ALMONT ASSOCIATES

We Specialize in Fire, Police, EMS & Emergency Management Assistance

Analysis of Fire Delivery Services for the City of Albert Lea, Minnesota

June 2012

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ALMONT ASSOCIATES

May 30, 2012

Mr. Chad M. Adams, City Manager
Office of the City Manager
City of Albert Lea
221 E. Clark Street
Albert Lea, MN 56007

Dear Mr. Adams:

Almont Associates is honored to present this Final report of the Analysis of Fire Delivery Services. The entire staff of the City was very professional and cooperative. They provided required information and worked hard themselves on the project.

The Elected officials provided a clear understanding of the community picture and their desires for the fire department and the services it provides. The Albert Lea Fire Department in partnership with the Township Fire Company provides a quality service to the citizens of Albert Lea. This report highlights the positive attributes and addresses the areas of concern. The report makes numerous recommendations based on comparisons to recognized standards and common practices in Minnesota.

There are areas in the recommendation matrix that have costs to be determined (TBD). As these recommendations are implemented Almont will assist in determining the cost of that project.

Almont Associates looks forward to presenting the final report to the public and then the elected officials of the City on June 6 &7.

Feel free to contact me with any questions.

Tom Weber

Tom Weber
President

Executive Summary

The City of Albert Lea has a proud tradition and history of providing fire services to the community. The Albert Lea Bucket Brigade was organized by a group of volunteers on November 22, 1870 and consisted of 30 volunteers. Soon after, the city saw a need for a better organization to protect the citizens. On August 5, 1879, the Albert Lea Fire Department was organized under Chief F.B. Fobes. The City continues the tradition of using career and volunteer firefighters to provide services. The difficult economic times have challenged all elected officials with how to continue to provide quality service while using fiscally sound principals. The City requested professional assistance with examining the fire department and creating a road map for the future.

Almont Associates partnered with a leadership team from the fire department and the interim Fire Chief to create this Master Plan. The first step was to create a strategic plan (Section 2.1.1) and develop the department Mission, Vision and Values by conducting surveys and a SWOT analysis. Upon completion of jointly establishing the future direction, data analysis was conducted and a full site visit completed. This site visit also included meeting with Fire Chiefs from neighboring fire companies.

The critical issues that were discovered during this analysis include establishment of the fire department organizational leadership (Section 2.3.1), establishing the staffing model that is appropriate to meet the needs of the community (Section 3.1.4 and Option Section 1-3), improving technology in the organization (Section 2.3.1), redefining productivity (Sections 2.3.1 & 2.3.3), improving training (Sections 3.1.4 & 3.1.19), increasing county-wide cooperative response and partnerships (Section 2.2.4), and facility and apparatus needs (Section 3.4) . The recommendation matrix at the end of the report defines all suggestions for improvement and provides the section numbers for the supporting detailed analysis.

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1.0 City of Albert Lea Fire Delivery Services

1.1 Analysis Overview

After careful consideration of Albert Lea's stated needs, Almont Associates understood that the community required an objective, professional Analysis of Fire Delivery Services which included staffing, operations, comparative analysis, and inspection services. It was understood that the community needed to participate in designing service expectations. This analysis establishes recommendations as to how the current providers can meet developed goals and what is the best delivery system capable of meeting these and future needs.

Almont Associates began work immediately on the analysis. There was an initial kickoff meeting held on January 30, 2012 where we meet with Mayor Rasmussen, City Manager Adams, Councilmember Baker, Councilmember Anderson and Chief Winkels. During these meetings we agreed upon the scope of the analysis and individual areas of concern. After consensus was obtained on the project parameters, extensive interviews were scheduled during full site visit in March. On January 31, we met with the Fire Department Captains and Lieutenants. During this meeting the use of survey instruments was explained and a SWOT analysis was conducted. We were also able to meet with Chief Chuck Karl of the Township Fire Department.

Between the initial kickoff visit and the full site visit data was requested and provided by the City, County, and the Fire Department. Additionally, an environmental survey was conducted of all department personnel. The information captured was used to develop a strategic planning session. This session was held on March 20 and included the fire department's strategic planning team. During this visit additional interviews were held which included City Manager Adams, Chief Winkels, Councilmembers Olson, Anderson, Baker, Kehr and Schulte. Brad Niebuhr of the Mayo emergency medical system was

interviewed as well as Dan Dorman, the Executive Director of Grow Albert Lea and Randy Kehr of the Chamber of Commerce. History is important to any analysis past Fire Chiefs Rich Sydnes and Paul Steiler were interviewed. The Fire Department is part of a city management team so the Human Resources Director Mike Zelenak and Community Development Director Bob Graham were also interviewed. External partners' participation is essential to conducting a proper analysis and we attended the Freeborn County Fire Chiefs Association meeting on March 19th. We also met with numerous County Fire Chiefs on an individual basis. These interviews provided critical information, and assisted us in developing an understanding of emergency services in this area.

1.2 Organizational History

The Albert Lea Fire Department has a proud tradition and history of serving the community. The Albert Lea Bucket Brigade was organized by a group of volunteers on November 22, 1870 and consisted of 30 volunteers. Soon after, the city saw a need for a better organization to protect the citizens. On August 5, 1879, the Albert Lea Fire Department was organized under Chief F.B. Fobes.

The first fire station was at the corner of Main Street and Washington adjacent to what was then City Hall. The apparatus consisted of a steam engine water pump and two hose carts which were pulled by horses to the scene until 1891 when the waterworks system was completed. In 1903 a new City Hall was built on North Broadway and also housed the Fire Department on two floors. The first motor driven water pump truck was put into service August 18, 1918 and led a new era of apparatus used for firefighting.

On May 1, 1948 the department went to a fully paid organization in order to better serve residents and businesses. The Fire Department moved to its present location at 221 East Clark St. in the City Center in 1968. This location has served the organization well but the department has outgrown the space available. The City entered into an agreement with the Albert Lea Township Fire Department on October 15, 1991 to become a combination department, with the Township acting as part-time firefighters

for the City Fire Department. This relationship continues today, and has potential for further growth that can be improved to the benefit of both communities.

2.0 Planning

2.1 Master Planning

2.1.1 Strategic Plan

The Center for Public Safety of Excellence's Commission of Fire Accreditation International defines strategic planning as "… a process by which an organization envisions its short-term future and conducts the necessary analysis to effectively plan for that future." It can be further defined as the process by which members of an organization determine what it intends to be in the future and how it will get there. To put it another way, they develop a vision for the organization's future and determine the necessary priorities, procedures, and operations (strategies) to achieve that vision.

Of far greater importance is an ability to swiftly revise tactics to meet changing requirements of constantly moving, and at times, shrinking revenue sources. Success in today's environment requires that department leaders have the ability to create a vision of the organization's future direction, as well as the course it needs to get there. Given the contraction and downsizing of the economy, organizations need to urgently rethink their strategies, and for these strategies to be truly successful in the future, they should be quickly planned and implemented with employee involvement.

A strategic planning process that includes development of a plan with continuous monitoring, revision, and updating will create an environment that prepares a department for adjusting to difficult times while maintaining its ability to provide services. The level of service that is provided may not be the same as before, but the environment that we are now dealing with could very well establish a new set of

expectations and redefine how services are provided. Strategic planning is a process by which adapting to changing environments is manageable with participation from the entire organization. It also provides a format for conducting a visionary approach to service delivery and allows an organization to be prepared for anticipated changes or to even modify its service delivery before change is forced upon it.

2.1.1.1 Strategic Planning Process

The process included an internal environmental scan, prioritization of the scan results, a one-day planning session, which included a SWOT analysis, a short course on strategic planning, review of the environmental scan, creation of the mission, values, and vision of the department, and a goal setting session. All members participated in the process from returning surveys to five members participating in the one-day planning session.

2.1.1.2 The Environmental Scan

The environmental scanning process was anonymously conducted of the department membership. There was an initial survey asked three open-ended questions:

1. What is working well in the Albert Lea Fire Department?
2. What is not working well in the Albert Lea Fire Department?
3. What would you like to see the department change or incorporate in its future service delivery system?

Fifteen surveys were returned (Appendix 1). What was working well was noted and areas for improvement were categorized and reissued in a document that employed the nominal group technique (NGT) to establish prioritization of issues (Appendix 2). The NGT had each participating department member rate the importance of each category of issues by placing a point value for each. The most important issue to that person received the highest point value (7). Correspondingly, the lowest received the lowest

value (1). The results were then compiled and the issues were prioritized for the Strategic Planning Team to evaluate. All department members participated in the prioritization process.

2.1.1.3 What is Working Well

The members of the department had reported over forty-four areas or practices that are working well in the organization. Some of the highlights of these responses are the work schedule, staffing, ability to rapidly make an interior attack on a fire, employees working well together, non-traditional assistance to the community, quality employees who work well together, excellent apparatus and equipment, senior citizens call-in program, ISO rating, rental inspection program, public education program and desire to provide a high level of service to the community.

2.1.1.4 What is Not Working Well

Department members reported fifty-three areas that either one or more persons felt were not working well. The areas that were of concern to multiple personnel are: lack of consistency in training, custodial work in City hall, lack of facility storage, lack of leadership training, each shift doing their own thing, current fire station, lack of direction and vision, employee accountability and lack of proper use of the Incident Command system.

2.1.1.5 What Would You Like to See the Department Change

Department members reported eighty-three suggestions for change or improvement with the most recommended areas being: direction and vision, appointment of a Chief, expanding their role in emergency medical services, maintaining their public interaction, adding a training delivery system for outside agencies and a new facility.

All of the areas of concern and what members would like to see changed or improved were placed into categories so a value of importance to the organization could be

established. The categories are as follows in order of priority as ranked by department members:

1. Service Delivery and Response System
2. Training
3. Communications & Dispatch
4. Management
5. Interdepartmental Communications and Relations
6. External Department Operations
7. Supervision

2.1.2 SWOT Analysis

A Strategic Planning Team (SPT) was formed consisting of Interim Fire Chief Winkels, Captains, DeVries, Hanna and Lieutenants Glassel and Schallock conducted a strengths, weaknesses, opportunities, and threat (SWOT) analysis as part of the initial planning session (Appendix 3).

Strengths describe the positive attributes, tangible and intangible, internal to an organization. They are within the organization's control. What do you do well? What resources do you have? What advantages do you have over your competition? Strengths capture the positive aspects internal to a department. This is your opportunity to remind yourself of the value existing within your organization.

The SPT recognized numerous strengths, they are: willingness to help (city & count-wide any task), strong fire prevention, effective emergency response, desire to improve, 24/7 hour staff coverage, well trained staff, good equipment, well equipped, team orientated, potential, ability to partner, provide external training, willingness to serve (community), positive public image, knowledge of community, lack of competition, function with reduced resources, central location (county-wide).

Weaknesses are factors that are within an organization's control that detract from their ability to provide service. Which areas might you improve? Weaknesses might include

lack of expertise, limited resources, lack of access to skills or technology, inferior service offerings, or the poor location of facilities. These are factors that are under your control, and for a variety of reasons, are in need of improvement to effectively accomplish the mission. Weaknesses capture the negative aspects internal to an organization that detract from the value offered. These are areas that need to be enhanced in order to deliver good customer service.

The SPT recognized numerous weaknesses, they are: lack (weak) leadership, no mission, vision, values, goals, training, morale, dispatch, underutilized (medical, Haz-Mat), fire investigation, facility, lack of ICS, no long range planning, outside FD tasks, outdated equipment, technology (RMS), poor communications, fear of change, lack of interagency interaction, apathy - undefined community expectations.

Opportunities assess the external attractive factors that represent the reason for an organization to exist and provide service. These are external to a department. What opportunities exist in a community, or in the environment, from which a department hopes to benefit? Opportunities may be the result of expansion, technology, resolution of problems associated with current situations or the ability to offer greater value that will create a demand for services. Does it represent an ongoing opportunity, or is it a window of opportunity? How critical is your timing? Opportunities are external to an organization.

The SPT recognized numerous opportunities, they are: partnering - resource sharing, functional mergers, new facility (external use), interdepartmental training within the City, EMS, annexation, promotion of organization, confined space contracts and training technical responses, aging population (educational opportunities).

Threats include factors beyond our control that could place our ability to provide service at risk. These are also external factors we have no control over, but may benefit from by

having contingency plans should they occur. A threat is a challenge created by an unfavorable trend or development that may lead to deteriorating revenues. Threats may include governmental regulation, economic downturns, devastating media or press coverage. It is important to get the worst fears on the table. Part of this list may be speculative in nature, but it still adds value to the SWOT analysis. The department must look back at these threats when considering its contingency plans.

The SPT recognized numerous threats, they are: budgets, uninformed decisions, unrealistic utilization of FD resources, unfair comparative analysis, staffing cuts, work schedule, candidate pool for firefighters, public safety director, loss of grant opportunities, political turf wars, reduction in services, reduced service demand, mandates (unfunded), increased service demand.

The internal strengths and weaknesses, compared to the external opportunities and threats, can offer additional insight into the condition and potential of the organization. How can we use the strengths to better take advantage of the opportunities ahead and minimize the harm that threats may introduce if they become a reality? How can weaknesses be minimized or eliminated? The true value of the SWOT analysis is in bringing this information together, to assess the most promising opportunities, and the most crucial issues. The SWOT analysis provided the basis for the SPT to create the Department's Mission, Values, and Vision.

2.1.3 Mission, Vision, Values, Goals

The SPT was provided a session in the need and value of strategic planning. During this session the team created a Mission Statement, Vision Statement and Values for the department.

Mission Statement:

We will provide professional proactive responsive assistance to enhance the quality of life for current and future generation

Vision Statement:

We will provide outstanding professional service while striving to develop excellence in the delivery of emergency services

Values:

Committed: *We will be committed to the safety and well-being of the community*

Integrity: *We will serve with the highest standards of ethical and professional conduct*

Respectful: *We will be respectful*

Reliable: *We will provide reliable services*

Friendly: *We will be friendly and caring to all*

The SPT developed two goals as an exercise during the strategic planning session. These goals are already being implemented by department staff. They will serve as examples for remaining goals the department members will develop from this report.

Goal 1: Establish a Training Committee to standardize training throughout the three shifts.

Objective 1.1: Determine the make-up of the committee, one or two members from each shift no later than April 6, 2012.

Objective 1.2: Identify all minimum training required by the state no later than June 12th.

Objective 1.3: Establish an annual training calendar no later than September 2012.

Objective 1.4: Establish a budget no later than January 2013.

Goal 2: Establish a dispatch liaison

Objective 2.1: Appoint a Liaison no later than April 6, 2012.

Objective 2.1: Establish regular dispatch meetings no later than May 6, 2012.

Objective 2.3: Within 6 months establish dispatch procedures.

Plan Implementation and Maintenance

The Fire Department, in collaboration with the City is responsible for the ongoing implementation and maintenance of this plan. As such, the Strategic Plan shall be a living document (not static) that is reviewed and updated annually by the strategic planning team of the fire department and communicated annually to the City Manager and City Council to keep its members (and the general public) well-informed of the accomplishments of firefighting services, issues, concerns, and resource needs.

2.1.4 Community Profile

The Community is known as the "Land between the Lakes" in southern Minnesota. The City was founded in 1855, as settlement began on the northwest edge of the lake and the city became known as Albert Lea. The City has grown into a balanced mix of 797 Commercial and Industrial Properties, and 7,466 Residential properties worth an estimated value of $1,134,297,000 within a 14 square mile area. The City is reported to have 18,016 residents. There is a slight shift in the median age for the community from

41 to 46 years between the last two censuses. The feeling among community leaders is that there is a shift in the population to a more senior community. Future growth is designed to meet the needs of the senior population.

The community is nestled in between Interstates 90 and 35 which are heavily traveled buy commercial and the general population. The City is located in Freeborn County and is the County seat. The neighboring townships are rural in demographics mainly comprised of farmland.

Albert Lea has an urbanized central core with a commercial and residential mix of buildings including some low rise buildings. There is expansion outside of the central core occurring toward both interstates. This trend is anticipated to continue. Growth and expansion through annexation may occur by the expansion of city water and sewer services. It is reported that development in the fringe or neighboring unincorporated areas would require these services which could lead to annexations. Wholesale annexations are not projected at the time of this report.

2.1.5 Building Structure Inventory

The current stock of commercial property in the central core is mostly older and creates a higher risk from a fire protection standpoint.

2.1.6 Projected Future Inventory of Structures

The future growth is not well defined as is the case in most communities with the current economic climate. Albert Lea is receiving inquiries about growth in the interstate corridor with interstate related development activity, which could include hotels, motels, restaurants and industrial business which depend on over-the-road transportation services.

2.2 Inter-Agency and Governmental Agreements

2.2.1 Inter-agency Accountability

The Freeborn County Fire Chiefs Association has been in existence for the last 50 years. The association meets on a monthly basis for the betterment of emergency response in the county and even beyond when necessary. The association creates a positive environment for cooperation and regional procedures.

Fire services outside of the City of Albert Lea proper are provided by independent fire companies by contract to the Townships who require service. In the past there was competition between the fire companies for the contract to provide services. This was driven by each fire company establishing their own tax rate for their service. The Association was involved with the establishment of a flat rate of .15 mills for the provision of fire services. Each fire company collects the same millage rate and each has a flat rate for service that is billed to each property owner after an event which required a response occurred. This is a uniform taxing and fee structure that all of the fire companies participate in. Currently, the City of Albert Lea does not use these provisions.

2.2.2 Mutual Aid

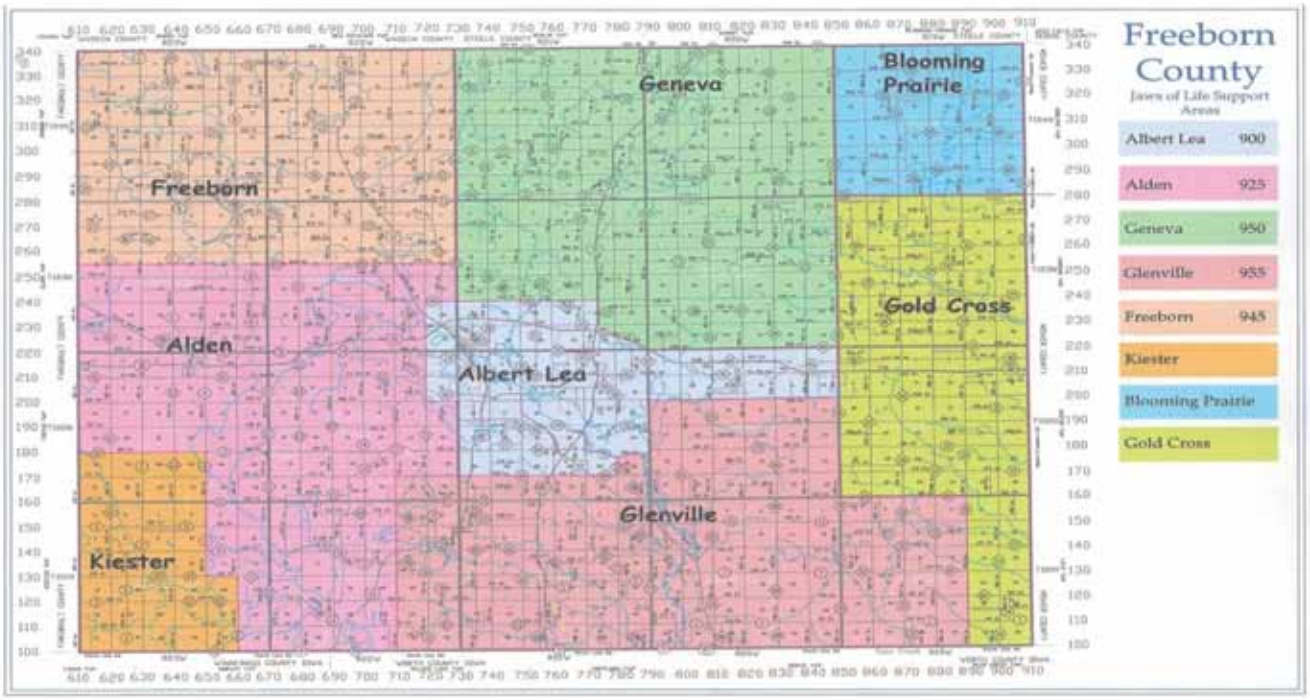
The mutual aid system in Freeborn County has been established for a significant period of time. All of the fire agencies are dispatched from the same dispatch center (Albert Lea); this assists the fire service implementing mutual aid. The departments have developed regional response in the rural areas and the practice is in place for dispatching the next closest company if the first due company does not initially respond to an alarm for service. There have been regional response plans developed for aerial and tanker/tender responses. The departments have recently developed a regional approach to emergency response for vehicle extrication calls for service.

