ANALYZING THE COST IMPACT OF COMBINING FIRE, BUILDING, HEALTH, AND ENVIRONMENTAL INSPECTION SERVICES INTO ONE ORGANIZATION

STRATEGIC MANAGEMENT OF CHANGE

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ABSTRACT

The city of Carson City Fire Department was unable to analyze the cost impact associated with combining fire, health, building, and environmental inspection services into one umbrella organization.

The purpose of the research was to analyze the cost impact of combining inspection services for the fire, health, building and environmental departments. This study used a descriptive research method. The following questions were answered:

1. What is the cost to bring all inspectors to the appropriate level of training?
2. What salary level will be necessary to recruit employees to fill the inspection positions?
3. Will the business community accept the proposed changes?
4. What have other fire departments done to deliver combined services and have they been successful?

The procedures involved the use of literature review conducted at the National Emergency Training Center’s learning resource center. The research also involved literature review in libraries in Carson City, NV, and in the governmental office of the City of Carson City, NV. A survey was conducted of randomly selected departments in the United States. The survey was used to determine what other fire departments have done relative to combining inspection services.

The results indicated that it would be financially feasible to combine all of the city’s inspection services into one department. When examining the existing salaries for Carson City inspection services, the results indicated that all of the inspector positions were salaried below
the labor market average. The business community would readily accept any combination of services which resulted in a decrease of government spending and less regulation.

The recommendations were that the Carson City Fire Department begin a logistical analysis of the prospect of combining inspection services to determine a specific plan of action. The planning committee should include representatives from all the stakeholders including employees, government and business. Further recommendations are that the Carson City Board of Supervisors look at implementing a plan to bring inspector positions into parity with the labor market.
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INTRODUCTION

The problem is that the Carson City Fire Department and the City of Carson City have not determined the cost impact of combining fire, health and environmental inspection services into one organization. The purpose of this research project is to analyze the cost impact of combining inspection services under one organization. This study utilizes a descriptive method of research. The research questions to be answered are:

1) What is the cost to bring all inspectors to the appropriate level of training?
2) What salary level will be necessary to recruit employees to fill the inspection positions?
3) Will the business community accept the proposed changes?
4) What have other fire departments done to deliver combined services and have they been successful?

BACKGROUND AND SIGNIFICANCE

The Carson City Fire Department is geographically located in the western Great Basin area along the California and Nevada border. Carson City is a consolidated municipality, and the only combined City/County in the State of Nevada. Carson City is also Nevada’s capital. The fire department provides, fire extinguishment, EMS, hazardous materials response, and life safety inspections for the entire community. The city is governed by a City Manager and five member Board of Supervisors.
The State of Nevada, including Carson City, is experiencing a rapid growth rate. The State’s growth rate over the past decade has been greater than any other state (Brunner, 1998; 795). This tremendous increase in population has lead to a corresponding increase in the business community. Most businesses which move to Nevada in general, and Carson City specifically, do so to escape high taxes, governmental regulations, and high payroll costs (Northern Nevada Development Authority [NNDA], 1997).

The Carson City Fire Department is responsible for fire inspection services within Carson City. The city is also responsible for conducting other regulatory inspections. The Carson City Health Department conducts health and environmental inspections and permitting. The Carson City Building Department conducts building inspections. Each of these regulatory organizations has the jurisdiction to inspect each business in the community. This will often lead to three or four separate inspections in each business. Steve Calibro, a local business owner, questioned the lack of coordination between the inspecting agencies. Mr. Calibro reported that during a recent inspection, the requirements of the fire department didn’t agree with the requirements of the health department. This lack of coordination cost Mr. Calibro the cost of retrofitting a waste oil storage system when it wasn’t necessary (personal communication, April 15, 2000). This lack of coordination has the potential to create similar disagreements between regulatory agencies in Carson City.

The Northern Nevada Development Authority reports that Carson City has the largest percentage of employees in the manufacturing and business industries than any other county in Nevada (1997). In a recent survey, a majority of the businesses in Carson City reported that they are “committed” or “very committed” to maintaining control of their organization without interference from local, state and federal governments (NNDA, 1997). The Carson City
Chamber of Commerce recently conducted a series of educational programs designed to educate their members in the operation of local and state government. A survey conducted at the completion of the program asked respondents to list the largest area of improvement for local governments. Nearly 10% of the surveys mentioned coordination of city services as an area for improvement (Carson City Chamber of Commerce, 2000). A total of 32% of the respondents reported experiencing some difficulty with one or more of the city’s regulatory agencies (Carson City Chamber of Commerce, 2000).

In an effort to deliver quality customer service, the feedback provided in the noted surveys should not be taken lightly. The managers of the city’s regulatory agencies have also expressed concern about the lack of a coordinated inspection service. The question becomes, will the community support an increase in costs to gain a coordination of inspections. This research paper is designed to analyze the financial costs associated with combining these services.

The research is based on the change management model in the Strategic Management of Change curriculum from the Executive Fire Officer Program, National Fire Academy. The change management model describes analysis as the first step in the change process. This model will serve as a guide in conducting the research.
The literature review was centered on documents utilized by local governments. This literature was deemed most appropriate in determining the financial aspects of the research.