2.2.3 Local Service Delivery

The Albert Lea Fire Department has provided services well beyond traditionally defined fire related services. The members demonstrate a compassion for the betterment of the community. They are involved in most if not all of the special events held in the community. They have volunteered to provide janitorial services in the City Hall complex. They provide proactive preventative services to the community in programs such as, blood pressure screening, the reassurance program, smoke and carbon monoxide detector programs, fire prevention open house and the annual first grader T Shirt program. The department embraces a small community feel and its members have the desire to be out in the community and involved any way they can. This is a very refreshing quality and should be commended.

2.2.4 Regional Service Delivery

The department participates in the Freeborn County Fire Chiefs Association. The group functions for the betterment of emergency service delivery throughout the county. The department participates in regional response for motor vehicle extrication calls (Jaws-of-Life) and specialty responses like aerial (ladder) company response, elevated and confined space rescue. The map below was created to designate closest unit response to jaws-of-life calls it also demonstrates the cooperative efforts of the county fire companies. These companies willing respond beyond the designated areas when requested. The map may need to be updated to reflect the changing conditions in staffing and response capabilities especially during the working daytime period.



Historically in the county there have been instances where fire companies bid against each other for the opportunity to provide service to a township. This created an environment where the ALFD is not requested for assistance as often as they should be. There continues to be the fear if one department shows that they may be better able to service a township the current service provider would lose that contract. This is antiquated thinking that needs to be addressed.

Delivery of emergency services, especially, during the continuing difficult economic times and when volunteer recruitment is as difficult as it is, available resources need to be taken advantage of. Albert Lea has the ability to provide quality assistance to its neighboring fire companies, there should be a system designed to implement that advantage. This is not a recommendation to be taken lightly. The elected and appointed leadership as well as the fire department itself needs to develop a plan for the future with its neighbors. The economic picture is not predicted to return to prerecession levels. Many papers have been written that the conditions we are in may

be the new normal. That means providing service the way it has been done is a thing of the past. Communities will only be able to maintain current services levels by partnering and creating a paradigm shift to regional service delivery. As demonstrated, the fire companies in the county have started to consider this with "Jaws of Life Support Areas". While this is a positive start every company needs to consider going further with developing a regional service delivery program.

Today, the Township Fire Company does not call the City Fire Department as part of their fire response. That is not acceptable. The two communities should be working to create a unified organization. Neither can survive without the other. It is time to streamline the departments into one cohesive unit.

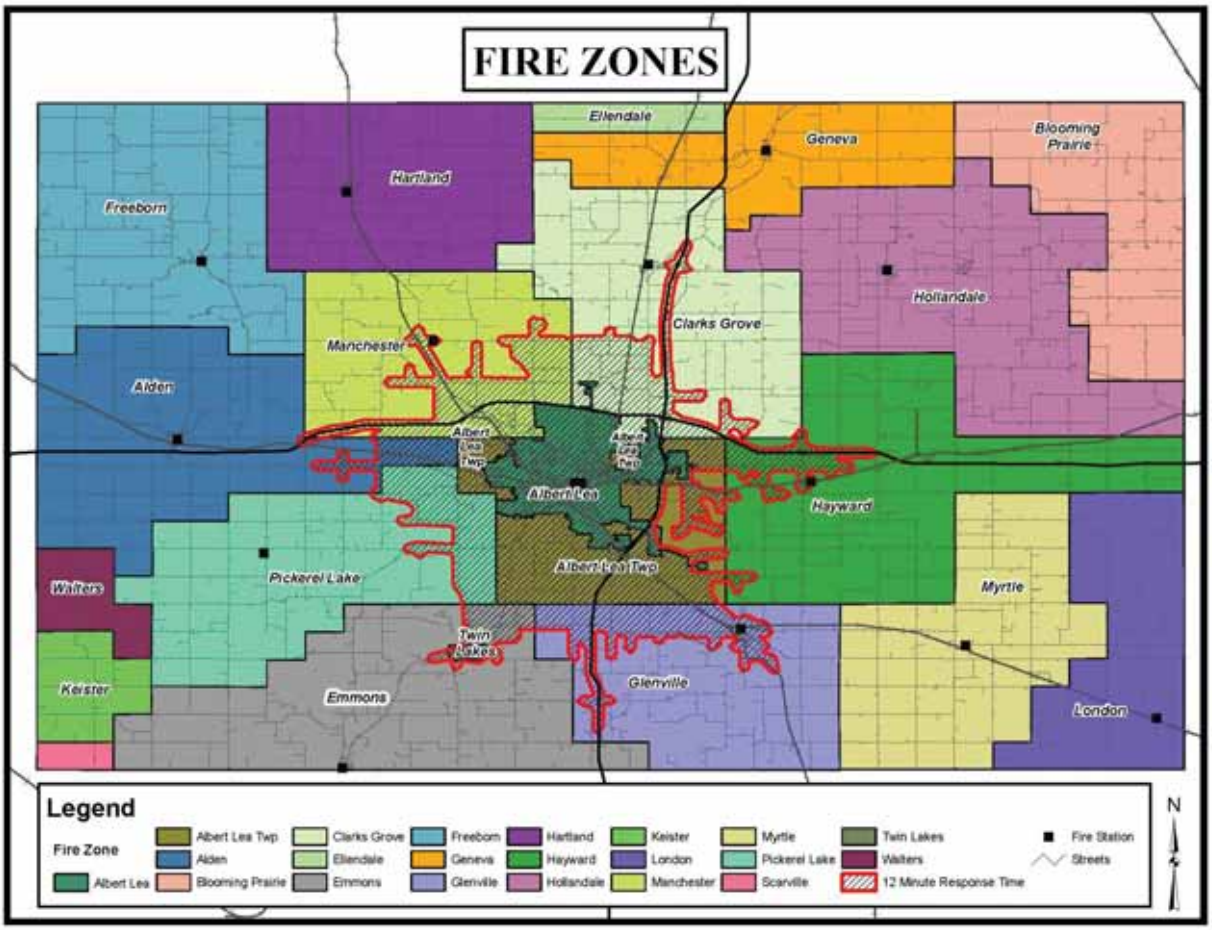
The county needs to develop a closest unit response program that eliminates jurisdictional boundaries and creates response profiles that sends the closest unit to all emergencies. While there will always be tradition in the fire service, now is the time to redefine such traditions to place the community first and provide a merged, whether it be functionally or full, fire service to the citizens of Freeborn County.

There are opportunities to be considered by ALFD and neighboring fire companies. During interviews all neighboring fire companies reported difficulty staffing for calls during the traditionally difficult hours of Monday through Friday 7 AM to 6 PM. The ALFD has staff available; they have the capability to respond a full crew which could make a significant impact on an active fire. There are two significant issues with this proposal. First, there has been historical fighting between volunteer fire companies for the contract to protect different townships. While the City has not been reported to be part of this history there are concerns by the fire companies that if the City firefighters were to respond and control the fires, townships may just contract with the city. The city would have a difficult time contracting for service at the rate the fire companies currently recover. The second issue is that the City could not provide this service

without cost recovery. There is a simple formula that should be used to provide full cost recovery for the City is as follows on a per hour basis:

	FEMA Rate for Apparatus
+	Total hourly cost per employee
+	Fuel cost
=	hourly cost for City response.

This would generally be less than $200 per hour and reasonable for the assistance that could be gained. The following map demonstrates the ability of the City to respond in 12 minutes from their station.



We have worked with volunteer fire departments throughout the country that have discovered the benefit of having a fully staffed engine company respond to working structure fires and provide the Rapid Intervention Team. When career personnel who

train as a RIT respond to difficult situations they have the ability to function as a well-trained team to accomplish their mission. The Freeborn County Chiefs should consider this as a viable option for their county. The Chiefs have already designated specific responses for calls requiring extrication tools. The predetermined RIT teams would be a logical next step.

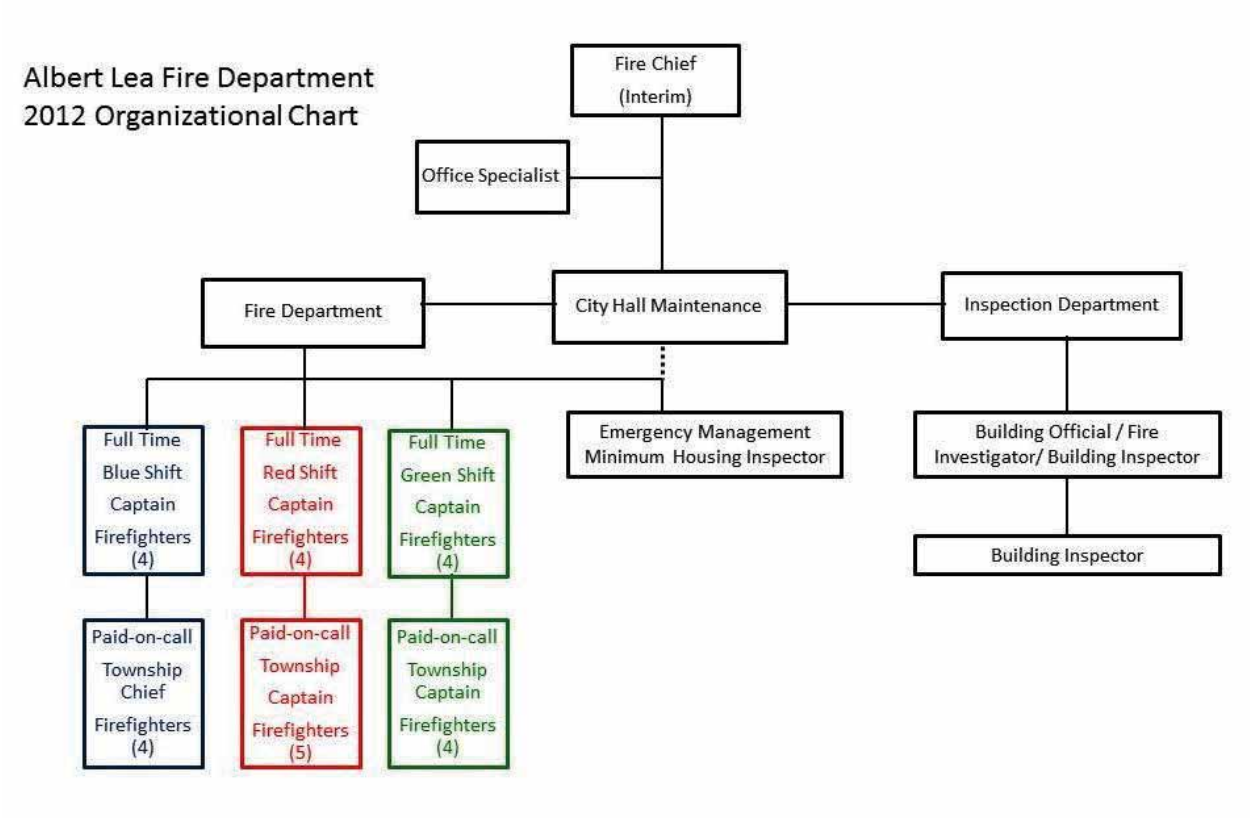
2.3 Organizational Development

2.3.1 Organizational Leadership Structure and Options

The City Fire Department has 16 budgeted full-time positions which include Chief, four (4) captains, eleven (11) firefighters, which includes assignment positions of lieutenant and apparatus driver. The Fire Chief's position is being held vacant awaiting options from this report and two firefighter positions are filled with part-time employees.

The Township Fire Department has a paid-on-call staff of 16 budgeted positions which include Chief, two (2) captains and fourteen (14) firefighters. There is also one administrative assistant which is a shared position.

The current organizational chart:



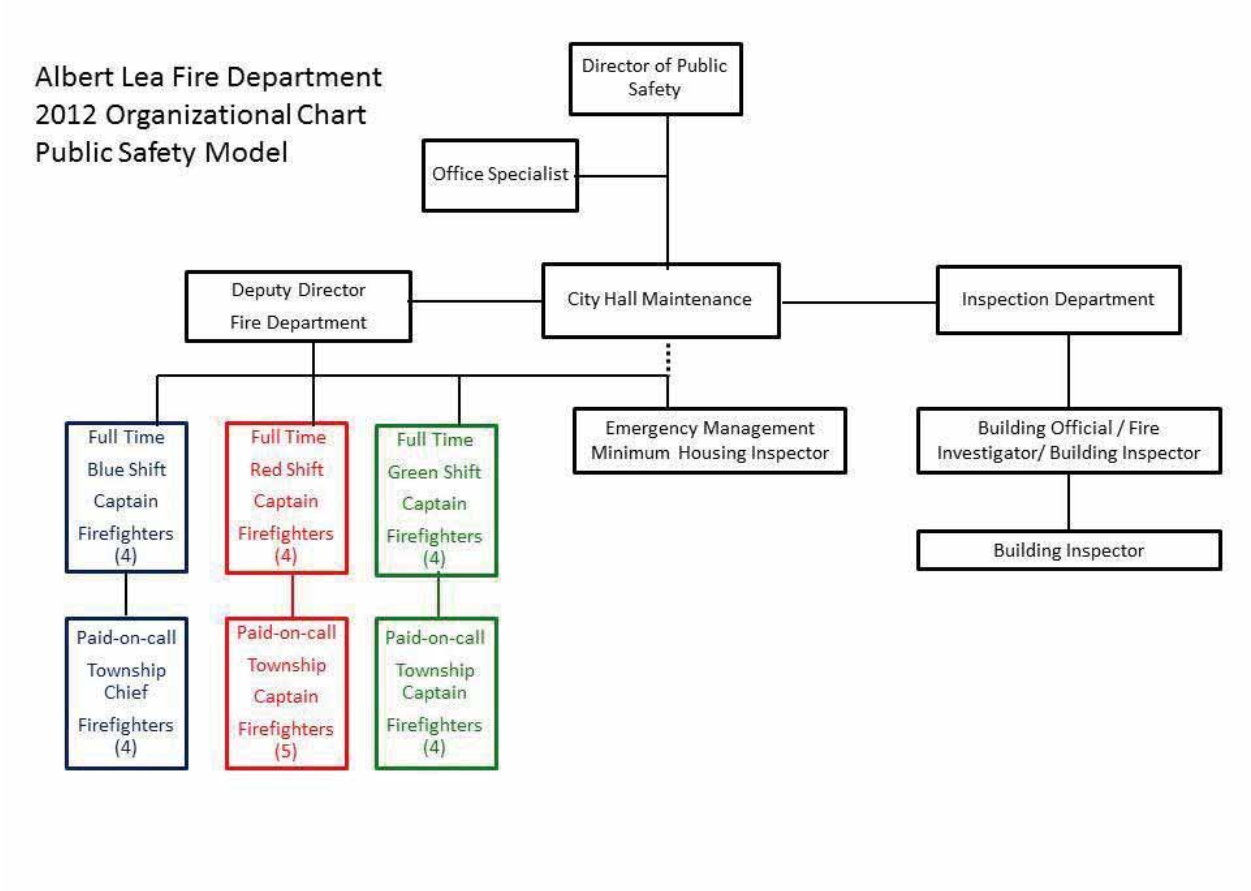
Almont Associates has been asked to comment on three different options for managing the fire department. Management Option 1 would be appointing a Public Safety Director over the Police and Fire Departments. Management Option 2 would be a part-time Fire Chief and Management Option 3 would be a full-time Fire Chief. The form of management has several pros and cons to consider, but most important is the individuals to be considered to fill the positions.

With over 40 years of experience, Almont Associates has worked with functional and dysfunctional types of each of these three options. The primary consideration when evaluating each option is the education, experience, and management style of the individual who would manage each option. A secondary but often overlooked consideration is the political aspect for the affected organization. An example we are familiar with involved the largest city in a Midwestern state. The City Manager was considering a Public Safety Director. As long as the Manager was considering the Police

Chief, the fire department was against it, but the police department was accepting as long as there was no consideration of functional consolidation at the street level. Once the Manager announced both fire and police professionals would be considered both departments were against a Public Safety Director. This demonstrates the animosity that can occur with this option.

When considering a Public Safety Director model, the job descriptions of both the Police Chief and Fire Chief should be considered. For example, if the Fire Chief in a small community is expected to conduct fire prevention activities such as inspection, public education, plans review, or investigation the Public Safety Director would need to have some additional training. Another consideration is incident command (IC). Traditionally, the fire official is the incident commander during all non-law enforcement events. Police responsibilities during disasters are typically security related and a secondary role. A police public safety director would need to be trained in the overall larger picture of incident command and should have experience managing the National Incident Management System. If a public safety director option were to be selected there would need to be a position created in the building, fire and police departments for an experienced chief officer to manage the day-by-day operational aspect. The public safety director should function as the administrative head of the combined departments and as the public face of the organization. The cost associated with the plan would need to include an increase for the Public Safety Director of $15,000. The addition of Deputy Directors of Fire, $155,000 and Police $125,000 for salaries and benefits and the mid-point of their associated pay grades.

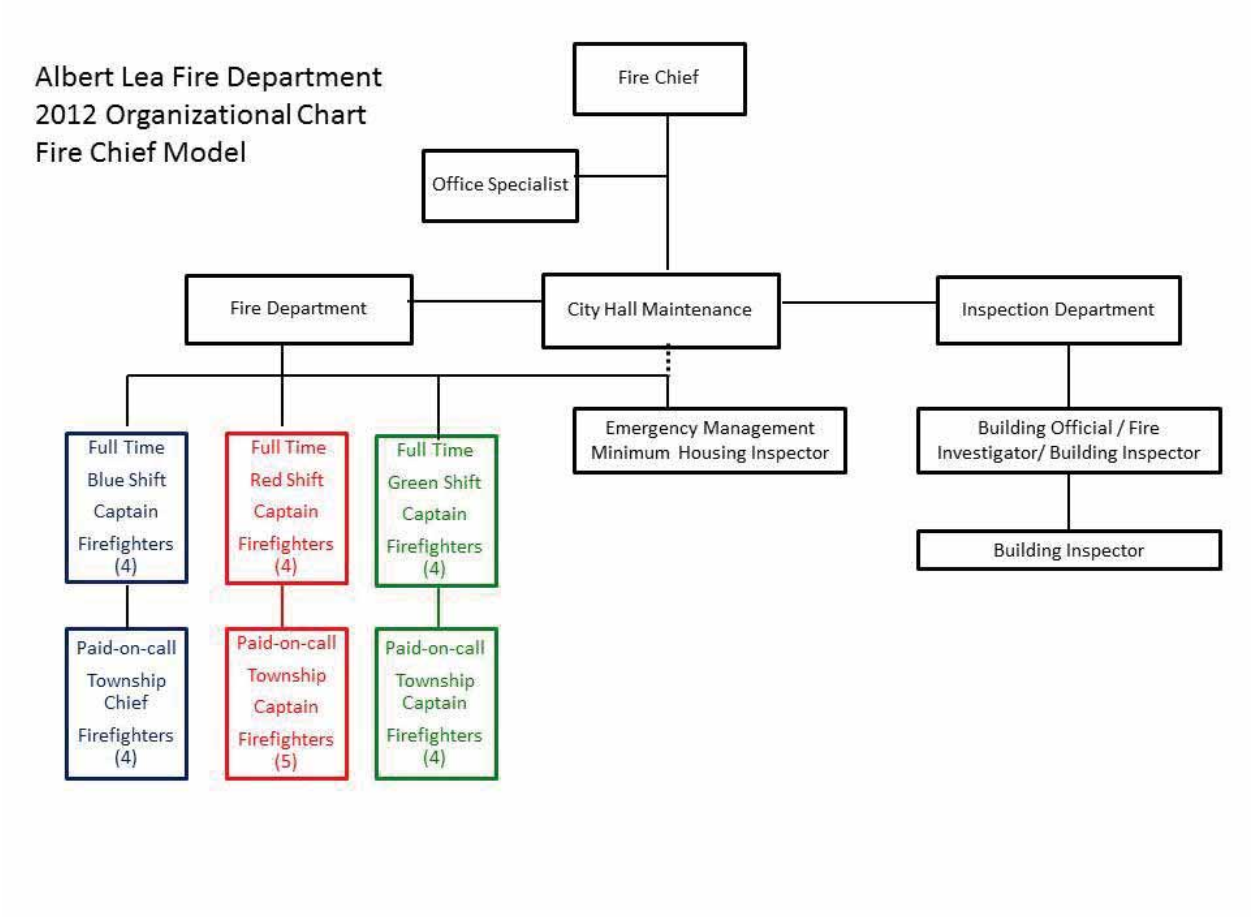
The Public Safety Organizational Chart would be:



The second management option is to consider a part-time Fire Chief, again the place to begin is a review of the job description requirements and workload. As mentioned above if the chief is expected to participate in prevention activities a part-time Chief could work but needs to be on call for customer services and incident command duties. The most obvious positive feature of a part-time Fire Chief as with the Public Safety Director is the salary savings. The primary disadvantage is the psychological impact and actual concept of part-time commitment to all building, fire and emergency management activities. It would be anticipated that a part-time Chief would not be able to dedicate the proper amount of time to all of these responsibilities as well as have limited time to respond to emergencies. Almont Associates do not feel this approach will best serve the needs of the city.

The third management option, a full-time Fire Chief, has one primary disadvantage and that is the cost. As previously mentioned, the place to begin is a review of the job description and work load. The obvious advantage is a Chief committed full-time to fire, building and emergency management. If it is determined that the job description and current workload needs to be expanded, time is available to accomplish that assignment. The full-time Chief has the ability to manage the demands of the building and fire departments. They should also serve as the designated Fire Marshal, which the department does not have. Additionally they would become actively involved in county-wide and regional emergency service partnerships. In small organizations as Albert Lea, he should respond to working incidents and function as an active participant thereby providing another firefighter at the emergency, this is very important with a combination department. Expansion of fire services as recommended by this report, such as, increased coordination with volunteer and outside agencies and an increased role in training would need to be considered when choosing which option will work best for Albert Lea. The cost to add a Fire Chief would be $ 143,000 based on Pay Grade 20, top salary and benefits. This would be $ 152,000 less than the Public Safety model.

The organizational chart for this proposal would be:



City Management would decide what type of leadership the organization will have, Public Safety Director or Fire Chief but either way there needs to be a redistribution of some currently assigned tasks. The Fire Chief's position is also the Chief Building Official. Whether there is a Chief or Director the building official responsibilities need to be designated from that position. There would be an extremely small candidate pool for a person having the qualification for both positions thereby restricting the City's ability to find a quality candidate pool. The Chief Building Official functions are now conducted by a building official; this person should maintain that responsibility and function as the Chief Building Official.

Since the current (interim) Fire Chief is not a building official that position is not able to conduct inspection functions. This would continue to be the case with the proposed

organizational chart. Therefore the work load for the current building and inspection staff has increased, this is challenging the staff to complete their work on time and serve their customers. Additionally, the minimum housing inspector, office specialist, Fire Chief and fire personnel are responsible for maintenance and janitorial services in City Hall and the Library. The fire crews had agreed to provide these janitorial service two years ago as a cost savings measure. This arrangement was to be for one year, but the financial condition of the community dictated that the program continued. All people involved in this process agree that it is time to remove that responsibility from the fire operations personnel.

To remove the maintenance and cleaning responsibilities from all the positions mentioned would require the hiring of personnel for that task. A position analysis has not been conducted for that responsibility. It is recommended that an incremental approach be taken and a full-time maintenance/cleaning person be added. This position would require a salary and benefit package at a cost of approximately $80,000 per year. During the first six months of filling this position an analysis should be conducted to determine if the responsibilities are being met. If the work load is beyond the capability of one person a part-time position could be created at a projected cost of $25,000.

Removing the maintenance services and adding a person for that responsibility has additional benefits. The minimum housing inspector is dedicating approximately 30 percent of his time on building maintenance as well as the office specialist. Both positions' normal work load is suffering because of building maintenance responsibilities. The addition of a maintenance person for the City Hall complex will increase the productivity of all of the personnel now responsible for those services.

The Fire Captain assigned as minimum housing inspector is in that capacity because of a disabling injury that has restricted his ability to function as a fire officer. While this person provides a valuable service to the community as housing inspector, emergency

management director for Freeborn County and the City as well as facility maintenance manager for the City Hall complex there may be a better role for this person and any future person to fill this position. The Fire Captain is certified as a Safety Officer. All fire departments should have designated safety officers who are responsible for safe practices and the health and welfare of the employees. Currently the Captain reports that he is used occasionally in that role. Consideration should be given to expand that role. Almont envisions removing the minimum housing inspector functions from the Fire Captain. It does not seem to be a cost effective use of that person. While it is acknowledged that the current employee in the position has physical restrictions they could function at full capacity as fire/emergency services personnel. We are proposing that the position become responsible for the following tasks:

Emergency Management 50%

Training Coordinator 25%

Safety Officer 20%

NIMS Compliance Officer 5%

During these difficult economic times the City and County should continue to share the emergency management responsibility. The County website describes the County's department of emergency management with Mark Roche as the Emergency Management Director. The city and county should agree on the county paying for the emergency management and NIMS compliance portion of this position. This would continue a positive functional relationship for both organizations while freeing up time for additional emergency management work to be completed. Additionally, the fire department will have a safety officer who is responsible for department wide training and could help with the development of the new training facility.

The duties of the minimum housing inspection program should be reassigned to the fire operations staff. This will add to their productivity and increase their community awareness, while providing needed assistance to the inspection program. There are potential retirements of both the minimum housing and building inspector in the near

future. These changes would help manage those occurrences. Additionally, there may be opportunities to replace both of these positions with certified firefighters. These personnel could be available to respond to emergencies during their working hours, if the Building Official is included (already a certified firefighter) there would be three additional firefighting personnel available for immediate response during the daytime hours.

The opportunity to improve functionality of the inspectors can be accomplished with the addition of smart phones for each person. It was reported that with the ability to manage calendars, send e-mail and documents the inspectors would be able to increase their time in the field. The city should explore the best option to add wireless technology for the inspectors while in the field.

The City is in an area that has the potential for natural disasters. An issue in the building inspections department after a disaster is permitting for repair. There is not enough staff available to meet the customer needs. It is recommended that part-time staff be added to assist during the aftermath of a storm that increases the demand on permitting.

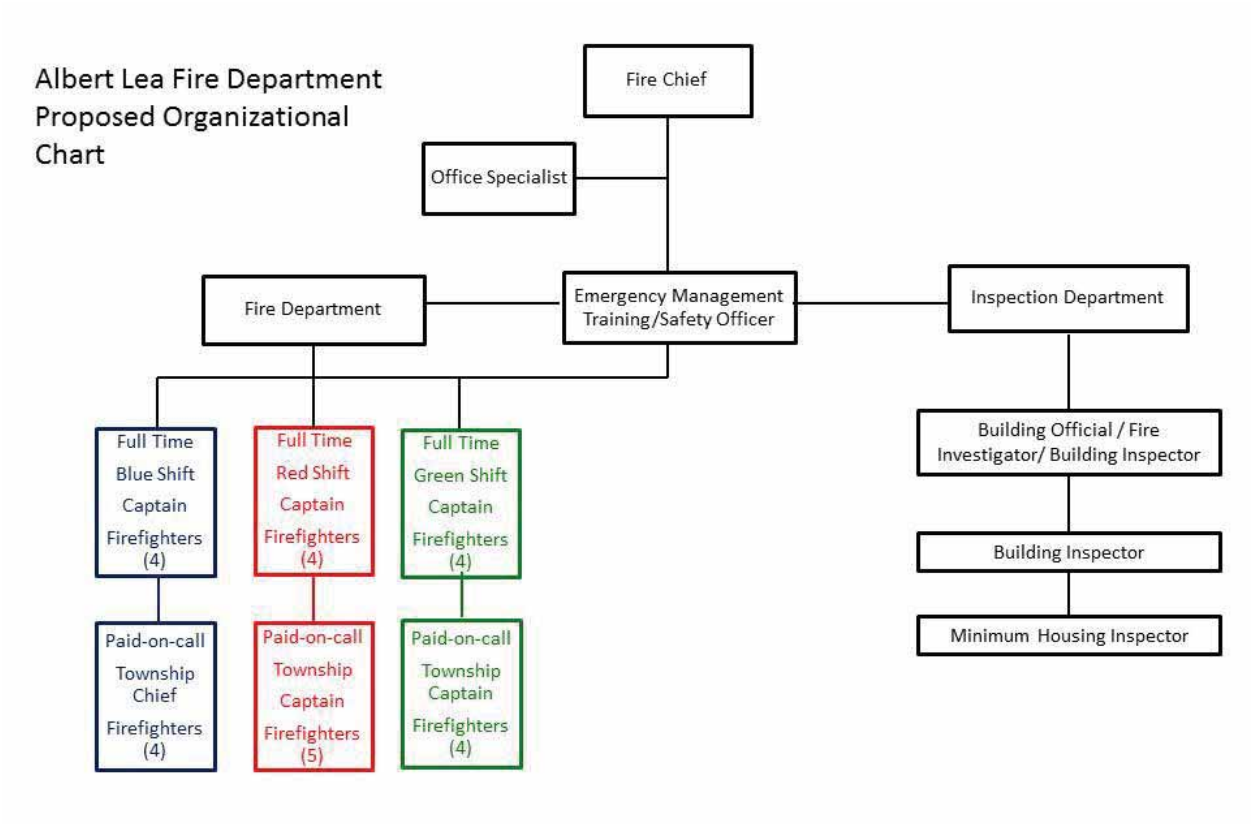
The department currently uses a manual payroll system. This is time consuming for the Office Specialist. The City is in the process of migrating to a new finance system. The Fire Department would need to analyze this system to make a determination if fire payroll can be automated and function in this new system. Historically, very few vendors provide a finance system that can accommodate the unique payroll rules of the fire service. If the new system is not capable of managing fire payroll the City should consider a public safety scheduling and payroll system. An example of one such system is Kronos Telestaff®.

The Fire and Building/Inspections websites are not being used to their potential. Web searches are the tool of the public for receiving answers to their questions. Neither department has a website that is functioning to the benefit of the public or the departments. Each department should assign a person responsible for content; they should develop a plan for enhancement of the site and work with the City web person to develop a plan of action to update their sites. A very good resource when websites are involved is the public school system. There are always students that need community service credit and they are usually very well versed in website use and development. The Departments should include this resource in there website enhancement plans.

Operations personnel work a 24 hour 3 platoon schedule. There has been years of research and analysis in the use of this schedule. It is the least expensive schedule for providing fire services. The fire personnel work an average of 56 hours per week and by federal law must be compensated at time-and-a-half for all hours over 52 per week. Almont examined a modified work schedule that included higher daytime staffing with lower night time staffing. To cover the City with this type of schedule required additional personnel.

Staffing for fire operations should remain the same. This analysis as well as the strategic plan provides information that demonstrates the need to maintain the current staffing model. The ability to respond with a fully staffed engine company in the 4 minute range, successfully deploy an attack hose line and either contain or extinguish fires that are manageable in their early stages are successful elements in the lower fire loss the community enjoys. The fact that additional assistance takes significant time to assemble, is an important factor in maintaining a minimal force of 4 personnel at all times. The current staffing of 5 allow for coverage for employee time off with limiting overtime impacts. The use of part-time employees is cost effective during difficult financial times. Those FTEs should revert back to full-time as funding allows. The need for all members of the small on-duty crew to be proficient for optimum effectiveness

supports the 15 person full-time staffing configuration. This plan outlines the potential for the expansion of services provided by the fire department. These additional services would support the continuation of current staffing levels. The organizational chart that describes the recommendations above is:



As part of this analysis the advantages and disadvantages of maintaining the current organization as well as examining reductions were conducted. This resulted in three options for consideration. These options are displayed at the end of the report and identified as Option 1, 2, and 3. Maintaining the current number of personnel and redefining some positions as well as increasing productivity of the current work force by 33% is Option 1. Reducing the current workforce by 3 firefighter positions and slight increases in productivity is Option 2. Reducing the workforce by 1 captain and 6

firefighter positions with losses in productivity is Option 3. All of these options are defined in detail on the exhibit pages at the end of the report.

During the analysis for this report further reduction beyond Option 3 were discussed. Reducing the current staff beyond the options described does not appear to be viable for the following reasons. The City does not appear to have a candidate pool of potential volunteers sufficient enough to support the fire activity in the community. Additionally, during the workweek daytime period the majority of responders are the recalled full-time firefighters. Any reduction in full-time personnel will have the corresponding loss of recall personnel. The available candidates to hire would most likely come from other county fire companies thereby reducing their staffing. The corresponding insurance increases and projected increase in fire loss would offset any savings realized while potentially adding to an increase in injuries and deaths. The elected officials and community leaders interviewed all voiced concerns over drastic cuts to fire protection. The majority were interested in increased productivity which this report recommends and describes.

The Fire Captains are not members of the collective bargaining unit. They are defined as non-exempt employees because of a past agreement and the number of hours they work; this is a benefit for Captains. The Captains have also enjoyed being on the firefighter overtime hiring list and can be hired as a firefighter. This can cause multiple Captains to be working at the same time. This is not cost effective for the City. The Captains should be placed on their own overtime list and hiring should only be in the situation where there would be no qualified supervisor scheduled for a shift then, the Captains hiring list should be used.

2.3.2 Lines of Communication

Organizational development can occur in many ways; however it usually begins with an analysis of where the organization is and more importantly where it should be in the future. This process was started with the development of the Mission, Vision and Values by the strategic planning team. In order to succeed, any plan must include all members of an organization having the ability to provide their input. This was accomplished with the environmental survey of the membership and must be continued through open lines of communication. This will encourage plan maintenance and ensure long term participation in the plan.

Communications can be informal and as simple as the spoken word. This takes place every day in every part of the organization. It becomes more formal and takes on a more importance in a setting such as emergency operations. Other areas of formal communications occur in the form of written communication with informal bulletins and policy and procedures manuals. The master plan development is a very powerful communications tool because it lets everyone in the organization know exactly where they are headed complete with measurable goals. The alternative allows everyone to have a different opinion with no focus or direction and is therefore doomed to failure. This has been reported as a problem between the shifts with each shift operating individually not as a cohesive department.

Other than the master plan, communications can be seen in documents such as the budget and informational notifications; the department has done a good job providing annual reports. All informational notifications should carry an expiration date so that they do not become part of policy or a directive. When informational correspondence does not carry an expiration date they should be made a part of policy, procedures or directives manuals.

Overall the department has basic organizational communications in the form of Standard Operating Guidelines. All forms of communication, especially Standard Operating Guidelines, must be regularly reviewed, updated as needed, and made available to all employees. The department is unique in that it has full-time paid and contract employees (Township Fire Department) therefore all of their documents must be integrated into one master organizational format and shared between the two organizations. No document should be just for career or volunteer personnel, although they may pertain to that element of the department. All personnel should be aware of said correspondence and have access to it.

Communicational dysfunction in an organization can almost always be attributed to some type of lack of communication whether it originates from the top down or the bottom up. The solution is for the development of a strong bidirectional flow of information and participation. Members of the department need to understand that not all ideas can be accepted all the time; but they need to know that their concepts have a functioning method to be heard and considered. They also need to know why their input was either accepted or rejected.

The department should create the following tools for internal communications: Create a method electronic or written for employee suggestions. The system must contain a feedback loop. The Chief and Shift Captain should meet should meet every workday morning (Monday thru Friday) no more than thirty minutes to discuss items that need to be addressed from for the shift and what projects or assignments are scheduled for the rest of the week. The Captain should then meet with their crew to highlight the important facts from the briefing. This creates a cohesive team environment, and allows for the entire management staff to be part of the decision making process of the organization. This briefing is an excellent mentoring tool as it provides insight to the decision making process of the organization and allows for the leadership message to be carried forth by the Captain of the shift. It is an essential tool that eliminates personnel

from going directly to the Chief to make changes that have effects on other areas of the organization without participation by representatives of those areas. Finally, a morning briefing is a proven tool in successful management.

A monthly staff meeting should be regularly conducted. It must include representatives from the entire organization and detailed notes in the form of minutes published. Each area of responsibility of the department should be reported on by the person responsible for that area. Suggestions for change or improvement should be finalized at these meetings. The Department should establish a Historian and support efforts to memorialize the organization.

The department should establish a safety committee which should meet on a regular basis as determined by the need to approve safety related programs, procedures, purchases and to investigate injuries and accidents for cause and recommendations to prevent reoccurrence. The committee's ruling shall have no bearing on corrective action recommendations.

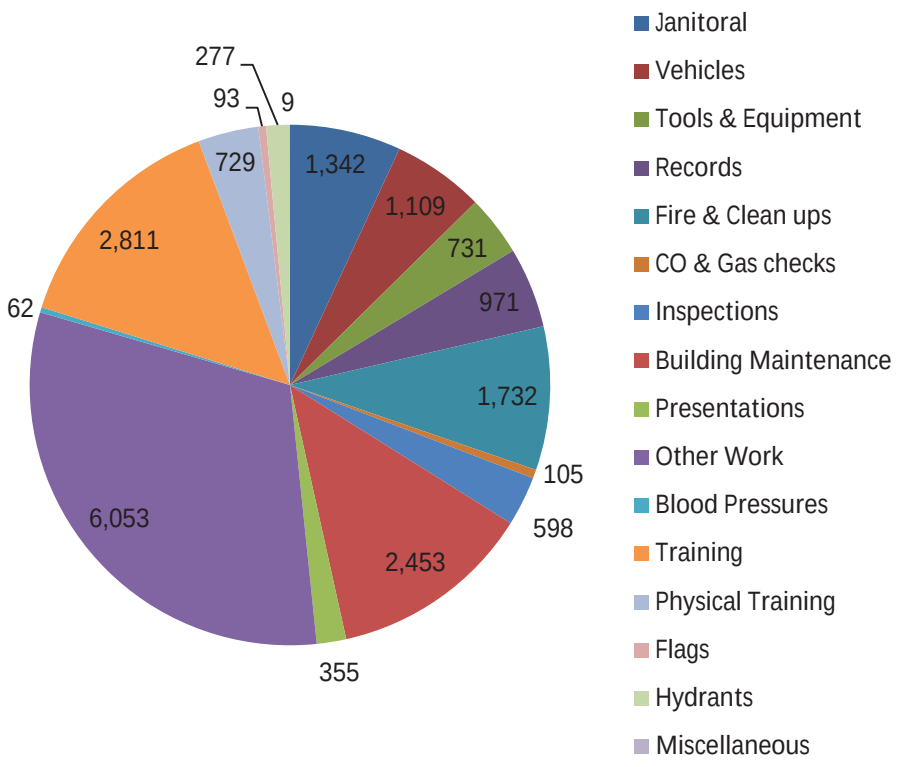
An electronic department newsletter is another good method of passing on information regarding the social aspect of the department. The newsletter should not contain material that is essential to the operation of the department. This type of correspondence is usually well received by department members. An annual report is essential to record the history of the department and provide the community with an understanding of the impact the Department has had on their lives. Currently, the department provides detailed information in the City Manager's Annual Report. This practice should be continued. Additionally, the department should post their section of the Annual Report on their webpage.