The Carson City Job Description Manual was consulted to determine the minimum requirements for each of the inspection positions within the city. The position of Fire Prevention Inspector I requires only graduation from high school and one year of experience in a setting which deals with the public. The position of Building Inspector I requires graduation from high school and one year of experience in the construction field. The position of Public Health Inspector I requires graduation from high school and some college level course work in chemistry, physics, biology, or a related field. The position of Environmental Control Officer I requires graduation from high school and some college level course work in chemistry, biology, or a related field, and one year of general work experience in an environmental field (Carson City, 2000). The salary levels for each of these positions vary considerably. The Fire Prevention Inspector annual salary is $47,546 (Carson City Firefighters Association, 2000). The Environmental Control Officer and the Public Health Inspector both have an annual salary of $41,391. The Building Inspector annual salary is $40,381 (Carson City Employees Association, 1999). In addition to each positions annual salary benefit costs must be added. Each city position costs an additional 16.9% when employee benefits are added in (Carson City, 2000; p. 6). The Carson City Final Budget (2000) was consulted to determine the authorized number of inspectors in each category. The fire department is authorized for three inspectors (2000, p. 175). The health department is authorized for a total of five positions, three of these are health inspectors, two are environmental inspectors (2000, p. 277). The building department is
authorized for four inspector positions (2000, p. 193). Appendix A summarizes the information contained above.

When consulting the Carson City Final Budget document for the 1999/2000 fiscal year, it became apparent that the building inspectors performed more inspections than all of the other inspections services combined. In 1998 the building department conducted 18,799 inspections. This included inspections for new construction at seven different stages (Carson City, 2000; p. 193). The building department must conduct inspections on each new building at several different phases. This causes the number of overall inspections to increase. Each new building gets inspected a minimum of seven different times. The fire department conducted 2,083 inspections in 1998 (Carson City, 2000; p.175). The health department conducted 1,020 food services inspections and 596 environmental inspections in 1998 (Carson City, 2000; p. 277). Appendix A summarizes the information contained above.

It was deemed important for this research to determine the position of each of the regulatory agencies division chiefs. The division chiefs were asked their opinions on providing the cross-training for inspectors. Fire Marshall Steve Mihelic (personal communication, June 10, 2000) related that it would be possible for environmental control officers and public health inspectors to learn fire code inspection procedures in an on-the-job fashion. Mr. Mihelic noted that the jobs the inspectors currently perform deal with researching regulations and the fire code is like any other model code in that it can be broken down into understandable parts. Mr. Mihelic estimated a training period of 160 hours would suffice to introduce health and environmental inspectors to the fire code issues.

Chief Building Official, Phil Harrington (personal communication, June 14, 2000) was comfortable with allowing fire prevention inspectors to conduct building inspections with little to
no training. The model fire and building code are similar and would allow easy integration. The health and environmental inspectors would take 30-60 days of training to be competent in the building inspection field.

Health Director Darrin Winkleman (personal communication, June 10, 2000) was concerned about the ability of the fire and building inspectors to conduct health and environmental inspections without having some college level course work in a related field. He felt it was important for the health and environmental inspectors to have some chemistry, or biology for a true understanding of the issues related to enforcement. Mr. Winkleman felt that two to three college level courses would provide the necessary background to begin on the job training. The on the job training would take an additional 60-90 days.

To determine what salary level would be necessary to fill a position which encompasses all of the city’s inspection services into one position, it was necessary to examine Carson City’s efforts at recruiting personnel in general. Carson City has had difficulty retaining employees, mostly due to salary differences (Andersen, 1995). Rice (1998) reported on the difficulties Carson City has had over the past two years maintaining key individuals.

Another of Carson City’s key employees has left to take a job in the private sector. Deputy City Manager Dan St. John has returned to his position of Vice President for Sierra Engineering. In total, four Carson City division or department heads have left to go elsewhere. Chief Deputy District Attorney Paul Lipperalli is now with the city of Reno. Water Utility Manager Dorothy Timinan-Palmer has been hired by Lumos and Associates as their chief water engineer. Carson City’s former Finance Director, Mary Walker will be a lobbyist for the upcoming legislative session. Timinan-Palmer attributes the exudes to the city’s low pay and increased job demands. “Carson City is a
great place to work, but the level of pay is considerably lower than the private sector. The city maintains a minimum number of employees and that causes all of the city’s workers to fill two and three roles, that’s pretty demanding on someone day in and day out”(1998, p. C1)

Defining a labor market is an important consideration when determining salary levels. Carson City’s ability to draw from a pool of prospective employees will depend on how well the city compensates employees as compared to other regional employers. Cascio (1995) describes that defining a labor market can be broken into public sector and private sector jobs. Other important factors include, geography, education, licensing/certification, and union membership (1995, p. 169).

Carson City hired consultant Ralph Andersen to analyze the city’s pay scale as compared to the job market. The job market was defined as the state of Nevada and a 100-mile radius of Carson City which reached into northeastern California (Andersen, 1995). Carson City salaries for each of the positions noted above are lower then the average for the job market. The Fire Inspector’s position was 10.1% below the average. The Environmental Control Officer’s position was 9.59% below the average. The Building Inspector’s position was 8.54% below the average. The Public Health Inspector’s position was 2.37% below the average (Andersen 1995). Forsman (1988) discusses the impact of salary on recruitment.

Obviously, the level of compensation and benefits provided for employees can have a great impact on recruitment, performance and retention. However, much research has indicated that compensation has less to do with job satisfaction than may have been perceived in the past. It is clear that the current generation of employees entering the work force value things other than money and are not nearly as cognizant of
or concerned about financial rewards as were their predecessors reared during the 1930s and 1940s (1998, p. 171).