Many departments confuse formal lines of communications as a means to limit or do away with open door policies. The two should not be mixed or confused. Open door

policies in the fire service are a way for problems to be addressed or ideas to be brainstormed. All officers should maintain or if needed, establish an open door philosophy but it must not be used to replace the formal chain of command or as a method for employees to shop for the answer they desire. Properly managed, both formal and informal lines of communication can work in harmony.

2.3.3 Organizational Productivity

The ALFD has provided annual productivity reports as part of the City Manager's Annual Report. These reports are detailed and describe the amount of hours of work provided by the organization as a whole. In 2011 the department's productivity was as follows:



Department employees worked approximately 40,320 person hours during the 2011. The goal for a department whose firefighters work a 56 hour workweek, as in Albert Lea, should be that employees are productive for the same number of hours as an 8 hour per day, 40 hours per week employee. While it can be argued that 40 hour employees are

not productive for the entire 40 hours worked each week, this analysis will use that comparison factor.

Employing the hours reported, the ALFD was producing a defined work product for 19,430 hours. There were 28,800 hours of available time based on a 40 hours of productive time. That would mean the department's members were producing productive accountable work for 67% of their available time.

For the community to receive the best return on their fire protection investment, this report defines multiple programs that would increase that work product. It also recommends that the janitorial services be removed from the department. This would increase the available time by 5% to 38%.

The increased tasks that are included in the report and further defined are, increased training with significant influence in incident command, assumption of emergency medical response duties, provision of regional training, increased fire prevention inspections, strategic planning, development of regional fire services, increased code enforcement services including minimum housing inspections, increasing department technology, and increased community interaction. While the exact hour impact of these recommendations cannot be defined at this time, the assumption of emergency medical services and required training can be anticipated to add a minimum of 15% increase in work hours. This would increase productivity to 77%. The remaining recommendations will place productivity at or above 100%.

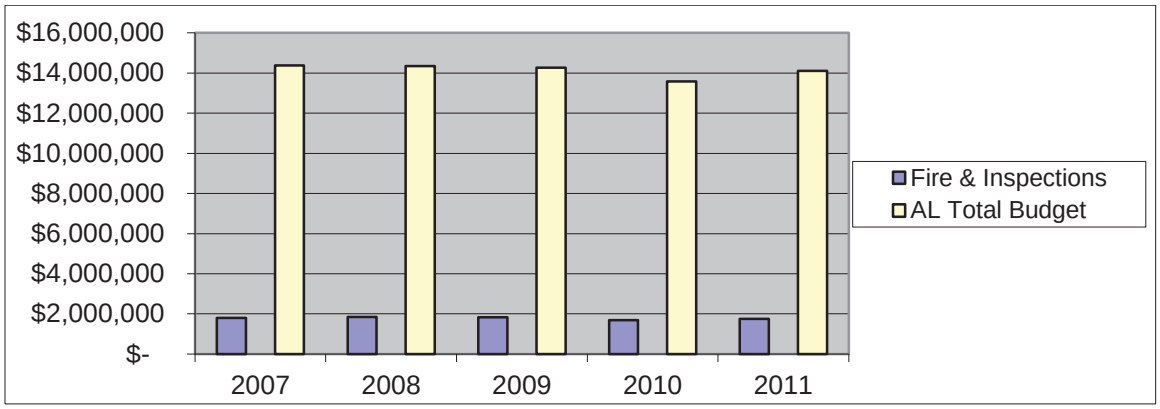
2.4 Budgeting

2.4.1 Current Funding Current Funding

The majority of revenue is generated from property tax revenue of a Tax Capacity Rate

which is 57.125 against a reported assessed property value of $ 1,134,297,000. Investment income from the Police & Fire Public Employee Retirement Association (PERA) Refund account is an additional source of revenue which funds may be appropriated for police and fire department projects or expenses. Building inspection fees are generated after inspections and since the Building Department is under the Fire Department, these revenues are associated with the overall Fire Department operations. Neighboring fire companies have been charging and collecting a fee for fire suppression activities associated with a working fire. Minnesota has historically provided State Shared Revenue but this has been in decline since the recession began. The fire department budget has averaged being 12.50 percent of the overall city budget for the last five years. The chart below demonstrates the actual percentage. Fire and Inspections started being shown as one in 2010.

Year	2007	2008	2009	2010	2011
Fire	$ 1,536,791	$ 1,592,512	$ 1,587,354	$ 1,441,899	$1,499,940
Inspections	$ 259,846	$ 254,342	$ 244,456	$248,252	$258,745
Fire & Inspections	$ 1,796,637	$ 1,846,854	$ 1,831,810	$ 1,690,151	$ 1,758,685
Percentage of Total Budget	12.50%	12.87%	12.84%	12.44%	12.47%
AL Total Budget	$ 14,373,023	$ 14,348,970	$ 14,267,756	$ 13,587,076	$ 14,107,092



2.4.2 Funding Options and Opportunities

If the need for additional staff is required, funding for these positions will need to be general fund expenses but there are grant opportunities. The largest is the SAFER Grants, Staffing for Adequate Fire and Emergency Response. This grant was developed

to provide funding directed to fire departments in order to help them increase the number of trained front-line firefighters available to help their communities. The ALFD is an excellent candidate organization for the grant. This year the rules are being changed to further assist departments as part of the federal stimulus incentives. The Department must strongly consider applying for the grant this year and in the future.

Another opportunity for revenue would be through annexations. Neighboring unincorporated areas may choose to annex into the City thereby providing addition ad valorem revenue.

Future Funding

The current methodology for revenue generation is appropriate. Some options should be considered. The United States Fire Administration has provided guidance for cities and fire departments with regards to alternative funding sources.

2.4.3 Capital Resource Needs and Projected Expenditures

The Department has already defined the needs that will be required. At the minimum, a new fire station with associated equipment and personnel will be required. This may be funded through a combination of revenue sources, which could include long-term bonds and revenue from the Pension Reserve Fund. The Department will need to expand its current long-term leasing program for additional funding.

2.4.4 Alternative Funding Sources

2.4.4.1 Development Impact Fees (Not allowed in Minnesota for Fire Services)

An impact fee is a direct charge levied by local governments against developers to help offset the cost of new growth. Impact fees most often take the form of a one-time permit charge assessed at the time of plat approval or an application for a building permit. These fees provide a city funding for capital projects. Cities may only impose fees on developments that will benefit from the infrastructure improvements. The fees

cannot be used to fund operational expenses. Therefore, impact fees cannot be used for maintenance or to eliminate deficiencies in older neighborhoods.

Impact fees can provide some financial relief for growth-related problems. In California, some cities collect fees for such urban-growth needs as road improvements, mass transit, public art, low-income housing, daycare centers, and job training. Arizona allows impact fees for fire, police, parks, recreation, libraries, public buildings, and streets. Like real estate transfer taxes, impact fees are facing increasing political scrutiny from real estate interest groups. Today, 26 States have implemented the use of impact fees, mostly in the western States, along the Atlantic coast, and in the Great Lakes region of the country. While the collection of impact fees for the provision of fire services is a short term alternative to assisting with the cost of growth, there is a much more efficient and effective solution.

Because Impact Fees are not allowed in Minnesota, the City should consider implementing a city-wide ordinance to require fire protection sprinkler systems in all new buildings. This is a solution that reduces the long term cost of fire protection, and reduced insurance rates for the property owners, while providing an optimum level of fire safety.

2.4.4.2 Emergency Service User Fees

Cities have the authority to impose direct charges, or fees, on individual users of services. Use of these revenues is restricted to paying for the service for which the fees were collected. User fees are a fairly efficient way to distribute the costs of government services. Many communities are serviced by private ambulance providers. As such, a price can be affixed to some services, such as transportation or EMS-standby services, and the customer billed for the provision of those services. Fire departments and EMS agencies have assessed a number of EMS-related user fees as a means of cost recovery or alternative funding with fees that are usually covered by insurance providers.

The Minnesota League of Cities has published guidelines on this fee and state the following:

> "Since this law was enacted, several cities have passed ordinances charging fire fees and more are considering this option. Aside from the concerns mentioned above, cities should consider the following issues before charging fire protection fees. First, the city should consider whether charging fire fees is the best choice. Some citizens may argue that the mechanisms for collecting and enforcing property taxes are already in place and that paying for fire services out of general revenue may be a better option than charging for fire calls."
>
> "Second, the city should decide whether it is prepared to collect charges when the fee is not covered by insurance. Some insurance policies will only pay if the property owner has an obligation to the city. If the city only collects fees in limited instances, the insurance company could argue that the property owner does not really have an obligation to the city. Furthermore, if the city aggressively attempts to collect fees from persons having insurance but looks the other way for persons not having insurance, the city could be committing insurance fraud."
>
> "Third, if the city decides to charge fire fees, the statutes do not limit the amount of fees a city may charge. However, as is usually true for city fees, the fee should be reasonably related to the city's cost in providing the service."
>
> "Finally, keep in mind that all fire fee collections belong to the city, not the fire relief association or fire department, and should be deposited in the city's accounts."

The other fire companies in the county are using this fee based system as secondary source of income while their primary source continues to be an ad valorem mill rate .15. They are using a flat fee structure to recover costs of operating at actual incidents. The City should consider joining the other fire companies and establish the supplemental fee for service charges.

2.4.4.3 Inspection Fees

Inspection fees have long been used by fire departments to provide funding for fire prevention. Fee schedules vary among jurisdictions. Inspection fees may be based upon the type of inspection conducted (initial or reinspection), the occupancy (educational, industrial, residential, etc.), and the size of the building. Many departments charge a flat fee for initial inspections with additional fees for each subsequent reinspection.

Additional fees may be charged when special hazards are present, such as hazardous materials storage areas.

Business self-inspection programs have become an accepted way to address low-hazard occupancies, while making certain the fire department has the necessary information on businesses operating within the jurisdiction and the types of hazards present. Self-inspection programs involve sending a checklist to the registered business operator. The owner completes and returns the checklist to the fire department along with a nominal fee in exchange for a Certificate of Inspection. Some fire departments conduct random audit inspections to ensure proper compliance. Self-inspection programs only work for low-hazard occupancies. The advantage is that self-inspections collect information the firefighters' need, while also providing a revenue stream for fire prevention services at little cost to the department. The following is one example of a fire inspection schedule.

2.4.4.4 Facility Rentals

Fire departments often rent out meeting space for private functions. Some departments intentionally design new stations to include meeting space that is not only useful to the

department, but also serves as a community facility. Departments can rent out a dining hall or large room for dances, parties, exercise classes, weddings, and other gatherings. Some of these organizations provide catering upon request. The fire department needs to ensure that they have adequate liability insurance for hosting these types of events. The Mountain Preserve Reception Center is owned and operated by the United Phoenix Fire Fighters Local 493. The Mountain Preserve offers a view of the Valley and is available for conferences, banquets, and weddings. Conference rooms provide meeting space for union events and meetings and are rented out to generate revenue for the organization. Facility rentals may face the same type of opposition as fees for service in that the public may feel they are being double-charged for a facility—once through taxes and again with a user fee. As with other charges, a department must weigh the potential public indignation in charging for service against the revenue raised. Charging for events that are clearly private affairs may prove more acceptable to the public. As the City designs the new fire station they should consider if this is a viable revenue source for them.

2.4.4.5 Grants

In April of 2012 the United States Fire Administration released a report about the funding alternative for the fire services. The report provides information to fire departments around the country on how to obtain state and federal grants. The information provides individuals with information on the proper way to prepare a grant. It also provides information on different types of grants available and formal education for grant writing. Attached is the link where the information can be found http://www.usfa.fema.gov/media/press/2012releases/042312.shtm. Two or three individuals should be given formal grant writing education with the intent of creating a revenue stream that could assist the department in purchasing needed equipment at no cost to the City of Albert Lea.

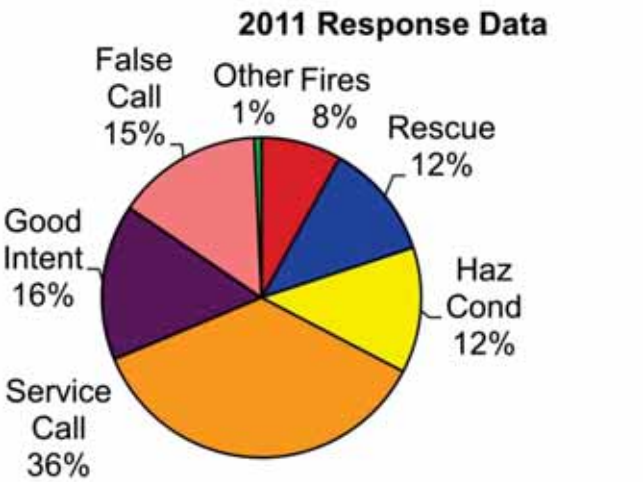
3.0 Service Delivery and Operations

3.1 Fire Deployment and Response

3.1.1 Current Level of Response and Coverage

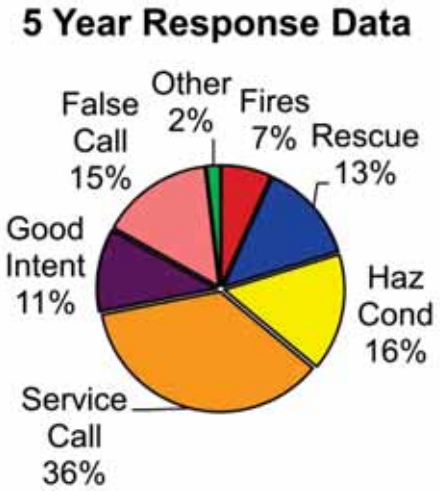
An analysis of the City of Albert Lea response data for 2011 shows that the fire department responded to 677 calls for service. The chart below shows the number and type of calls for service:

55	Fires
80	Rescue
86	Hazardous Condition
244	Service Calls
107	Good Intents
100	False Calls
5	Other
677	Total



Five year data analysis show that the number and type of calls for service:

203	Fire
408	Rescue
476	Hazardous Condition
1085	Service Calls
338	Good Intents
454	False Calls
56	Other types of calls
3020	Total

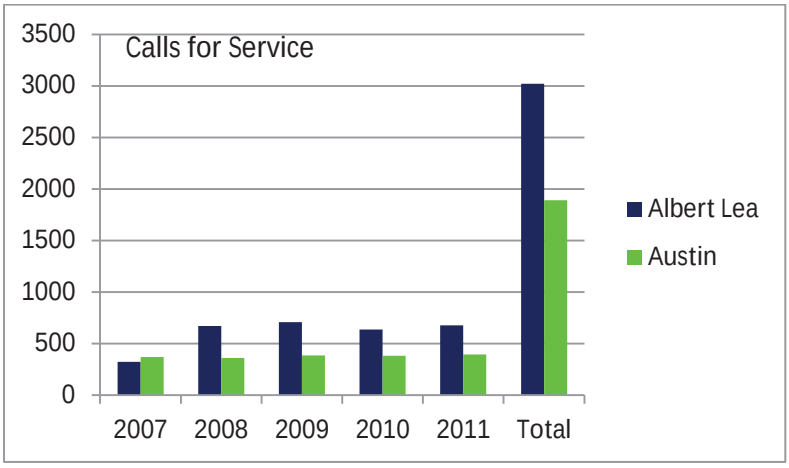


This analysis demonstrates that the department does not compare with most career fire departments. Their lack of responses to medical emergencies is an anomaly for the fire department. The rest of their responses mirror similar fire department throughout the

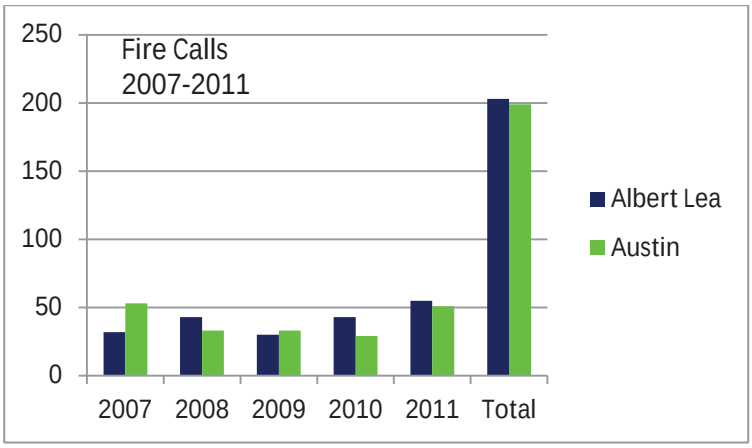
state and country. The department is averaging two responses for service per day. This does allow for increased productivity as further defined in this report.

3.1.2 Comparative Analysis with Similar Department

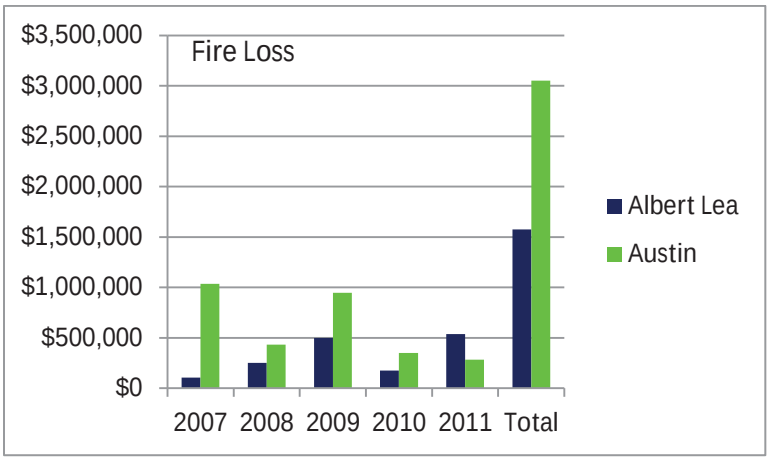
During interviews it was noted that Austin, Minnesota provides similar services and would be an acceptable organization to conduct a comparable analysis with. Almont conducted a phone interview with the Fire Chief. The result was that Austin has similar problems with coverage during the workweek daytime period. At best they receive a total of 10 firefighters responding which most are the recalled career firefighters. The recommended number of firefighters for a single family residential structure should be 14. Additionally recruitment and retention is difficult for the same reasons as in Albert Lea. Austin reduced its full-time fire force in 1991 through a plan of attrition which took until 2000; their cuts have not been recent. It is reported that providing enough staffing at fires during the workweek daytime period is very difficult. This may be demonstrated in their fire loss over the last ten years, which is double Albert Lea's. Further research discovered that Austin as a larger population by 24% and is smaller in area by 7% in the city but they provide coverage to two townships which adds another 28 square miles. Both Cities have a single fire station and provide primarily fire services with very few emergency medical responses. Over the last five year period Albert Lea has recorded 7% more requests for service.



During that same time period Albert Lea and Austin had similar amount of fires that were responded to.