The analysis of Carson City’s personnel manual, and the research conducted by a city-hired consultant have provided the review of public documents and how they relate to the subject. The feelings of the business community are harder to measure. Osborne (2000) comments on the increased government regulation.

The Small Business Survival Committee, a nonprofit, nonpartisan advocacy organization in Washington, D.C., says that such (regulatory) trends are not surprising given the steady stream of regulations, rules and mandates emerging from our nation’s capital. Just like taxes, increased regulations mean higher costs for U.S. businesses, entrepreneurs, and ultimately, consumers. Indeed, one of the greatest threats to our current period of economic growth is excessive governmental regulation (2000 p.8).

Osborne (2000) relates the increase in federal regulatory spending to local spending. “While the federal government increases spending on business regulation, the local governments are pushed to enforce federal regulations at the local level. This leads to an increase in the local bureaucratic machine, and demonstrates federal unfunded mandates (2000, p. 8).

While Carson City was forming a regional hazardous material response team, the city was asked to pass a local cost recovery ordinance. This ordinance would have charged the business responsible for a hazardous materials leak for the entire cost of clean up. The business community responded by demanding that the ordinance not be passed. “The business community is adamantly opposed to any increased regulation and will fight tooth and nail to defeat any elected official who votes in favor of it” (Tolda, 1993, p. A4). While the business community is opposed to any increase in regulation or taxes, they do favor the cities efforts at
streamlining the regulatory agencies. In a survey conducted by the University of Nevada, Reno (1998) 85% of business owners were “satisfied” or “very satisfied” with a recent city reorganization which combined several city departments under one roof (1998, p. 47). This reorganization combined several utility divisions under one umbrella organization. The reorganization also combined the purchasing, personnel, finance, and risk management divisions under one administrative services division (University of Nevada, Reno [UNR], 1998, p. 5).

While the above noted literature review is specific to the business community in general, it is interesting to note that in a recent National Fire Academy research paper an author wrote that the relationship between private and public sectors should be more closely explored. Cannon (1992) believes “that fire departments must begin to operate more as a business entity, rather then as the traditional resource drain” (1992, p 9). He goes on to explain that looking at what has worked for years in the private sector, may lead to examples of what will work for the public sector, including fire departments (1992, p. 9).

To get a sampling of what other fire departments have accomplished relative to combing regulatory services the Learning Resource Center at the National Fire Academy was consulted. This, combined with a survey of fire departments’, will provide a good background for determining the experiences of other organizations.

In his 1994 research project for the national Fire Academy, Richard Minor describes the problems his organization has faced with separate building and fire code inspections in the Loveland, Texas fire department. According to the author, the division of responsibility for building and fire code enforcement has created confusion on the part of the customer. The additional problems have been an increase in the operating costs for two divisions, redundancy in operation and a potential for compromised code intent relative to fire and life safety (p. 6). The
The Boise, Idaho Fire Department recently studied the potential of combining fire and building inspection services. “The increased demand on the services that are provided by local governments present serious challenges. In order to respond to these pressures, lessons from the business community need to be used to achieve effectiveness and efficiency. This would include reorganizing the fire and building inspection services into one department to improve the cost efficiency and resolve the conflict between two regulatory agencies (Smith, 1991; p.21).

There were no research projects which dealt with combining fire, health, environmental and building inspection services into one organization. The vast majority of research projects on the Learning Resource Center dealt with the combining of building and fire inspection services. Additional papers covered the pros and cons of combining police and fire dispatch and communications services.

**PROCEDURES**

**Research Methodology**

The descriptive research used in developing this paper was initiated with a literature review at the Learning Resource Center of the National Fire Academy in February 2000. Numerous catalog searches were conducted within the subjects of combined services, inspection services, and health and safety inspections. This literature helped by examining what other researchers had discovered and how they had applied what they had learned. The research
question “What have other fire departments done to deliver combined services and have they been successful?” was partially answered by this literature review. A second literature review was conducted in the Carson City, Nevada, public library system. This was supplemented by visits to the Carson City Finance Department and the Carson City Personnel Department to gather information specific to city government operations. The local level research helped to gather information relative to the specific sources of funding for Carson City employees, and the services they performed. The local research also developed several studies commissioned by local government agencies relative to city operations and measuring the public and business sector opinion. The research questions answered through the literature review are:

1) What is the cost to bring all inspectors to the appropriate level of training?
2) What salary level will be necessary to recruit employees to fill the inspection positions?
3) Will the business community accept the proposed changes?

The research methodology also included a conversation with several Carson City governmental officials including: Chief Building Official Phil Harrington, Health Director Darrin Winkleman, and Fire Marshall Steve Mihelic. Theses interviews were deemed appropriate because the ultimate outcome for the success of a citywide inspection program is the responsibility of each of these individuals. Their input was deemed important to gain an understanding of those issues where were critical for inclusion in the research.

**Survey Methodology**

In an effort to answer the research question, “What have other fire departments done to deliver combined services and have they been successful?” a survey was conducted. Appendix B contains a copy of the survey. This survey was used in conjunction with the literature review for
this research question. One hundred fire departments were selected at random utilizing a random number generator. The names and addresses were chosen from the publication *National Directory of Fire Chiefs and EMS Administrators, Eighth Edition*. Appendix C contains a list of those departments which responded to the survey. The survey questions were developed after conducting the literature review and based on soliciting responses which would answer the research question.