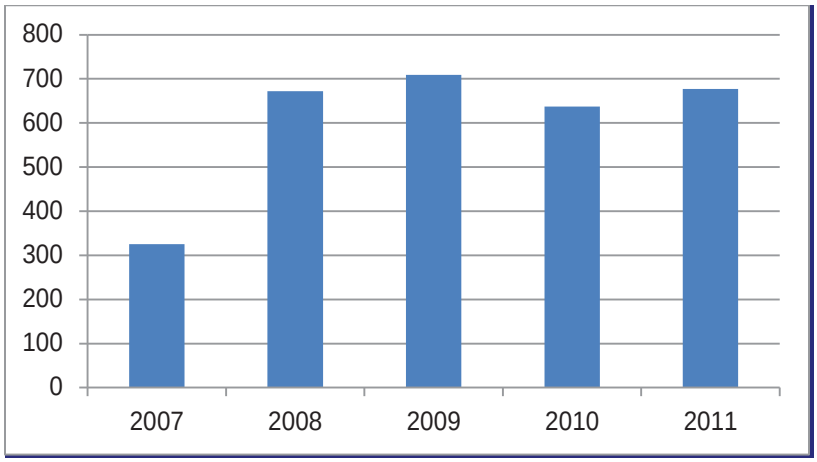
The significant difference that was discovered was the fire loss during the same period of time. Austin's reported fire loss is 49% higher than in Albert Lea.



The final area was the difference in budgets. The Austin budget for 10 FTE and 20 PTE is about $1,100,000. The Albert Lea budget for 15 FTE and 16 PTE is about 1,500,000. The difference is about $400,000 per year. The one significant difference for the two organizations is the fire loss. While it is difficult to place a solid correlation between the two there is evidence that the quick response, with a crew capable of making a rapid interior attack along with Albert Lea's strong fire prevention program may make the difference between the two communities.

3.1.3 Project Future Response and Coverage

Historical response data demonstrates that annual call volume has been steady. There was an increase between 2007 and 2008. This was due to a change in reporting and records management. From 2008-2011 the number of annual responses remain consistent from year to year.



Regression analysis and projected growth indicate that increases in emergency responses will be minimal.

Expansion into Emergency Medical Services

The Mayo Clinic Health Systems (MCHS) provides a hospital based advanced life support service in Albert Lea. This service provides some of the best trained paramedics and emergency medical technicians because when not responding in the field these personnel are providing services in the hospital, especially the emergency department. This allows these employees access to the latest skills, plenty of patient care time and a closer relationship to the receiving hospital than most systems can provide. The local police district police officer provides an unofficial role as a first responder for medical emergencies in their area for critical medical calls. The Albert Lea Police Department has an excellent automatic defibrillator program and many police officers have successful saves in the field. The analysis shows that there is no need to change either of these programs.

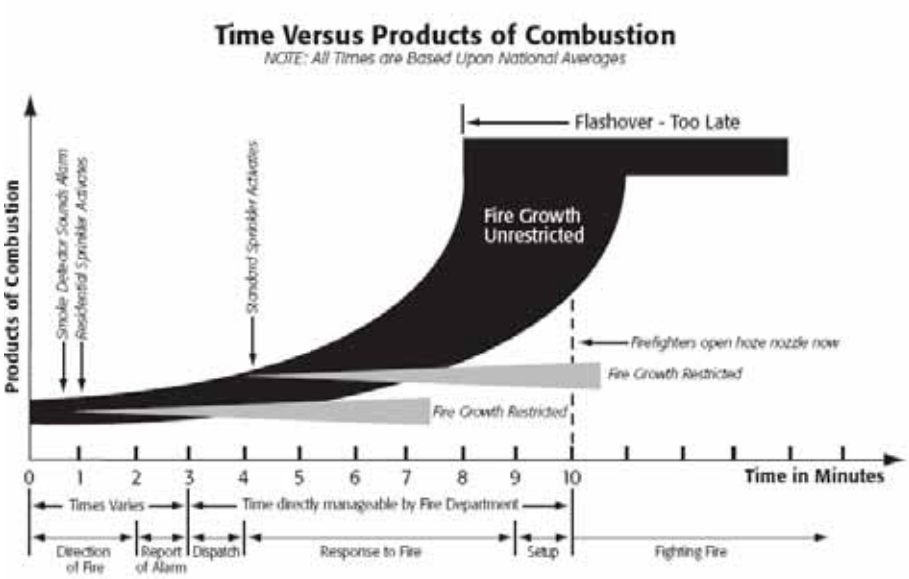
MCHS has suggested that the fire department could play a role in providing much needed staffing support for critical patients, and especially for patient movement from their physical environment to the ambulance. Additionally, Mayo staffs two units for the majority of the region. There are times when their response will be delayed; during these instances a response by fire department first responders would be required. Finally, there was the conversation about stationing a reserve Mayo ambulance at the fire station to be staffed by firefighter/EMTs when all of the Mayo units are busy. This ambulance could also be the first responder unit for the fire department, thereby keeping fire apparatus available for fire responses. Currently, medical transport and paramedic service is provided by MCHS with two advanced life support ambulances. If the ambulance company needs additional personnel for a critical emergency they request the second ambulance, leaving the citizens without an available ambulance. The City of Albert Lea should establish criteria working with MCHS that would dispatch a fire unit for additional assistance during critical calls thereby relieving MCHS from using two ambulances for single patient emergencies. For example, a cardiac arrest or unconscious/unresponsive emergency would automatically have a fire department response along with the ambulance and closest police officer. The fire staff would provide critical staffing for emergencies that require additional staff. The NFPA recommends a minimum of two paramedics and two EMTs respond and treat patients in need of advanced life support care to assure the best chances for a positive outcome. Use of the fire department would allow the second ambulance to be available on single patient emergencies. This plan increases the productivity of the fire department and increases the efficiency of the MCHS units.

The program should be evaluated in 6 to 12 months to see if the service being provided to the citizens has improved and is beneficial to all parties involved. If the program is deemed to be beneficial to the City of Albert Lea and MCHS additional training of personnel should occur. All fire department personnel should be trained to the emergency medical technician level and consideration of placing a back-up ambulance

in the fire station should happen. In the event of multiple calls or a mass casualty incident the back-up ambulance could provide an additional unit on the street.

3.1.4 Staffing

The Department uses a career staff that is supplemented by a "call back" of career personnel and volunteer personnel from the Township of Albert Lea. The use of the call back procedure and the township personnel is for incidents that require multiple personnel and apparatus. The department could be compared to the National Fire Protection Association 1710: Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments, for their initial response engine company. This standard would not have a relative bearing on the additional responding units. The majority of responses to fires by ALFD are within the NFPA standard of four personnel within four minutes based on the 1710 standard. The Department should strive to continue to meet the NFPA 1710 Standard for initial response by the first arriving company. This gives the department the best chance to contain fire to the room of origin if reported in a timely manner. The following chart demonstrates the need for timely well-staffed response.



This graph demonstrates the effects of an unchecked fire with regard to growth and fire extension. The best opportunity any fire department has to control a fire is to be able to attack the fire within the room of origin before flashover or extension outside of said room. Albert Lea has demonstrated success in their efforts to control fire which is proven by their reported annual fire loss verses the amount of property they protect. Their current staffing allows for aggressive interior attack by the initial company and support from cost effective call back of paid per call employees.

The City has had a contract with the Township Volunteer Fire Department (TVFD) to provide support staffing for fire services. The Township fire station is located less than one half mile from the City fire station. The City has provided the TVFD with an engine and provides their members training and personal protective equipment. The City also funds the firefighters' pension plan and training. Currently the TVFD provides staffing to the City fire station when requested. This has been the practice since the inception of the contract, but it adds unnecessary delay to the response of the TVFD to assist the City. Effective immediately, when "toned out" to respond as City contract firefighters the TVFD firefighters should report to their station, staff their City provided engine and respond to their designated assignment. TVFD personnel should not respond to the City fire station until they have excessive staffing beyond their apparatus' capability; only then would they staff other City apparatus with City crews. This will allow for improved response by the TVFD and will greatly improve the response time of the second engine company to an alarm.

Recruitment and retention of part-time staffing is a challenge for volunteer fire companies. Many of Albert Lea residents are likely commuter workers. Their work days are long, especially adding commuting time, and their workweek just as long. They do not have significant free time and what free time they do have is dedicated to their families and their children's activities. Additionally, due to the economic conditions many employers cannot afford to allow employees time to leave work to respond to

fires. This is drastically reducing the available pool of candidates for volunteer firefighters. Many volunteer or part-time organizations are being affected by these conditions. All of the fire departments are reporting significant difficulty in staffing during the working hours and some are additionally having staffing issues around-the-clock.

Historically, the ALFD has tried and at times very successfully fought a fire (room and contents) with the on-duty 4 or 5 person crew. While this is admirable it is not a safe practice. The City has a system in place with the TVFD and recall of their career personnel to provide the required number of personnel. The Incident Commander (IC) is activating the recall system but not requesting additional units to the emergency. Again this is not a safe practice. The ALFD needs to refocus on managing the incident at hand with a proper response before it holds staff back for the "next" call. The historical data and reported call activity does not support holding resources back from an active incident for the potential of the next incident. Units can always respond from the active incident to the next call if necessary. The ALFD needs to respond no less than the required NFPA 1710 staffing for the incident until that incident is completely remediated. It is important to note that many firefighter injuries occur when the firefighters are tired. Working a fire, even room and contents, with just 4 personnel, when additional staff is available is not a good or safe practice. Working fires should automatically receive the required number of apparatus and personnel to meet NFPA 1710 staffing levels.

The fire department's staffing during the first few minutes of a fire is critical. The ALFD has been successful in providing quality fire protection to the community with minimal staffing. No matter how many personnel are at the scene of an emergency, personnel accountability is the most important aspect of operational management. The department must adopt and employ the following philosophy "*Risk a lot to save a savable life, risk a little to save savable property and risk nothing to save nothing*."

The ICS system must be used at all incidents and an essential component of ICS is personnel and scene safety. The only way to account for personnel is to employ an acceptable accountability system. It has been reported that each shift Captain operates at emergencies using their own personal style. Each person has their own style but operational procedures, emergency benchmarks, scene safety and personnel accountability cannot be accomplished differently, they must all follow strict standard operating guidelines. All personnel need to re-trained in personnel accountability, scene safety, and the ICS system. There should be a safety officer assigned at all working incidents. The safety officer must assure personnel accountability. The past practice of holding back companies for the next incident before NFPA staffing recommendations at the working incident are met must be stopped. Operating differently on each shift is inherent in the fire service but it cannot be allowed to transition to the scene of an emergency.

Technology can assist the Incident commander with managing the scene and their personnel. The use of a laptop computer or tablet could provide electronic pre-fire plans, building plans, contact information, an accountability system, hazardous material information and an incident command system for the captains to use while at emergencies. This would be of great importance for the fire commanders especially because the fire department does not have a dispatching system.

The City provides 911 calls answering, police dispatching and fire alerting services. Fire alerting is different than fire dispatching. Fire alerting is when a person receives a call for assistance for fire services, they alert the fire department, ensure someone is responding then their responsibility ends. Fire Dispatching is the same as police dispatching. Alerting occurs then the dispatcher monitors the entire call. All radio traffic and requests from the field are monitored and responded to. Currently, fire is only receiving alerting services. This places an extra burden on the IC, who must monitor all radio traffic, usually in a very difficult environment to hear, and account for

all of their personnel without the help of a dispatcher. This is an additional reason why any technology that could improve the ICs ability to manage an incident should be strongly considered.

Upgrading to fire dispatching should be a goal of the City and the fire departments they serve. Many times the dispatcher, being in a quite environment will hear radio transmissions that the IC misses. The call volume for fire is not excessive; therefore a system of part-time additional help may be all that is required. The Fire Departments and Chief Winkels should meet to discuss the impacts and options for upgrading to full fire dispatching. Fire dispatching is another form of personnel accountability which helps to ensure scene safety.

3.1.5 Response, Reaction Times

NFPA standard 1710 defines response time goals for career agencies. The career standard was created for urban and suburban demand zones. The recommendations for fire and EMS responses are that a four person first due company arrive at less than four (4) minutes and an entire first alarm at less than eight (8) minutes. The first alarm minimum staffing is 14 personnel. The Department can and should strive to meet NFPA 1710 as it grows into the future in those core areas of the Department. While it is not practical for ALFD to provide a full first alarm assignment in 8 minutes the organization's response profiles should strive to meet the minimum of 14 personnel for the typical single family home and 18 or more personnel for a commercial structure fire. This will require mutual aid but should be a standard that is met to assure the best chance of controlling the fire.

The City has some untapped resources that they could employ in their efforts to provide fire protection. There are City employees that are volunteer firefighters in their home communities. While at work, it would be beneficial to the city to consider allowing these employees to respond as part of the ALFD. There would be required training and

protective clothing costs and the employees would need to be covered for leave from their assigned tasks. This could greatly benefit the community by having experienced volunteer firefighters function in the City when at work.

3.1.6 Response Trends

One of the primary considerations in any service delivery is the location of a facility. Facility location is directly related to response times. Whether responding to a fire, a medical emergency or rescue response, times are the only variable that can be initially impacted by facility location.

While the focus on the research is to apply Geographic Information Systems (GIS) computer-based modeling to determine possible fire station locations, a review was made of all possible methods used by the fire service to determine fire station locations. The earliest known method for determining fire station locations known to this consulting firm goes back to the horse drawn steamer era, where fire stations were located based on the distance that a team of horses could effectively pull a steamer engine and crew, approximately eight-tenths to one mile. A lingering result of that method of station distribution exists today in many large city fire departments, where fire stations are fairly close together and "bunched up" by today's standards. Over the decades, these stations become entrenched as part of their neighborhoods or communities. City governments and department administrations sometimes find these stations hard to close to provide a more economical and operationally feasible distribution, due to local resistance.

Each community must decide the appropriate response and travel times for their community. This decision should be based on a variety of factors, including:

- Types of services provided (fire, EMS, specialty response)

- Reasonable travel time for fire department fire apparatus and ambulances to meet emergency response needs of a community
- Size of area served and amount of resources available
- Level of risk a community is willing to accept by establishing or tolerating longer response times.

3.1.7 ISO Rating Schedule

Many fire departments historically based their fire station locations on travel distances. Frequently, the standard used for determining this has been from the Insurance Services Office/Commercial Risk Services (ISO/CRS). The oft-cited *Fire Suppression Rating Schedule Handbook*, (Hickey, 1993) details how the distance between the placement of engine and ladder companies affects the provided municipal fire protection class and in effect, fire insurance premium costs. The ISO/CRS Grading Schedule considers four components when looking at the number of engine companies to deploy:

- Needed engine companies based on the determined basic required fire flow
- Needed engine companies based on the first-due response distance, and companies needed for distribution throughout a community
- Needed engine companies based on response of companies on the first alarm of fire to buildings
- Number of needed engine companies for areas outside the community (p. 76).

Based on the required fire flow (3000-3500 gallons per minute), the maximum number of required engine companies at any one fire incident is 3. Hickey (1993) further explains that the required number of engine companies (at any one fire incident) may respond from the same fire station (p. 76).

Regarding fire station locations, Hickey (1993) explains that each needed engine company can protect 1.5 miles travel distance from each fire station. The travel distance

is measured according to the route most commonly taken from the station to the designated risk (structure). The designated travel path considers typical impediments to travel, such as railroad grade crossings, bridges (max. gross vehicular weight), dead-end streets and other obstructions. "In most cases, the 1.5 mile response Department from a fire station location will have an irregular shaped perimeter based on the actual travel distances; it will almost never be a circle" (p. 77).

Using the ISO/CRS methodology, fire station locations are determined by plotting compass points at 1.5 miles in all directions from the fire station or stations. Hickey (1993) shows how these concepts provide the foundation for determining needed fire station locations. The 1.5-mile travel distance is plotted on a map. Areas outside of the plot are evaluated by a count of available fire hydrants within those areas. Areas that have 50% or more of the hydrants in a standard response Department that are beyond 1.5 miles from an engine company require an additional engine company. Similarly, the placement of ladder companies is based on a 2.5 mile travel distance, however the availability of fire hydrants outside the primary response area is not a factor in this determination.

3.1.8 Time Element of Station Site Selection

Once the response time standard has been developed, it needs to be broken down into specific time intervals for each of the components that make up response time – i.e. alarm notification, dispatch time, turn-out time, and travel time.

The entire response time of a fire department to arrive at an emergency incident includes a *cascade of events*, which starts with the recognition of a problem requiring the fire department and ends with the fire department's arrival, intervention and action. The cascade of events includes:

- Recognition of problem
- Initiation of 911 call or transmission of fire alarm

- Receipt of 911 call or fire alarm by dispatch center
- Call processing time
- Dispatch processing time
- Notification of fire department
- Turnout time
- Travel time
- Time to reach patient and initiate care or to initiate fire suppression efforts

Travel time is one of the most manageable segments of time in the entire sequence. This is the amount of time that it takes for a piece of fire apparatus or an ambulance to travel from a fire station to an incident scene (wheel start to wheel stop). Travel time can be managed by selecting fire station locations based on the amount of time that it takes to travel from the fire station to the incident scene.

For the purposes of this study, the maps consider travel time with speed limits on each street taken into consideration.

3.1.9 Standards of Response Coverage

One recent trend in the fire service is to develop and adapt standards of response coverage on a local level to determine the appropriate allocation of resources available to respond to emergency (and non-emergency) incidents. The development of standards of response coverage has been increasing in acceptance and application in the past several years due, at least partly to its prominence in the fire accreditation model process. A team member is very familiar with the components of accreditation from his experience as a previous accreditation manager, and current peer assessor and team leader for the Commission on Fire Accreditation International (CFAI). The CFAI (1997-2002) recommends that agencies develop a standard, or benchmark, that indicates their response time goals. It also recommends that when writing target indicators for travel times, an organization should stay away from response time

averaging because it is statistically misleading. It is more appropriate to set goals to achieve a prescribed travel time in a certain desirable percentage of all responses.

"Standards of response coverage must include an element of time: the maximum prescribed travel that indicates the level of service that is anticipated. Usually this is referred to in service level objective statements of the agency and is expressed in terms of a specific response by a specific period of time" (CFAI, 1997-2002, p. 3-34).

CFAI (1997-2002) provides a sample policy statement for a standard of coverage: "For 90% of all incidents, the first due unit shall arrive within the five minute travel time. The first due unit shall be capable of advancing the first hose line for fire control or starting rescue or providing basic or advanced life support for medical incidents" (p. 3-22).

3.1.10 Rapid Access to Defibrillation/Early Advanced Life Support Care

While AFD does not currently provide this level of emergency medical service it needs to be considered as a potential future service that the department might need to provide. Limmer, O'Keefe, Grant, Murray, and Bergeron, (2001) provide what The American Heart Association (AHA) believes are the four most important factors that affect the survival of victims of cardiac arrest. They are (1) early access (to the EMS system), (2) early initiation of Cardiopulmonary Resuscitation (CPR), (3) early defibrillation and (4) early advanced care (p. 348). The AHA states, "if the response time of the defibrillator is longer than eight minutes, virtually no one survives cardiac arrest." (Limmer, et al, 2001, p. 349). The AHA also states that the faster a patient in cardiac arrest is provided with defibrillation, the more likely the patient will survive the event. The early initiation of advanced cardiac care administered by paramedic level responders also is apparently responsible for higher survival rates. (Limmer, et al, 2001)

3.1.11 Computer Modeling / GIS

The evolution of early programs into today's GIS technology is exciting and ever developing. GIS provides the ability to quickly and inexpensively capture data, to process and integrate it with other existing data bases and to develop stand-alone modules of capacity in the mapping arena. Using pre-existing or created data sets, GIS gives policy makers the ability to see the potential impact of various planning scenarios prior to actual implementation. GIS allows the use of three dimensional rendering, virtual reality and modeling of future decisions and events, GIS gives planners and policy makers alike the ability to create future universes based on assumptions and parameters which can be easily modified.

The software can be used to generate service areas, shortest distance between two points, best route between two points or more points and drive time. It also provides information on population counts in a defined service area. The Network Analyst component allows the study of drive time from a variety of potential fire station locations. GIS is also used to identify available land parcels that are large enough to accommodate a future fire station site.

3.1.12 Procedures

The initial step in conducting this analysis was to obtain a street network for Freeborn County. This street network was obtained from the county government. For the purposes of this research it was determined to utilize three response time benchmarks for this analysis. The response time analysis goal for this study was:

- Response from the locations recommended in 4, 8, and 12 minute increments.