**Limitations**

This research was limited by the literature review. The main body of research was conducted in Carson City and from sources within city government. The majority of materials available were single sources and only produced by one organization. The Carson City specific documents are important to the research. However, they limit the field of opinions. This research utilized surveys conducted by other organizations. The survey results reported are assumed to be accurate. No effort was made to ensure the statistical accuracy of those outside surveys.

The survey results were limited to those departments that responded to the questionnaire. No effort was made to determine if the departments selected represented a statistically correct sample of all departments in the United States.

The survey results were assumed to be accurate. No effort was made to ensure that the responses to the questionnaire were truthful. The survey review was limited to answers provided by the organizations completing them.
RESULTS

The results of the literature review and the survey conducted are delineated here, and are provided as answers to each of the research questions.

1. What is the cost to bring all inspectors to the appropriate level of training?

The Carson City Job Description Manual provided the minimum requirements for each of the inspection positions within the city. The position of Fire Prevention Inspector I requires only graduation from high school and one year of experience in a setting which deals with the public. The position of Building Inspector I requires graduation from high school and one year of experience in the construction field. The position of Public Health Inspector I requires graduation from high school and some college level course work in chemistry, physics, biology, or a related field. The position of Environmental Control Officer I requires graduation from high school and some college level course work in chemistry, biology, or a related field, and one year of general work experience in an environmental field (Carson City, 2000). The salary levels for each of these positions vary considerably. The Fire Prevention Inspector annual salary is $47,546 (Carson City Firefighters Association, 2000). The Environmental Control Officer and the Public Health Inspector both have an annual salary of $41,391. The Building Inspector annual salary is $40,381 (Carson City Employees Association, 1999). In addition to each positions annual salary benefit costs must be added. Each city position costs an additional 16.9% when employee benefits are added in (Carson City, 2000; p. 6)

The Carson City Final Budget (2000) was consulted to determine the authorized number of inspectors in each category. The fire department is authorized for three inspectors (2000, p. 175). The health department is authorized for a total of five positions, three of these are health
inspectors, two are environmental inspectors (2000, p. 277). The building department is authorized for four inspector positions (2000, p. 193).

Appendix A summarizes the findings to these research questions. Table A-1 indicates the total annual personnel cost for each of the respective regulatory agencies. The health/environmental department spends the most money on inspection services, while the building department spends the least. There is a disparity in the annual salary between each of the inspector positions. The fire prevention inspector received the highest annual salary. This negotiated difference is due to the fact that two separate unions performed negotiations and impacted the results.

The number of inspections completed by each agency is summarized in table A-2. The building department conducts the most inspections annually, while the environmental division conducts the least.

The number of training hours varied by division. The fire department reported that 160 hours of training would be sufficient for health department officials to become competent in fire code enforcement (Steve Mihelic, personal communication, June 10, 2000). The building department reported that the fire inspectors would have no problem with building code enforcement, but that it would require health officials 30-60 days of training to learning the building code (Phil Harrington, personal communication, June 14, 2000). Health Director Darrin Winkleman (personal communication, June 10, 2000) would require the fire and building inspectors to take 2-3 college classes in addition to 60-90 days of on the job training.

2. What salary level will be necessary to recruit employees to fill the inspection positions?
In answering this question a report produced by a consultant hired by Carson City was helpful. Andersen analyzed the city’s pay scale as compared to the job market. The job market was defined as the state of Nevada and a 100-mile radius of Carson City which reached into northeastern California (Andersen, 1995). Carson City salaries for each of the positions noted above was lower then the average for the job market. The Fire Inspector’s position was 10.1% below the average. The Environmental Control Officer’s position was 9.59% below the average. The Building Inspector’s position was 8.54% below the average. The Public Health Inspector’s position was 2.37% below the average (Andersen 1995).

The work that Andersen performed was supported in the research by two separate sources. Cascio (1995) describes that defining a labor market can be broken into public sector and private sector jobs. Other important factors include, geography, education, licensing/certification, and union membership (1995, p. 169). These factors were utilized in Andersen’s report. In research conducted by Rice (1998) it was clear that Carson City had troubles keeping key individuals. Carson City’s deputy city manager, chief deputy district attorney, water utility manager, and finance director all left city employment for more lucrative positions (1998, p. C1)

Andersen (1995) summarized that Carson City has had difficulties in retaining employees, mostly due to salary differences (1995, p. 45).

Forsman (1988) discusses the impact of salary on recruitment. “Obviously, the level of compensation and benefits provided for employees can have a great impact on recruitment, performance and retention. However, much research has indicated that compensation has less to do with job satisfaction than may have been perceived in the past. It is clear that the current generation of employees entering the work force value things other than money and are not
nearly as cognizant of or concerned about financial rewards as were their predecessors reared during the 1930s and 1940s (1998, p. 171).

3. Will the business community accept the proposed changes?

In an article for the business community Osborne (2000) writes about the increased regulation imposed by the federal government. Osborne relates the increase in federal regulatory spending to local spending. “While the federal government increases spending on business regulation, the local governments are pushed to enforce federal regulations at the local level. This leads to an increase in the local bureaucratic machine, and demonstrates federal unfunded mandates (2000, p. 8).