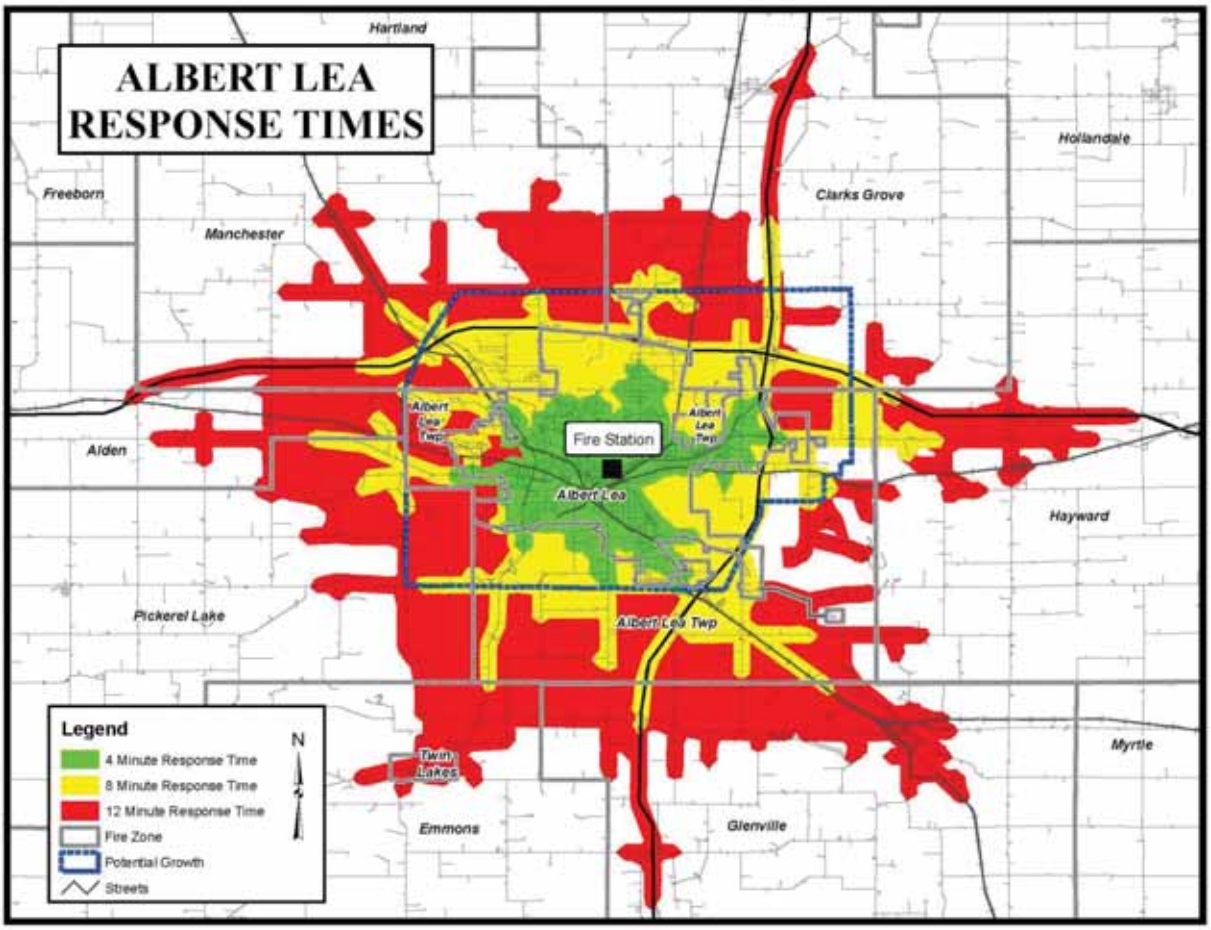
3.1.13 Assumptions

The procedures utilized in the research were based on various assumptions. The first assumption was that the response time data obtained from the ALFD was accurate and complete. A second assumption is that all of the computer program ArcView GIS Network Analyst software would produce accurate and verifiable data on response time

scenarios for the depiction of current and future fire stations. Other assumptions used in the research include that the fire stations will be staffed 24 hours a day, and that average turnout time will be no more than 60 seconds.

3.1.14 Current Location

The following map reflects the current configuration of the City's fire station. This map demonstrates the areas of the city that are within a four, eight and twelve minutes response time from the station. The coverage from this location is good. The entire core center of the City is within the four minute road travel time frame. The entire City is within an eight minute response. ISO gave the City 55% (2.22 out of 4 points) credit for coverage by the engine and ladder companies.



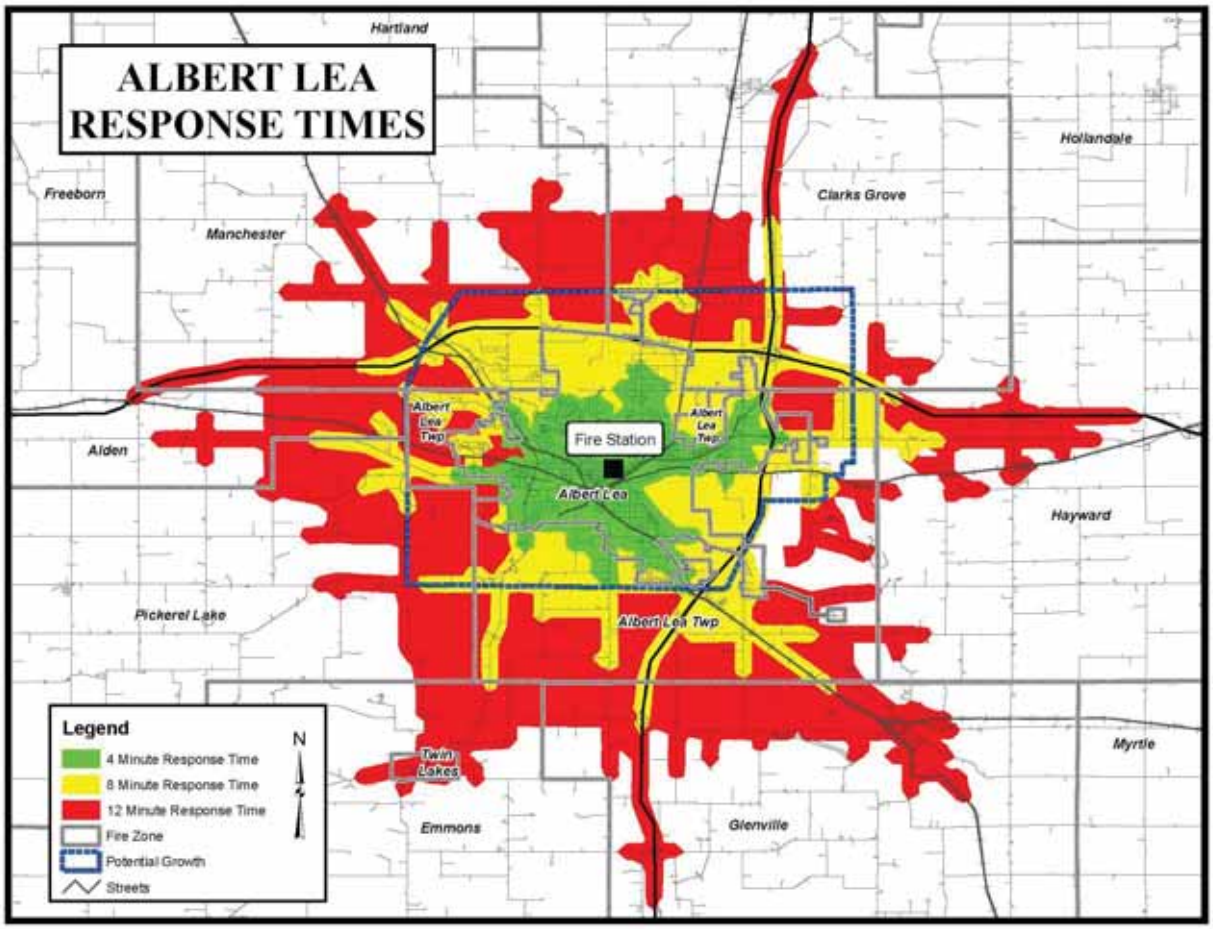
The current fire station location while serving the City well for coverage has become too small and also creates a response risk for the public as well as the firefighters with the vehicle and pedestrian traffic caused by City Hall and the library. Additionally, this facility requires the apparatus to be backed into the station verses being able to drive through. There is no space available for training other than classroom and the facility is not capable of housing both male and female firefighters. The City has acknowledged the need to use the space occupied by the fire station for the library, which is occupying atrium space in the building. There is also a situation with diesel exhaust from apparatus being smelled throughout the building.

3.1.15 Alternative City Locations

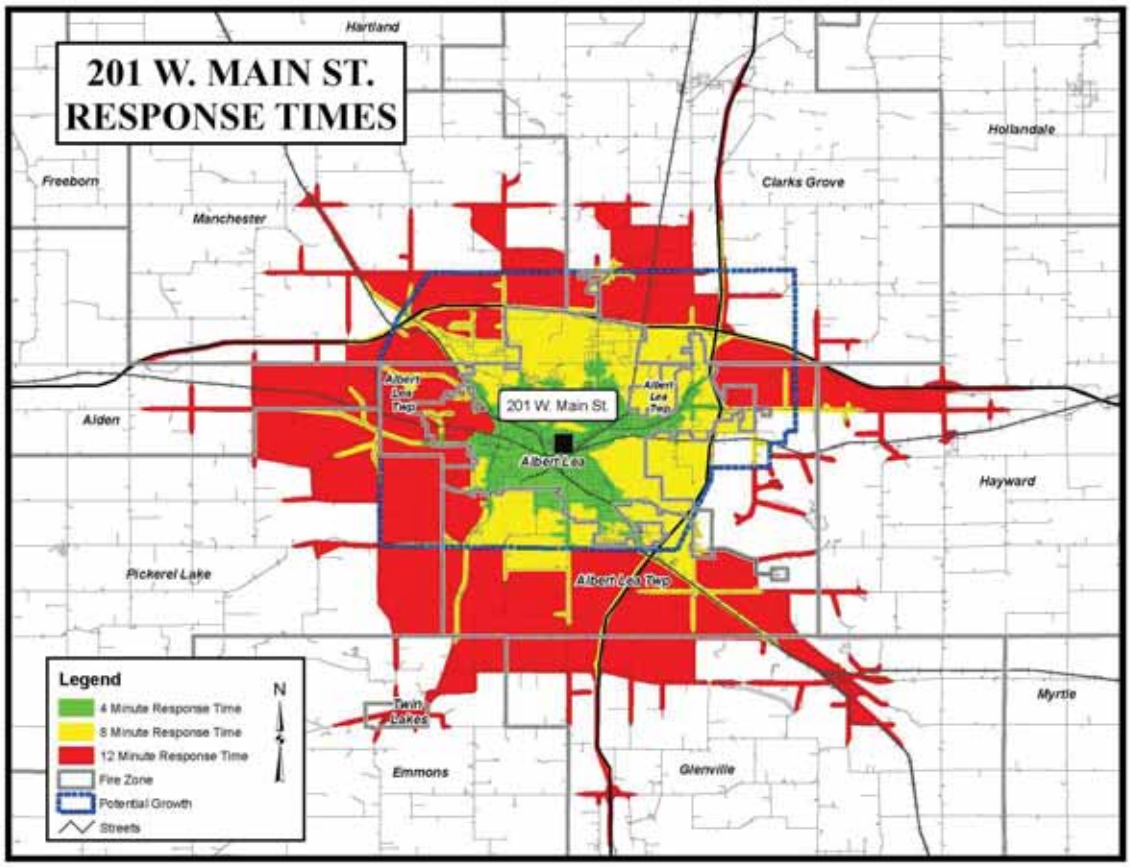
During the kickoff visit multiple locations were recommended for analysis as possible sites to build a replacement fire station. Through analysis and discussions the following locations were reviewed. 400 East Clark Street, 201 West Main Street, 700 East Main Street and the Farmland on East Front Street.

The following maps demonstrate 4 minute 8 minute and 12 minutes responses from each location:

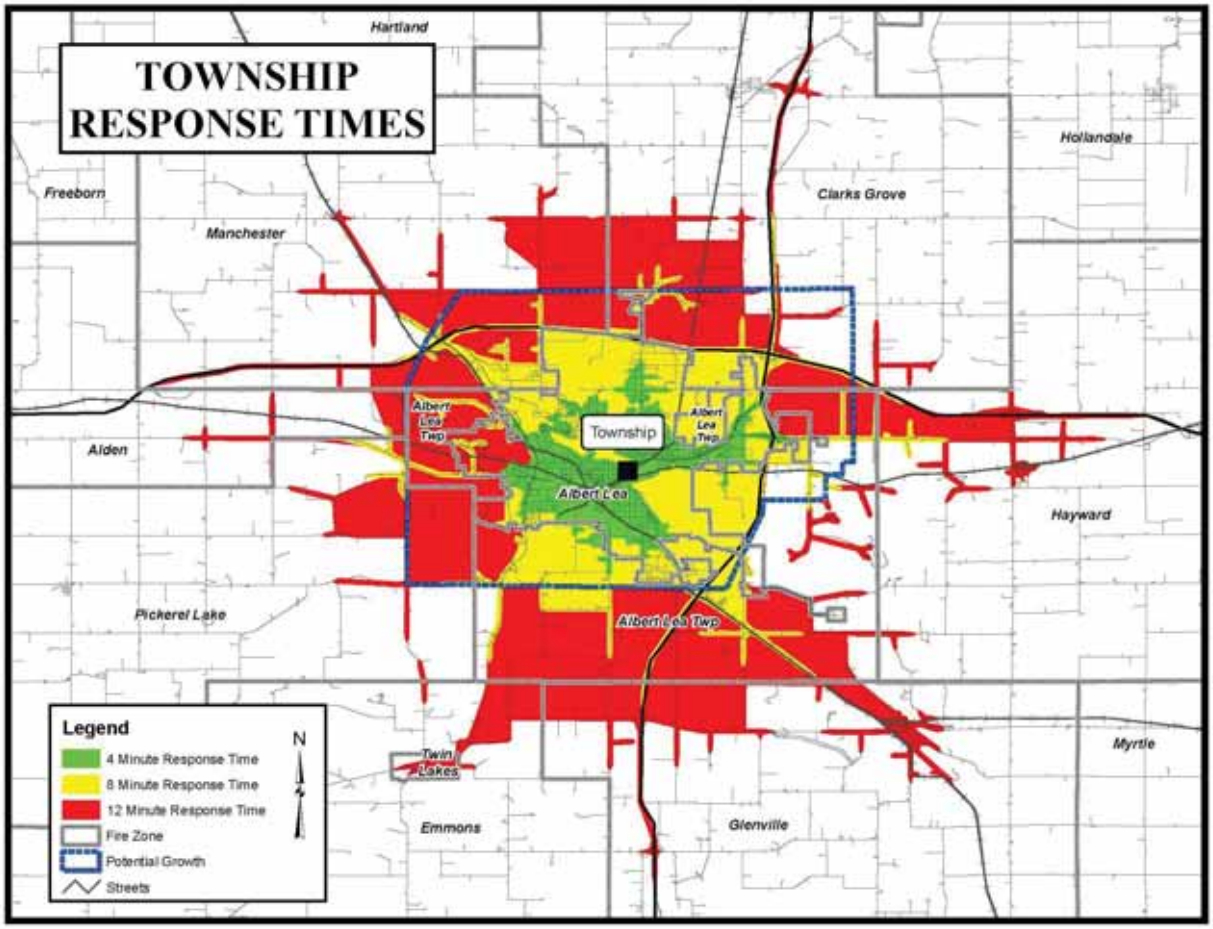
400 East Clark Street responses are the same as the Albert Lea Response Times.



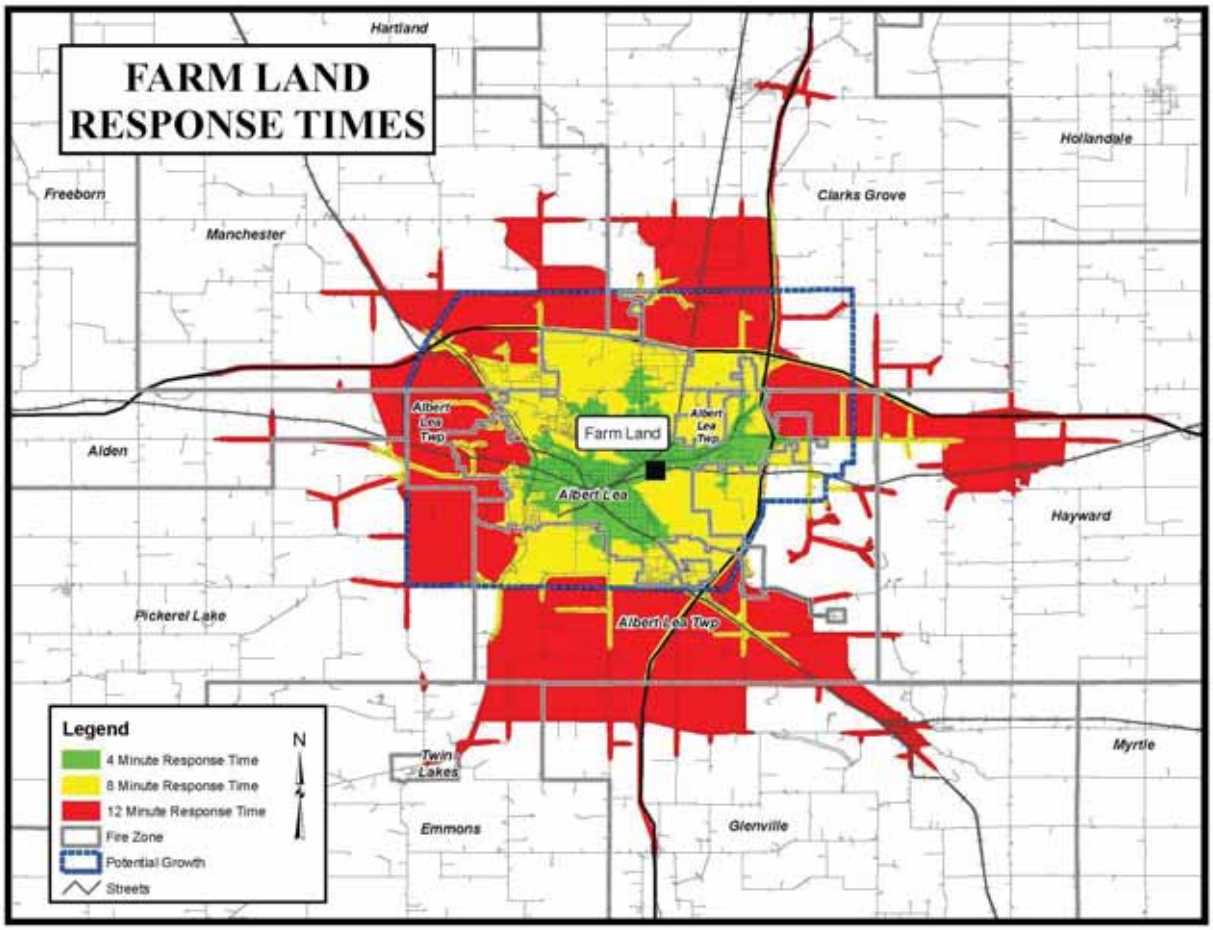
201 West Main Street



700 Block West Main Street



Farmland on East Front Street



While each location slightly modifies the 4 minute response the 8 and 12 minute responses change very little. The 4 minute response from any of the locations includes the older core section of the City.

Each location has unique distinct attributes:

400 East Clark Street is a block long property that would require the purchase of some occupied houses. The area is in need of some type of redevelopment. The location of a fire station here would not be recommended use. The site is of varying elevations which would preclude enough space for a training facility.