In support of local reorganization, the University of Nevada, Reno (1998) reports on the success of Carson City to combine several departments to improve efficiency. Of the businesses responding to a survey, 85% of said, they were “satisfied” or “very satisfied” with the reorganization which combined several city departments under one roof (1998, p. 47). This reorganization successfully combined several utility divisions under one umbrella organization. The reorganization also combined the purchasing, personnel, finance, and risk management divisions under one administrative services division (UNR, 1998, p. 5).

It becomes apparent that local business leaders don’t support any increases in taxes for fees relative to regulation. “The business community is adamantly opposed to any increased regulation and will fight tooth and nail to defeat any elected official who votes in favor of it” (Tolda, 1993, p. A4).

Cannon writes about the relationships between the business community and public sector organizations. He says that fire departments should operate more like traditional businesses and less like the resource drain they are believed to be. What has worked for years in the private
sector, may lead to examples of what will work for the public sector including fire departments. (1992, p. 9).

4. What have other fire departments done to deliver combined services and have they been successful?

The literature review didn’t develop any examples of organizations which combined all of the inspection services proposed by this research paper. Two applied research projects dealt with combining building and fire inspection services.

The Loveland, Texas fire department recommended the combination of the building and fire inspection departments under the fire department’s control. The newly proposed department will increase operating efficiency, effectiveness, and improve life safe code enforcement (Minor, 1994; p. 26).

The results of a research paper for the Boise, Idaho fire department were similar. “The increased demand on the services that are provided by local government present serious challenges. In order to respond to these pressures, lessons from the business community need to be used to achieve effectiveness and efficiency. This would include reorganizing the fire and building inspection services into one department to improve the cost efficiency and resolve the conflict between two regulatory agencies (Smith, 1991; p. 21).

The literature review provided some insight into the fourth research question. However, a survey was conducted to further evaluate the position of fire departments across the United States. A questionnaire was mailed to one hundred fire departments (see Appendix B). This questionnaire was completed and returned by 52% of the departments surveyed.

Question 1 of the questionnaire asked the responded to indicate the name of their department. This information is listed in Appendix B.
Question 2 of the questionnaire asked to indicate the population served by the department. The average population of the departments that responded was 163,223. This number is high because eight of the departments responding had a population over 750,000. The largest number of responses, 40, indicate that their population is between 30,000 and 75,000. Four of the departments surveyed had populations of less than 15,000.

Question 3 of the questionnaire asked about the make-up of the employees in the department. Career departments outnumbered combination departments 28 to 24. There were no responses from all volunteer departments.

Question 4 of the questionnaire asked: “What department within your city/county structure provides inspections services related to the fire code?” Of the departments that responded, 51 (98%) reported that fire code inspections were conducted by the fire department. The only department which didn’t conduct their own fire code inspections had those services performed by the state fire marshal’s office.

Question 5 asked: “What department within your city/county structure provides inspection services related to the building code(s)?” Twelve of the responses indicated that the fire department also conducts building inspections. In these twelve cases the fire and building inspections are combined under the fire department jurisdiction. The remaining 40 responses had their building code enforcement performed by the building division.

Question 6 asked: “What department within your city/county structure provides inspection services related to health issues?” This question presented several diverse answers. The state health department provides health inspection services for 16 of the departments. The county health department provides health inspections for another 16 departments. The city health department was responsible in 11 of the department’s responses. The building department
handles health inspections for eight of the respondents. In one case the fire department was responsible for health inspection services. This one department, Bismarck Fire and Inspections Department, handles all fire, building, health, and environmental inspections.

Question 7 of the questionnaire asked: “What departments within your city/county structure provides inspections related to environmental issues?” Only the Bismarck Fire and Inspections Department performs environmental regulation under the control of the fire department. The majority of environmental issues are dealt with by a state agency. Of the department’s responding 29 (56%) reported that the state health department or the state division of environmental management were responsible for environmental issues. The city handled environmental issues in 13 of the cases. The remaining nine departments charged the county health agency with handling environmental issues.

Question 8 asked: “What were the reasons for combining regulatory/inspection services as mentioned in the questions noted above?” Twenty-four of the responses indicated some combining of inspection services. The majority of those combined the building and fire code inspection services. In the case of the 16 that combined fire and building inspection services all of the responses indicated that they combined to increase consistent enforcement of the related fire and building codes. The seven departments that reported combining health and environmental services did not answer the questions as to why the departments were combined. In all of these cases the combination of health and environmental departments occurred outside of the fire department, therefore the survey respondents didn’t have specific knowledge as to why the departments were combined. The one department which combined all services reported doing so for economics reasons. The response also reported combining services to decrease duplication of inspections.
**DISCUSSION**

**Research Question 1 - What is the cost to bring all inspectors to the appropriate level of training?**

The Carson City Job Description Manual provides little in the way of substantial requirements for any of the city inspection services. The positions of building and fire inspector require some general work experience, and high school graduation (Carson City, 2000). The health and environmental inspector positions require some college level course work in biology, chemistry or a related field (Carson City, 2000). The positions require surprisingly little in the way of formal education. This would indicate to me that the positions could easily be cross trained. The personnel interviews with each of the department/division heads indicated that, at most, 90 days worth of cross training would be required. This cost of cross training should be minimal. The actual costs in salary wouldn’t increase. There will be some decrease in service levels during the cross training period, but the overall mission of each division should not be compromised. The college level course work indicated by Health Director Darrin Winkleman (personal communication June 14, 2000) could be obtained at the local community college during the regular work day.