201 West Main Street is a narrow block long property that is a condition for redevelopment. While the property could house the fire station with a training facility the area is in the main urban core and not conducive to smoke building uses.

700 East Main Street is the current location of the Township fire station. This property while long and narrow would have enough property for a fire station and training compound. The land fronts the railroad property and would allow fire smoke training. The land is directly on Main Street where redevelopment would be desirable. Properties would need to be acquired on this site.

Farmland on East Front Street is a large plot of land that could easily accommodate a fire station and training facility. Fire smoke training would be an issue if the retail development were to occur. Plans for the land include a combination of retail and entertainment with recreational facilities. A fire station could be included in these plans and there is some benefit to have a city building that is occupied 24 hours a day on or near a recreational facility. This property is City owned.

Through analysis of the property sizes, land use, neighbors and potential as fire and training facilities the East Main Street area is the best option while the Farmland on East Front Street are is a suitable location for a new fire station.

3.1.16 Specialized Response

The ALFD responds to specialized types of emergencies which include hazardous material releases, confined space, technical, trench ice and water rescues. During this analysis the level of training for these types of emergencies was not determined. Through interviews it appears that personnel, in general are not trained to the operations or technician level as defined by NFPA and OSHA guidelines. The department must conduct an audit of personnel training with regard to specialized

responses and determine if personnel are qualified to function in these capacities and if not what needs to occur to qualify the employees to function in these capacities.

3.1.17 Operational Guidelines

The ALFD currently has Standard Operating Procedures (SOP) in place. After reviewing the fire department's SOPs they needed to be updated to reflect the changes that have occurred in the fire service over the years and also expanded to cover operations at emergency scenes.

Every department is unique and has special circumstances that may separate them from other fire departments around the country. The development of SOPs to fit the needs of the city is critical to the members of the department and the citizens of the city. When SOPs are developed or revised consideration must be given that there is growing cooperation between county fire companies and SOPs should reflect that. SOPs provide guidance to employees that ensure consistency in emergency and non-emergency situations. The majority of SOP's are administrative in nature but they need to be expanded to the emergency scene.

A common question is what type of emergency scene SOPs should be developed? The National Institute for Occupational Safety and Health (NIOSH) investigates firefighter deaths and then produce reports on how these deaths could have been prevented. A significant majority of the reports address the development of SOPs that could have prevented the firefighter death. The group recommends the development of a committee to establish SOPs whose main purpose is to update the current procedures and develop new ones that will meet the needs of the department in the future. Many fire departments will share their operating procedures. For the betterment of county-wide responses all departments in Freeborn County should have the same operational SOPs. The ALFD should review procedures of other departments, modify them to their

needs and then train and implement them. This will speed up the review/development process.

3.1.18 Incident Reporting and Data Management

The ALFD uses software developed by ImageTrend to record information on emergency runs, non-emergency runs, training, and hydrant maintenance to name a few. ImageTrend is in use in over half the states across the country including the State of Minnesota. The software is very capable of providing for the city's record management requirements including recording and proper documentation of vital statistics.

The primary concern is that no personnel are proficient in the use of the software. In fact, when questions were asked about the product everyone kept referring to one person, Firefighter Bart Berven. Since FF Berven appears to have the most knowledge on the software he should receive formal education on the uses so that the department can fully develop all of the functions available in the program. After the training he should then train the rest of the employees on the proper use of the software.

3.1.19 Training

In order to analyze a fire department's ability to respond to structural firefighting the project team would have to evaluate actual fire operations. In the absence of that, fire operations can be evaluated based on training activities of a fire department. Anytime a dysfunctional fire operation takes place it can generally be traced to improper training. Training is one of the single most important non-emergency functions that fire departments engage in. Today, a firefighter's survival depends on that firefighter's commitment to learning and on the department's desire and ability to provide valid opportunities for that learning to occur. Rapid technological changes are occurring in incident scene management, emergency medical service, hazardous materials response and personnel management. Because of this, fire service personnel require a personal and organizational commitment to both initial and continuing training.

During our site visit we discussed the development of a training committee. The purpose of the training committee is to develop training for the calendar year and provide for the standardization of the training. A concern was noted during the site visit that the training and emergency scene operations are varying depending on the shift. It is imperative that all personnel receive the same training and that emergency scene operations are consistent among all shifts.

The formation of the training committee should consist of fire personnel from all ranks and shifts. All personnel should be able to have input as to the type of training that should take place throughout the year.

Every month there should be a drill established through the training committee. **NFPA 1401-5-3.3.12 Training** defines training as "the process of achieving proficiency through instruction and hands on practice in the operation of equipment and systems that are expected to be used in the performance of assigned duties." Everyday training is conducted through vehicle and equipment inspections, pump and tool check-outs, and physical fitness although this is not well documented. These activities need to be recorded using Image Trend.

The department training committee should establish a monthly and an annual training calendar based on the needs of the department. Consideration must be given to the State of Minnesota's licensing procedures. During our site visit the state was in the process of developing the licensing procedure but at the time it was not clear of the training requirements to renew a firefighter's license. The training committee should become very familiar with these requirements as the state begins to determine the minimum training hours to recertify.

A training facility is very important for the purposes of fire personnel training. Currently the City of Albert Lea has no training facility. For maximum credit and competency of

the fire department personnel, these facilities must be used. Minimum facility use by all company personnel while training should include:

1. Eight (8) half day (3 hours) drills per year, 24 hours total
2. Four (4) half day (3 hours) multi-company drills per year, twelve (12) hours total
3. Two (2) night drills (3 hours) per year, six (6) hours total

There should be company training totaling twenty (20) hours per month per member. Training in basic skill development and retention of competencies in suppression related subjects such as hose, ladders, SCBA, forcible entry, salvage, tactics, and other job related training are the basics of this program. These training components and officer development are the basis for ISO analysis.

The basic skills program should include the minimum number of hours in each subject area that the fire department administration determines is needed. Training goals should be established by the departments training committee for members on an annual basis, personnel as certified training officers should complete these goals. The company officer must document all training related activities in the department's records management system.

Pre-fire planning inspections by fire company personnel in their area are important. The fire department is active in pre-planning efforts that identify hazards and establishes a strategic plan of operations for target commercial buildings. Pre-fire plans are important, so are post incident analyses. All activities that address NFPA standards, and improve the employees' ability to provide their required duties are recordable as training hours.

Examining emergency operations after the fact is one of the best learning and training tools available. It is essential that we learn from what went right and what went wrong. The uses of informal and formal post incident analyses are a key component to

successful safe emergency operations. The Chief Officer is responsible for personnel being prepared to function. The Chief oversees functionality and can make a difference in the performance of the department by using actual experiences to further improve employee skills.

Informal post incident analysis (documentation not required) should be conducted at the company or shift level. This includes on-scene or immediate return to the station reviews of the last call. A good informal tool is a lessons learned procedure (suggested information sharing documentation recommended) which has a company provide information about a call that they experienced in a written (memo) format to the fire chief who then distributes it to entire department. A good example of this is experience gained by performing extrication on a certain type of new model vehicle.
Formal post incident analysis (required documentation) should follow a defined format, be conducted for significant incidents, and a formal report be released. This report should be used to change procedures, training or anything else that was discovered not to work during that incident. Not all post incident analyses have to have negative outcome; the procedure has to make sure to promote the positive outcomes too.

Training is a cost factor that is a necessary function of the Department. The constantly changing federal mandates from the Occupational Safety and Health Administration (OSHA) and the Environmental Protection Agency (EPA) require political subdivisions meet certain mandates. OSHA mandates such as 29 CFR, 1910.146 which are required by EPA. In non-OSHA states have a very specific impact on the fire service. The law adopted in 1993 requires municipalities to provide a specified level of training and equipment for confined space entry and rescue. This law affects water departments, sewer/waste management departments, and fire departments with regard to entry and rescue operations. The Department must maintain annual training for their personnel with refresher and or actual operations documented at the operations level for these skills.

The importance of training cannot be understated; it must be the major priority of the Department. When a daily schedule of activities is created prioritization of training as the top priority should be the normal practice. Exceptions can be allowed but they should be infrequent.

3.2 Life Safety

3.2.1 Code Enforcement

The importance of effective code enforcement cannot be over looked. Fire Prevention Codes while containing many regulations for new construction, are primarily maintenance codes. This tells us that the code is intended to set standards for maintaining a building's fire and life safety features such as exits, detection and suppression systems, and a building's compartmentation. It also ensures that the building is kept free from hazards and conditions that could lead to the ignition of a fire.

Without an effective program for regular formal fire inspections and code enforcement, hazardous conditions go unnoticed and uncorrected. Each and every code violation represents a situation in which a building, accessible and open to the public, contains a significantly increased risk of fire ignition, fire spread, and ineffective protection systems or other life safety hazards.

The City of Albert Lea's Bureau of Fire Prevention uses the Minnesota State Fire Code "The State Fire Code". Any local Government in Minnesota can adopt the code and then the local Government can use Chapter one of the code to provide a system for local code enforcement and administration

3.2.2 Life Safety Inspections

A commercial, assembly, Educational, residential, and business inspection program is already in place. The primary purpose of any inspection program is to decrease community risk. This means eliminating potential sources of ignition or fire spread, as well as assuring proper egress for occupants in the event of any emergency. These efforts can only be effective if the individuals conducting the inspections have a combination of training, experience and motivation and if the inspection program is enforced consistently and regularly. It is also imperative that records which define the level of service and accomplishments be maintained. These records should show the following:

1. Number of Existing occupancies classified by hazard type (RISK)
2. Number of inspections completed.
3. Frequency of inspections.

Reviewing the department's occupancy classification sheet, it is agreed that the frequency of inspections, except Groups B and E require a more frequent inspection schedule; as long as there are no statues preventing this. It is recommended that "Group B" inspections be changed to every two years instead of three years. A lot of changes can take place in an occupancy within three years. "Group E" inspections should be conducted at the opening of the school year and again in February.

The State of Minnesota Department of Public Safety has a great Inspection checklist that can be followed by any inspector. The state also prints Fire Drill Instructions that can be used by local government. The Albert Lea Police department conducts Lock-down drills in the schools with assistance from the ALFD. The State also provides instructions for Fire Code variance and time extensions that must be submitted to the state. If the Code variance request comes from the local municipality or local Fire Official, Fire Chief or Fire Marshal it would require a local governing body to review. It then goes to the State Fire Marshal to approve or reject.

The City should consider the use of i-PAD® tablet technology to do inspection and violation notices, that would help the field inspectors and customers. Throughout the country fire and building inspection departments use technology to assist with conducting inspections, managing the files, in-the-field access to data files, code storage and retrieval, and processing of the inspection reports as well as generation of compliance and non-compliance correspondence. There are programs for inspections and fire investigations available and more being developed. The Fire and Building department should partner with the City's technology staff to research the available hardware and software and develop a goal with objectives as part of the strategic plan for this improvement.

Like most cities, planning and zoning looks at the proposed building and projects being considered for the city. The Building and fire inspections receive plans which are reviewed for apparatus access, fire lanes, fire hydrant locations and a fire life safety compliance before approval of a building permit. The Building and fire officials should complete plan reviews together.

3.2.3 Cause Determination

The department's shift personnel are responsible for fire cause determination. The Building Official will assist when needed; they work as a team on difficult or long duration investigations. Capt. DeVries, Lt. Schallock and the Building Official Doug Johnson are Certified Fire Investigators through the International Association of Arson Investigators, with numerous years of experience. Eight other shift members have been trained in fire cause determination through the state of Minnesota. They work closely with the local State Fire Marshal. Any of the certified members can make a determination and file the report. There is a peer review process in place but a final review by the Fire Chief should be conducted. It is important to note The State of Minnesota requires that all fires be investigated and reported that have a minimum of $100.00 in damage. With this threshold of $100.00, most if not all fires will have to be

investigated. Food on the stove, grass fires etc. will probably all exceed the $100.00 limit. Most all investigations can be handled at the local level. The Response time for a call out of the State Fire Marshal to assist Albert Lea with a fire investigation is two to three hours. The State Fire Marshal is available and should be used for arsons, fatalities and when the local investigators are unable to determine the cause of a large loss or suspicious fire.

The Minnesota State Fire Marshal's office does fire investigation training. They offer the following Courses:

1. Basic Fire and Arson Investigation, which is a three day course and provides the basic skills, required in the initial fire scene investigation and basic cause & origin investigations.
2. Advanced Fire/Arson Investigation is a four-day course and covers topics such as interviewing, vehicle fires and electricity as it relates to fire.
3. A new Masters Investigator class has been developed. It gives the students the opportunity to examine a building that has burned through to flashover, gather and assess data, and prepare a verbal fire report.

Scene control and evidence handling should be conducted in accordance with the recommendations of NFPA 921 (Standard for Fire Cause and Origin Investigation) and in cooperation with your local and State Police Departments. It's important that personnel are adequately trained and certified in this discipline. Records, reports and investigation notes should be filed and maintained in a secure location with appropriately limited public access to open cases. Standard Operating Guidelines for investigative procedures need to be developed.

Some ALFD personnel are members of County wide Fire Investigation Team (FIT). The City Fire investigators are on call to respond to any fire in the county and lend investigative support. They respond as a two person team while volunteering their time. This allows them to gain valuable experience and develop strong county-wide

relationships with investigators. Additionally, there is modified Juvenile Fire Setter program in place that works well.

The fire investigation report employed by the department, which is mostly filling in the blanks, is a good outline and prompt sheet. Review of completed fire reports indicate it is easy to manage and covers the benchmarks needed.

The department has been reporting the projected fire loss for years. While that figure can be used as a demonstration of what occurred from year to year the organization should annually report the property saved ratio. This paints a clearer picture of what effect the intervention by firefighters had on the outcome of the fire. By showing the amount of property saved verses the amount of property lost to fire a stronger understanding of the effectiveness of current staffing, training, equipment and procedures can be analyzed from year to year. The State of Minnesota Fire Marshal's Office is reported to be considering this change in reporting state-wide, following Albert Lea's lead.

3.2.4 Public Education

The City has a working and functioning fire prevention committee. This group has provided many successful programs. If annual fire loss is an indication these programs can be deemed very successful. To measure this success the committee should consider reviewing the types of fire and the occupancies where they are occurring and see if they need to refocus any of their programs toward the results.

A Fire Prevention Poster Contest is held for students in the fifth grade. The winner of this local contest gets to compete on the state level. This is an excellent program that has proven success in many communities. There should be consideration to include the fourth grade.

Members of Albert Lea Local 1041 have provided an annual first grade T-shirt fire prevention program for twenty years. They conduct a spring visit to the first grade classes in all schools. They reach about 250 students per year with a visit by a Fire Truck and provide a talk on fire safety. Funding for this program comes from city businesses, School PTO and the local community organizations. Members of Local 1041 provide the staffing.

Fire Prevention programs are also provided for local nursing homes, medical facilities and businesses. Fire personnel provide fire prevention education to all pre-schools and Kindergarten students during the week before fire prevention week.

The Fire Department does a blood pressure program for its senior population. A comment was made that it was hard to keep the scheduled appointments considering the staffing challenges. The department should examine options to modify the scheduled appointment issue; one option to consider is the use of students who require community service hours. In 2011, 445 readings were taken. Proactive preventative service is essential to the success of any fire department; this type of program is paramount to keeping the community healthy.

The reassurance program was started for the elderly, who are living on their own, to enable them to have contact with someone on a daily basis. They are required to make a call to a dedicated phone line daily before 11:00 a.m. If no call is received the ALFD staff will check on them. Forty people participated in the program in 2011 and there are plans to expand the program in 2012.

A smoke and carbon monoxide detector program was started with the help of S.E. Minnesota Association of Realtors who made a donation of $1,155 for the purchase of combination Smoke/CO Detectors. The ALFD installed the detectors at no cost. Minnesota state statutes require a smoke detector and CO detector in every home. This program is an outreach program for many disadvantaged families to help them obtain

smoke /carbon monoxide detectors in their home. This has a great lifesaving's potential. It is an important program the department should seek additional funding to allow the program to continue.

The Fire Department does hold an annual Open house during Fire Prevention week. In 2011, fire prevention talks were given to 138 groups, or 3,876 people in total. These opportunities are important in developing a safe educated community. The ALFD must continue this practice and expand when the opportunity presents itself.

One of the most difficult aspects of fire prevention is the ability to deliver the message with limited staffing. Many fire departments have had to continue the same program year after year because of staffing issues. One department that had this problem found a unique method to update their program, and involve the local school system in the delivery of their fire and safety message. The NFPA has recommended that fire departments transition to hands on delivery for fire and life safety messages. This method has been determined to be the best way of educating children, it promotes retention over lecture. To accomplish the change many more presenters are required, more than most departments can afford. There is a resource right in the local community. The High School has students who are planning to become future educators. These students are perfect help to deliver the annual message to school children. ALFD's fire prevention should review the youtube video and consider the high school students as a resource to assist in delivery of their message prevention messages. http://www.youtube.com/watch?v=SkZ-up-ZnzI .

The ALFD needs to expand their web page to include links to NFPA safety messages. There are many links available that children can access for fire and life safety messages. The department should make these available through their fire department web page.

3.2.5 Public Information

Public information is the greatest tool for preparation and prevention of catastrophic loss from emergencies. The department should use its website as a proactive tool to disseminate safety and disaster preparedness tips. The Department should establish relationships with the local newspapers, banks, grocery stores, and local radio stations as avenues for distribution of community safety and preparation information. Firefighters should establish a practice of going to local Mall or shopping center on Friday nights or on weekends and hand out safety and disaster planning information. The leadership of the organization should establish memberships in service clubs and the chamber of commerce. These are excellent opportunities to interact with the business members of the community. They enhance the bidirectional flow of information. A strong public information plan is essential to proactive community interaction between the fire department and those they serve. The Department should create the assignment of a Public Information Officer and allow uniformed members of the department to apply to fill that role in addition to their normal duties.

3.3 Comparison to Recognized Standards

3.3.1 National Incident Management System (NIMS)

NIMS compliance is essential in the safe systematic operation of not only emergency operations but also daily events and non-emergency operations. Compliance is required for eligibility for grant assistance and all disaster response. The ALFD has demonstrated some NIMS compliance there are concerns that the entire City may not be in compliance with National Standards. Staff has been trained to the appropriate levels for their responsibilities. The ALFD should take the lead to ensure NIMS compliance with external organizations like the MCHS and the rest of local government. The Emergency Management Director should conduct an audit and make necessary improvements.

The department is reported to use the Incident Command/Management System (ICS). There are concerns that the ICS is not employed on all incidents and the use is not consistent from shift to shift. The ALFD relies on recall staffing which makes consistency essential to ensure scene safety. It is important that ICS be employed on all incidents at all times. Practice makes perfect and consistent use promotes improved skill levels and ensures when a major incident occurs the IC is prepared to employ ICS to its fullest.

3.3.2 Insurance Service Office (ISO)

In the city's most recent ISO report the fire department received the maximum amount of credits in the areas of company training and hazardous materials training. Training deficiencies were noted in Officer training, driver and operator training, and new driver and operator training. To receive additional credits towards the ISO analysis officers should attend the National Fire Academy (NFA) in Emmittsburg, Md. The training provided by the academy covers a wide range of officer training classes. The only cost to the City of Albert Lea would be transportation and meals of the employees. The other costs are covered by the NFA. Driver training should be addressed through the training committee and standard operating procedure for new employee and current employees should be developed. The use of national and state standards should be followed to develop this curriculum.