I believe that the costs to bring all inspectors to an appropriate level of training would be minimal. The agencies might suffer some decline in their overall projected inspection numbers. However, this should not decrease significantly enough to cause health or safety issues for the public or the employees.
**Research Question 2 - What salary level will be necessary to recruit employees to fill the inspection positions?**

This research question, more than any other, can determine the financial success or failure of combining inspection services. The city has a history of losing key employees over the past several years. Rice reported on those difficulties in a 1998 article.

Another of Carson City’s key employees has left to take a job in the private sector. Deputy City Manager Dan St. John has returned to his position of Vice President for Sierra Engineering. In total, four Carson City division or department heads have left to go elsewhere. Chief Deputy District Attorney Paul Lipperalli is now with the city of Reno. Water Utility Manager Dorothy Timinan-Palmer has been hired by Lumos and Associates as their chief water engineer. Carson City’s former Finance Director, Mary Walker will be a lobbyist for the upcoming legislative session. Timinan-Palmer attributes the exodus to the city’s low pay and increased job demands. “Carson City is a great place to work, but the level of pay is considerably lower than the private sector. The city maintains a minimum number of employees and that causes all of the city’s workers to fill two and three roles, that’s pretty demanding on someone day in and day out” (1998, p. C1)

When a city begins to lose upper level management, the organization begins to suffer through a lack of direction. Each of the individuals mentioned above takes with them years of knowledge that will take time to replace, if it can be replaced at all. Those individuals left the employment of Carson City to take more lucrative jobs in the same area. Cascio (1995) described that defining a labor market can be broken into public and private sector jobs. Other important factors include, geography, education, licensing/certification and union membership (1995, p.
This factor is important in recruiting employees to fill key roles in Carson City government. Carson City cannot compete in the labor market with private sector jobs. Those positions are usually much sought after, and offer higher salaries than government. Private sector jobs, however, are not as secure as public sector jobs. Employees often trade the security of a 20 or 30 year job for the immediate satisfaction of high salary.

Carson City should be competing for employees based on the other factors mentioned by Cascio. The local public sector job market should drive recruiting and salaries. Carson City is below the local public sector job market and needs to increase salary levels. This was supported by Andersen (1995) who indicated that The Fire Inspector’s position was 10.1% below the average. The Environmental Control Officer’s position was 9.59% below the average. The Building Inspector’s position was 8.54% below the average. The Public Health Inspector’s position was 2.37% below the average.

The issue of personnel recruitment for Carson City goes deeper than the issues analyzed in this research paper. The city currently has all of the inspector positions filled, and would simply have to cross train personnel to combine services. I believe that if an individual chooses to leave city employment it would be caused more by the issues Rice and Andersen discussed then by their own issues related to combining inspection services.

**Research Question 3 - Will the business community accept the proposed changes?**

The business community in Carson City seems to be strongly against any increase in local government spending. Osborne (2000) commented on the increase in government regulation and spending.

The Small Business Survival Committee, a nonprofit, nonpartisan advocacy organization in Washington, D.C., says that such (regulatory) trends are not
surprising given the steady stream of regulations, rules and mandates emerging from our nation’s capital. Just like taxes, increased regulations mean higher costs for U.S. businesses, entrepreneurs, and ultimately, consumers. Indeed, one of the greatest threats to our current period of economic growth is excessive governmental regulation (2000 p.8).

Osborne (2000) relates the increase in federal regulatory spending to local spending. “While the federal government increases spending on business regulation, the local governments are pushed to enforce federal regulations at the local level. This leads to an increase in the local bureaucratic machine, and demonstrates federal unfunded mandates (2000, p. 8).

This article demonstrates the feelings of the business community relative to federal spending, and how it effects local government. The business leaders are obviously tired of increased federal mandates. They are also tired of local attempts at increasing spending. Carson City’s efforts at passing a local hazardous materials cost recovery ordinance were meet with strong opposition. “The business community is adamantly opposed to any increased regulation and will fight tooth and nail to defeat any elected official who votes in favor of it” (Tolda, 1993, p. A4).

This anti-fee attitude can be used to the advantage of the City when combining services. The overall effect of combining the inspection services should serve in improve efficiency and ultimately reduce costs and impose less government infringement. The research shows that business leaders are pleased when the city can combine departments to increase services or save money.

While Carson City was forming a regional hazardous material response team, the city was asked to pass a local cost recovery ordinance. This ordinance would have charged the
business responsible for a hazardous materials leak for the entire cost of clean up. The business community responded by demanding that the ordinance not be passed. While the business community is opposed to any increase in regulation or taxes, they do favor the City’s efforts at streamlining the organizational structure. In a survey conducted by the University of Nevada, Reno (1998) 85% of business owners were “satisfied” or “very satisfied” with a recent city reorganization which combined several city departments under one roof (1998, p. 47). This reorganization combined several utility divisions under one umbrella organization. The reorganization also combined the purchasing, personnel, finance, and risk management divisions under one administrative services division (UNR, 1998, p. 5).

**Research Question 4 - What have other fire departments done to deliver combined services and have they been successful?**

The literature review and the survey indicated that fire departments have combined some inspection services, most notable with the building inspection division. These combination departments seem to work effectively. Minor indicated that for the Loveland, Texas, fire department combining services would increase operating efficiency, effectiveness and improve life safety code enforcement (1994, p. 26). The Boise Fire Department also combined building and fire protection services. “The increased demand on the services that are provided by local government present serious challenges. In order to respond to these pressures, lessons from the business community need to be used to achieve effectiveness and efficiency. This would include reorganizing the fire and building inspection services into one department to improve the cost efficiency and resolve the conflict between two regulatory agencies” (Smith, 1991; p.21).
The success of grouping fire and building inspection services as reported by Boise and Loveland fire departments, combined with the 12 survey departments who also grouped those services as reported in the survey question, point to the potential success of joining efforts.

The National Fire Academy’s Learning Resource Center didn’t have any research papers which dealt with combining fire, building, health and environmental inspection services. One department responded to the survey that they had combined all of these organizations. The reasons behind combining services were to reduce overlapping inspections and to improve code interpretation and enforcement efficiency.

The fire service, in general is an innovative group in some respects, but tradition seems to have won out over improved efficiency in this area. In a time when citizens are looking to reduce “big government” combining any services which can logically be grouped together deserves a close look.

RECOMMENDATIONS

As a result of the literature review and survey findings from departments around the Unites States, the following recommendations are made:

1. The Carson City Fire Department should join the Building Division and the Health Department in studying other aspects of combining inspection services. The stake holders in the process should work to delineate the logistical aspects by forming a committee to review all facets. This committee should deal with, the development of an organizational chart, management responsibilities, and a
determination of physical needs. The needs of the individual inspectors should also be considered during this planning process.

2. The Carson City Board of Supervisors should work toward implementation of the recommendations in the Andersen study. This should include a strong look at establishing parity for the inspector positions as compared to their counterparts in the labor market.

3. The business community should be consulted prior to the formal establishment of an inspection department. The participation of the business community in the early planning stages can lead to success when the actual process is put into place.

4. The research established several organizations which have combined some inspection services, and one department which combined all of the inspection services proposed here. These organizations should be formally contacted to determine the pros and cons they face, and to gain insight into the formation operation of their combined organizations.
REFERENCES


Carson City Employees Association Inc. (1999, July). *Carson City/Carson City Employees Association Collective Bargaining Agreement.* Carson City, NV:

Carson City Firefighters Association Inc. (2000, May). *Carson City/Carson City Firefighters Association Collective Bargaining Agreement.* Carson City, NV:


Minor, R. (1994). *Consolidating the building department into the fire department.* Emmittsburg, MD: National Fire Academy, Executive Fire Officer Program.


APPENDIX A - Summary of Inspectors in Carson City Regulatory Agencies

The following table summarizes the key components of the agencies which have regulatory authority in Carson City.

Table A-1

<table>
<thead>
<tr>
<th>DEPARTMENT</th>
<th>ANNUAL SALARY (INCLUDING BENEFITS)</th>
<th>AUTHORIZED NO. OF PERSONNEL</th>
<th>TOTAL COST FOR INSPECTORS IN EACH DEPARTMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire</td>
<td>$55,581.00</td>
<td>3</td>
<td>$166,743.00</td>
</tr>
<tr>
<td>Building</td>
<td>$40,381.00</td>
<td>4</td>
<td>$161,524.00</td>
</tr>
<tr>
<td>Health/Environmental</td>
<td>$41,391.00</td>
<td>5</td>
<td>$206,955.00</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>12</td>
<td>$535,222.00</td>
</tr>
</tbody>
</table>

The following table summarizes the number of inspections conducted by each of the regulatory agencies.

Table A-2

<table>
<thead>
<tr>
<th>DEPARTMENT</th>
<th>NUMBER OF ANNUAL INSPECTIONS PERFORMED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire</td>
<td>2,083</td>
</tr>
<tr>
<td>Building</td>
<td>18,799</td>
</tr>
<tr>
<td>Health</td>
<td>1,020</td>
</tr>
<tr>
<td>Environmental</td>
<td>596</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>22,498</strong></td>
</tr>
</tbody>
</table>
May 2000

Dear Fire Service Professional,

I am a participant in the National Fire Academy’s Executive Fire Officer Program. A vital portion of that process requires the completion of an applied research project. I am looking for assistance in determining the organizational structure of your department. Would you please take a few moments to complete the attached survey and return the results to me in the most convenient manner for you. I have listed my name, address, phone, fax, and E-mail information below.

Thank you for your cooperation.

Sincerely,

Stacey Giomi
Battalion Chief
Carson City Fire Department
777 S. Stewart St.
Carson City, NV 89701
Phone (775) 887-2225
Fax (775) 887-2209
E-Mail: NVGiomi@aol.com
1. Name of your Department

2. Population served by your department

3. Make up of your department (choose one of the following).
   A. Career _____
   B. Volunteer _____
   C. Combination _____

4. What department within your city/county structure provides inspection services related to the fire code?

5. What department within your city/county structure provides inspection services related to the building code(s)?

6. What department within your city/county structure provides inspection services related to health issues?

7. What department within your city/county structure provides inspection services related to environmental issues?

8. What were the reasons for combining regulatory/inspection services as mentioned in the questions above?
APPENDIX C - Questionnaire Respondents

Departments which responded to the customer service survey questionnaire. Departments are listed alphabetically by department name.

Table A-1

<table>
<thead>
<tr>
<th>DEPARTMENT</th>
<th>CITY, STATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alameda Fire Department</td>
<td>Alameda, CA</td>
</tr>
<tr>
<td>American River Fire Protection District</td>
<td>Sacramento, CA</td>
</tr>
<tr>
<td>Ames Fire Department</td>
<td>Ames, IA</td>
</tr>
<tr>
<td>Belgrade Rural Fire District</td>
<td>Belgrade, MT</td>
</tr>
<tr>
<td>Binghamton Fire Department</td>
<td>Binghamton, NY</td>
</tr>
<tr>
<td>Bismarck Fire &amp; Inspections Department</td>
<td>Bismarck, ND</td>
</tr>
<tr>
<td>Bluefield Fire Department</td>
<td>Bluefield, WV</td>
</tr>
<tr>
<td>Cape Girardeau Fire Department</td>
<td>Cape Girardeau, MO</td>
</tr>
<tr>
<td>Caribou Fire and Ambulance Department</td>
<td>Caribou, ME</td>
</tr>
<tr>
<td>Casper Fire Department</td>
<td>Casper, WY</td>
</tr>
<tr>
<td>Clark County Fire Department</td>
<td>Las Vegas, NV</td>
</tr>
<tr>
<td>Coatesville City Fire Department</td>
<td>Coatesville, PA</td>
</tr>
<tr>
<td>College Place Fire Department</td>
<td>College Place, WA</td>
</tr>
<tr>
<td>Concord Fire Department</td>
<td>Concord, NC</td>
</tr>
<tr>
<td>Daphne Fire Department</td>
<td>Daphne, AL</td>
</tr>
<tr>
<td>Defiance Fire Department</td>
<td>Defiance, OH</td>
</tr>
<tr>
<td>Dothan Fire Department</td>
<td>Dothan, AL</td>
</tr>
<tr>
<td>Eastman Fire Department</td>
<td>Eastman, GA</td>
</tr>
<tr>
<td>Eloy Fire District</td>
<td>Eloy, AZ</td>
</tr>
<tr>
<td>Fairfax County Fire and Rescue Department</td>
<td>Fairfax, VA</td>
</tr>
<tr>
<td>Fire Department</td>
<td>City/State</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>Fayetteville Fire Department</td>
<td>Fayetteville, GA</td>
</tr>
<tr>
<td>Fenton Fire Protection District</td>
<td>Fenton, MO</td>
</tr>
<tr>
<td>Gautier Fire Department</td>
<td>Gautier, MS</td>
</tr>
<tr>
<td>Hampton Fire and Rescue Department</td>
<td>Hampton, VA</td>
</tr>
<tr>
<td>Heber Springs Fire Department</td>
<td>Heber Springs, AR</td>
</tr>
<tr>
<td>Honolulu Fire Department</td>
<td>Honolulu, HI</td>
</tr>
<tr>
<td>Huntsville Fire Department</td>
<td>Huntsville, TX</td>
</tr>
<tr>
<td>Johnston Fire Department</td>
<td>Johnston, RI</td>
</tr>
<tr>
<td>Kern County Fire Department</td>
<td>Bakersfield, CA</td>
</tr>
<tr>
<td>Kingsport Fire Department</td>
<td>Kingsport, TN</td>
</tr>
<tr>
<td>Laonia Fire Department</td>
<td>Laonia, NH</td>
</tr>
<tr>
<td>Lawrence Fire Department</td>
<td>Lawrence, MA</td>
</tr>
<tr>
<td>Lower Merion Township Fire Department</td>
<td>Ardmore, PA</td>
</tr>
<tr>
<td>Medford Union Fire Company</td>
<td>Medford, NJ</td>
</tr>
<tr>
<td>Mountain View Fire Department</td>
<td>Mountain View, CA</td>
</tr>
<tr>
<td>Mundelein Fire Department</td>
<td>Mundelein, IL</td>
</tr>
<tr>
<td>New Hanover County Dept. of Fire Services</td>
<td>Wilmington, NC</td>
</tr>
<tr>
<td>Norfolk Fire Division</td>
<td>Norfolk, NE</td>
</tr>
<tr>
<td>North Richland Hills Fire Department</td>
<td>North Richland Hills, TX</td>
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<tr>
<td>Phenix City Fire and Rescue Services</td>
<td>Phenix City, AL</td>
</tr>
<tr>
<td>Rosenberg Fire Department</td>
<td>Rosenberg, TX</td>
</tr>
<tr>
<td>Santa Fe Fire Department</td>
<td>Santa Fe, NM</td>
</tr>
<tr>
<td>Sierra Vista Fire Department</td>
<td>Sierra Vista, AZ</td>
</tr>
<tr>
<td>St. Tammany Parish Fire Protection Dist. #4</td>
<td>Covington, LA</td>
</tr>
<tr>
<td>Village of Plover Fire Department</td>
<td>Plover, WI</td>
</tr>
<tr>
<td>Fire Department</td>
<td>Location</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Vineland Fire Department</td>
<td>Vineland, NJ</td>
</tr>
<tr>
<td>Waterbury Fire Department</td>
<td>Waterbury, CT</td>
</tr>
<tr>
<td>Wellington Fire Department</td>
<td>Wellington, OH</td>
</tr>
<tr>
<td>Winston/Dillard Fire Protection District</td>
<td>Winston, OR</td>
</tr>
<tr>
<td>Winter Springs Fire Department</td>
<td>Winter Springs, FL</td>
</tr>
<tr>
<td>Woodmoor/Monument Fire Protection District</td>
<td>Monument, CO</td>
</tr>
<tr>
<td>York Department Of Fire/Rescue Services</td>
<td>York, PA</td>
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</tbody>
</table>