It was noted in the most current Insurance Services Office (ISO) evaluation that a significant credit reduction came in the area of company personnel. ISO determines the strength of staffing using a yearly average of total firefighters available to respond to structure fires. The City of Albert Lea received 5.13 out of 15 (34%) credit due to its staffing numbers. The ability of the City to maintain an ISO 3 rating is desirable to the community as noted through personal interviews. Consideration may need to be given to staffing levels in the future if there is either a rapid expansion of the city through annexations, or a rapid building growth. One method of reducing the impact of new growth on the delivery of fire services is the requirement that all new buildings, regardless of the type, contain full fire sprinkler protection systems. These systems

have positive long term effects on the cost of providing fire protection. They reduce the financial impact on the over the life of the building. A full fire protection sprinkler requirement in Albert Lea will significantly reduce the need to expand fire services as the community grows, thereby maintaining costs associated with fire protection. It will also assist occupancies enjoy reduced insurance rates for fire protection.

3.3.3 National Fire Protection Association (NFPA)

Special Response

The city should strongly consider compliance with NFPA 1670 Standard on Operations and Training for Technical Search and Rescue Incidents. The fire department is expected to respond and mitigate these types of incidences. The standard categorizes the different levels of training for first responders as; awareness, operations, and technician level. The fire department should perform a risk analysis and determine the extent of training that is required to safely mitigate a technical rescue incident.

Health and Wellness

The city should strongly consider compliance with NFPA 1500 and the IAFF and IAFC Health and Wellness program. The Fire Service Joint Labor Management Wellness-Fitness initiative was developed by unionized firefighters and fire chiefs. The program consists of a medical evaluation and assessment, fitness, injury and medical rehabilitation, and behavioral health. The program is very specific to all the fields addressed and can be implemented in phases over a period of time.

The city should strive to attain compliance with NFPA 1001 Standard for Fire Fighter Professional Qualifications and the State of Minnesota firefighter certifications. The city should strive to have all personnel trained to the firefighter two level defined by NFPA 1001 and also be certified by the State of Minnesota as firefighter two.

3.3.4 Center for Public Safety Excellence (CPSE)

Many Organizations are doing a good job of implementing standards established by the Center for Public Safety Excellence (CPSE) without really knowing that they are. The CPSE established technical competencies with benchmarks for departments to measure their performance against so they can determine if they are providing quality services to the community they serve as well as their members. The CPSE has set standards for fire departments, and chief officer (fire, medical, and marshal) accreditation. These standards are derived from the National Fire Protection and the International City Manager Association guidelines. Recommendations in this report use these standards as their basis. While the Albert Lea Fire Department is not ready for accreditation either as a department or for individuals they should strive to function based on standards acceptable to the accreditation process. As the department progresses through its strategic planning process it should establish a timeline to consider starting the accreditation process through the CPSE.

3.4 Maintenance of Facilities & Equipment

3.4.1 Buildings

The City fire station is located in the City Hall complex adjacent to the library. The station is a split floor design with the apparatus bay and storage areas on the first floor, living, office meeting and eating areas on the second floor. The station is not designed for male and female firefighters. It would be difficult if not impossible to properly modify to accomplish female firefighters. The station is not handicap accessible.

The apparatus floor is a single direction flow which requires the apparatus to be backed into over a long front driveway. Apparatus must turnaround on the busy street in front of the station to back in. There is not enough storage or bay space for required apparatus and equipment. Training is an issue with little to no access to classroom

space and operational training needs to be conducted off-site. There is a significant problem with diesel exhaust from the apparatus.

The vehicle exhaust problem is a serious situation. Diesel exhaust is a "Known Carcinogen". While the current apparatus have an exhaust diverter system this does not work all of the time and especially when the apparatus is idling in the front driveway of the complex during daily apparatus inspections. It has been reported that exhaust can be smelled throughout the City Hall complex and it was obvious in the City Manager's office during interviews. The City should immediately add CO monitoring systems to assure the safety of personnel in the building while preparing to add a one hundred percent capture system for all apparatus.

Manufacturers of diesel exhaust capture systems for fire apparatus have the ability to install a 100 percent capture system in the current station and then move that system to a new facility when it is built. This would solve the current situation while saving the City from purchasing a new system for the new station. Federal grants are available for these types of systems, but the City needs to act soon and may not be able to wait for a grant cycle. The City needs to install a 100 % diesel exhaust capture system without delay.

The Township Fire Department station has the same problem as the City with regard to vehicle exhaust. While an analysis of the Township facility was not requested, a visit to inspect the City purchased pumper revealed that the exhaust problem was significantly worse there and should to be addressed immediately. The station is an open floor plan with eating and meeting space directly next to starting vehicles.

In the beginning of this process the City stated that a new fire station needed to be considered. The analysis of the current facility supports that assumption. Not only with improved functionality of the fire department but moving out of the space in City Hall

will enhance the remaining services in that building. It is recommended that a new fire station be built and that the director (chief) of fire and building services as well as the building and inspection function remain in City Hall.

There were many recommendations and options for a new fire station. A committee should be formed to address these and to plan for the new building. The committee should be diverse and should include representatives from all associated city departments which might have an impact by the final use. There should also be public representation as well as participation from the Township Fire Department. The relationship between the City and Township fire departments has been in existence since 1991 and it should continue either as it exists or through increased merged functionality. Both fire stations are in need of replacement and the location of each (less than a half mile of each other) suggests that a joint facility should be constructed and shared.

When a community builds a new facility whether it is a fire station or a gym, multiple uses should be considered. Fire Stations are part of the neighborhood and should represent the needs of that area. As a new fire station for Albert Lea is planned consideration should be given for the following needs. The station should be shared between the two departments, it needs to meet all codes and accommodate male and female firefighters. It must contain a fire protection sprinkler system. Many departments have used these installations as show cases for the use of these systems throughout the community. They install different types of systems in the different areas of the building to show the advantages of this level of protection. The facility should include public access which may include meeting space and or rental facilities. Two areas of concern for the City are the need for a fully functioning Emergency Operations Center and a training complex. The EOC could be established in the community center area of the building (large open space) which would then function as the EOC when required. The department has a stated desire and most departments in the county

agree that there is a need for a county-wide training facility. The committee should establish the needs associated with training and make recommendations to the design that support providing those needs. Finally, the facility should be designed and built to function as a shelter from disasters.

3.4.2 Apparatus/Vehicles

The Department's fire suppression fleet of apparatus should be designed to meet ISO standards for required pump capacity, ladders and equipment. ISO has determined that the required fire flow is 3500 gallons per minute (gpm). The department meets this requirement and has received full credit. Additionally the City's water and fire department are providing an excellent supply system, proper amount of hydrants, and a good maintenance and inspection program. They received 94% credit for the system. The maximum full ISO credit for pumpers requires 3 pumpers, and 1 reserve pumper. The city has received 88% credit for front line pumpers and 57% credit for reserve pumpers. The city is assisted in its ISO rating and credits by having automatic aid through the continuing contract with the Township. The fact that the Township fire station is within the city limits assists this rating.

ISO requires one (1) Ladder (aerial) Company for the community. The Ladder Company received 98% credit. There are no additional apparatus requirements as stated by ISO standards. There are always support vehicles and the City has five (5) fire department support vehicles.

Company	Engines	Eng/Tanker	Aerial	Tanker	Brush	Other
City	2	0	1	0	0	5
Township	1	1	0	1	1	

The City has established and attempted to maintain an apparatus replacement program. This program is funded on an annual basis and is assisted by funds which are available

through the City's reserve pension fund. The current apparatus replacement account has $ 709,391 available.

The age of fire apparatus is not the sole indicator of the service life. The maintenance program, condition, type of use, amount of use, hours of operation, quality of original product and cost to maintain all play significant factors in determining a replacement program. A general rule-of-thumb for custom full sized fire apparatus with the amount of use in the ALFD is at least 15 years of front-line service and 5 years of reserve service. With a good proactive preventative maintenance program the Department should be able to use this rule as a minimum standard. Each individual apparatus should have its own replacement plan. Smaller squad units and commercial chassis vehicles will have a shorter life expectancy. Support vehicles are scheduled for replacement on a ten year basis. This would be modified based on use and condition. Some communities in the past have based replacement on the greatest return for a trade-in on a support vehicle; this factor may be considered and could assist the replacement program. All pricing is based on full replacement costs without regard to a resale value.

The Departments daily vehicle inspection (checkout) program meets and exceeds current standards. The entire staff does an excellent job in maintaining and conducting minor repairs. The use of the city's public works maintenance program is cost effective, convenient and is providing a professional level of service. The use of emergency vehicle technicians for technical repair when required is a good standard to maintain and must be continued to assure the proper level of qualified maintenance.

The overall condition of the ALFD fleet is very good. There is one unit (Ladder 916) that is reaching its front line life expectancy and consideration for replacement has begun. The current apparatus is a 100 foot aerial devise fully equipped with Ladder Company equipment. The department must consider that with its staffing and response capabilities whether the replacement aerial should be a full "Quint" verses just an aerial

apparatus. A full quint is a combination aerial apparatus and pumper. It has an aerial ladder, pump, water tank, hose and full ground ladders. The benefits of this vehicle are that with limited staffing it could provide many functions at a fire while additional pumpers are responding. It is not recommended to reduce the number and type of pumpers in the fleet. This would be additional pumping capacity while maintaining aerial credit from the ISO. If this vehicle replaced a pumper there may be loss of ISO credit aerial credit.

3.4.3 Fleet Replacement Recommendations and Schedule

The following schedule has been developed based on consideration of the vehicle type required for the risks in the Department, ISO requirements, and projected reasonable life expectancy. The life expectancy is contingent upon the continuance of the current maintenance program, proper engineer education, and projected call volume. The Department's apparatus committee has developed replacement specifications for a Type III pumper/wildland unit, tender/pumper and rescue/pumper. Based on the committee's research, their input and discussion with the Chief the following replacement schedule is recommended for consideration. An apparatus replacement schedule has been developed based on the above criteria.

Vehicle Unit Costs and Year Projections															
UNIT	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Ladder 916	978														
Engine 917				450											
Engine 918															623
Engine 920 (TFD)							492								
Support 93	40														
Support 136							43								
Support 80	40														
Support 86	40														
Car 1	45														
	1143	0	0	450	0	0	535	0	0	0	0	0	0	0	623

3.4.4 Funding for Apparatus Replacement

Funding for apparatus replacement should be occurring on an annual basis. A combination of funding sources should be used including impact fees, general fund

revenue, unencumbered funds, donations, bonding, and the reserve pension fund. Special assessments should be a last resort. The current budget (2012) report shows apparatus replacement reserves of $ 709,391. The chart below demonstrates what funding would be required to meet the proposed replacement program. Cost estimates are projected at a higher level and assume apparatus purchase costs will escalate at 1.5 % annually. This chart demonstrates the amount of funding the City should place in an apparatus replacement line item. That amount is $ 136,000 annually. The chart below shows the replacement year required funding for each year, available funding in the replacement account assuming that the $ 136,000 annually has been added and the difference that would either be a reserve or need to be financed. For example, in 2012 it is recommended that Ladder 916, Supports 36, 80, 82 and Car 1 be replaced at an estimated cost of $1,143,000. There is approximately $ 709,391 in the apparatus replacement fund, after purchasing there would be a balance of $ -443,265 in the reserve account. This figure does not account for trade-in or resale value which could be used against the purchases thereby increasing the reserve fund. Additionally, a new aerial apparatus would require a new facility to ensure that it could fit in the building and be of sufficient size to fully function as recommended. Therefore, the apparatus fund would have time to build additional reserve funds before the actual purchase.

Fleet Replacement Funding Plan

Replacement Year	2012	2013	2014	2015	2016	2017	2018
Required Funding	$1,143	$0	$0	$450	$0	$0	$535
Replacement Fund	$709	$136	$136	$136	$136	$136	$136
Difference	-$434	-$298	-$162	-$476	-$340	-$204	-$603
Unfunded amount	$0	$0	$0	-$476	$0	$0	-$603
Available Funds	-$434	-$298	-$162	-$476	-$340	-$204	-$603
TD $ (000)							

Replacement Year	2019	2020	2021	2022	2023	2024	2025	2026
Required Funding	$0	$0	$0	$0	$0	$0	$0	$623
Replacement Fund	$136	$136	$136	$136	$136	$136	$136	$136
Difference	-$467	-$331	-$195	-$59	$77	$213	$349	-$138
Unfunded amount	-$467	-$331	$0	$0	$0	$0	$0	$0
Available Funds	-$467	-$331	-$195	-$59	$77	$213	$349	-$138
TD $ (000)								

3.4.5 Capital Equipment

This section will address personal protective equipment and tools of the trade. The Department has a majority of the equipment necessary to provide basic and advanced services to the citizens of Albert Lea.

The department has 2 Thermal Imaging Cameras (TIC), one is placed on the first run apparatus and the other is stored on a back-up apparatus. The first run apparatus contains a newer style TIC while the back-up TIC is older. Consideration should be given to replacing the older TIC with a modern style camera. When the primary TIC needs repaired or annual maintenance is required fire personnel will still have the ability to utilize the new style TIC. The other benefit to having multiple TIC's is that some emergency scenes require a multiple unit response or multiple search and attack teams operating in a hazardous environment. The newer technology provides a higher level of service to firefighters and the citizens of Albert Lea. New apparatus purchases should include new thermal imagers and most of the equipment that those units require. This

type of replacement program allows the department to update equipment as it updates or adds apparatus. A TIC should be ordered with the replacement aerial ladder.

Technology is a tool of today's modern fire service. One tool that many fire departments have not used in the past but is receiving new consideration is the use of foam on all fire attacks all the time. In conjunction with this, many departments are moving to straight tip attack line nozzles. These two changes work together to help departments that cannot meet minimum staffing requirements in the early stages of a fire perform rapid indirect attacks with highly successful knock down results without pushing the fire. It also greatly extends the duration of available tank water thereby allowing for larger fire control. It also has a positive effect on ecology as this practice has been dubbed environmental friendly.

All new firefighting apparatus should have some type foam capability to allow the department to move to foam fire attacks. Compressed Air Foam Systems should be considered. There has been significant research done on the use of CAFS verses water for fire attack. The major benefits of CAFS discovered by the Los Angeles County Fire Department and recently republished in Fire Chief Magazine by Janet Wilmoth, Editor in Chief, "*Affirming Foam",* July 1, 2009. The articles found:

> "First of all, it took only 25 seconds to knock down the fire with the Class A foam/water solution, compared to the 50 seconds it took with water. Using CAF cut that figure by more than half to 11 seconds, making CAF roughly four times more effective than water in terms of knockdown time.
>
> Along with faster knockdown, foam also outscored water in terms of gallons used. The attack team used 44 gallons of Class A foam/water solution to knock down the fire, versus 75 gallons of plain water. The CAF test produced even more dramatic results. It took only 16 gallons of CAF to knock down the fire in all four rooms, which is impressive considering that they started the attack from 35 feet away at the curb. Again, this

> figure shows CAF to be roughly four times more effective than water in terms of the gallonage required for knockdown.
>
> As an added benefit, the heat-absorbing properties of foam reduced the average interior temperatures significantly faster than water. With Class A foam/water solution, it took 1:45 minutes for the average interior temperature to drop from 600°F to 200°F, compared to 6:03 minutes with water. CAF produced slightly better results with a time of 1:28 minutes."

What this article did not report is that the weight of the water in the hose is reduced by close to 50%, a very important factor with the number of firefighters available in the City. Finally, Retired Chief Alan Brunacini has been quoted as saying "if you are buying a new pumper and it does not have CAFS, the day you take delivery the pumper is outdated." Almont is recommending significant apparatus purchases over the next ten years. There is no better time than now to transition to foams systems for fighting fire.

As the community grows, the need to enhance, replace or try new equipment will also grow. The Department should form a committee that will look into new technology that may benefit the citizens of Albert Lea.

3.4.6 Personal Protective Equipment

During the site visit it was noted that the type of bunker gear supplied was consistent but the gear was in varying conditions. Additionally, it was noted that the gear is stored when not in use in open lockers with direct access to sunlight and florescent lighting. This method of storage is not in compliance with manufacture's recommendations if the gear contains any PBI material. Daily storage of bunker gear should follow manufacture's recommendations to receive the best and longest use from the gear. All bunker gear must be inspected to NFPA 1851 Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting. No gear should be used if it fails this inspection for interior firefighting. Due to

the increased health risks of contamination from dirty protective clothing The Department should strive to meet the standards recommendation of each member being issued two sets of two sets of gear. The Department could start an early replacement program and allow personnel to retain their old set as a clean backup. Personally assigned bunker gear should not be used for demonstration purposes. This places undue wear on the gear and could leave it in an unusable condition.

While it is not optimal for firefighters to wear structural firefighting gear for fighting grass or brush fires it is difficult to justify the additional expense. In 2011 the fire department responded to six incidents that involved grass or brush fires.

3.4.7 Self- Contained Breathing

Self-Contained Breathing Apparatus (SCBA) is arguably the most important piece of personal protective equipment available to firefighters. A malfunction of an SCBA in an environment that is immediate dangerous to life or health (IDLH) presents a high probability of a severe injury or even the death of a firefighter. NFPA 1981: Standard on Open-Circuit Self-Contained Breathing Apparatus (SCBA) for emergency services addresses the requirements for an SCBA.

The City of Albert Lea has 33 SCBAs in service. Manufacturers must abide by the NFPA standards for repair and updating of these units. SCBA standards are updated every five years. The updates have been in 1997, 2002, 2007 and will be at the end of this year 2012. Manufacturers cannot upgrade a unit that was placed in service two standards ago. ALFD has 22 units that are pre 2002 and 11 post 2002. Therefore the SCBAs that are pre 2002 cannot be upgraded and should be replaced as they average 18 years in service. The post 2002 units average 8 years in service with the newest units being 5 years old. ALFD must develop a replacement schedule to replace older SCBA's with newer more technological advanced models. While this can be a very costly initial investment the development of a replacement cycle will spread the cost over the

upcoming years. The window for United States Fire Administration grant funding is opening in June 2012. ALFD should apply for funds under the Assistance to Firefighters Grant. This grant places a high priority for personal protective equipment and the city has a good probability of receiving federal monies to help offset the purchase costs of replacement SCBA's. The ALFD could also replace these units as they purchase new apparatus. Adding SCBAs as equipment during the apparatus purchase allows for new units are to be obtained when suppression vehicles are purchased.

It is important to note that there are many advanced life saving features missing from the older units such as, buddy breathing, heads up mask display, and personal rescue ropes. Every effort must be made to start a replacement program this year.

3.4.8 Associated Equipment

Specialized responses include high-rise rescues, confined space rescues, trench rescues, ice rescues, and any other atypical response. The department currently keeps five sets of this type of gear on the apparatus. These types of responses require highly trained personnel to respond and mitigate the situation safely. The importance of this type of protective gear is imperative for the life safety of all involved. In general if all personnel are trained to enter the hot zone on these types of responses then the sizes must be general in nature. One or two individuals trained as technical rescue technicians on each shift could each have gear specifically sized.

All small equipment such as hose, nozzles, and adaptors should be replaced as apparatus are replaced. The costs of these items are included in the projected cost of the vehicles as defined earlier in the report.

Appendix 1: Responses to Initial Survey of ALFD Members

Below is the list of items that ALFD members have reported are working well. As is always the case you will find some of these items also reported as in need of improvement. Review the areas that are reported working well, we will not be spending time on these items but will be concentrating on the areas that you feel could use improvement. ***If the same response was provided by more than one member, it is indicated by the number of responses in the right column.***

These are the areas that you reported to be working well.

24 Hour Shifts	3
5 man crews with 4 man minimum	2
Response Times (time from call to 4 firefighters on scene working)	7
Having 4 firefighter minimum staffing 24/7	2
Fire Inspection Program	
Rental Inspection Program	1
Public Education Program	
Community Service/Assistance	
Cooperation with other city departments	1
Safety programs	
Water Rescue	
Training Schedule	
Equipment	1
Good Staff	
Desire to provide high level service to the community	
Sound team/team work	2
Fire personnel work well together and display great team work and service on all emergency calls	2
Very professional members and well trained	
Commitment to department and providing quality service	
Ability to initiate interior attacks with four man crews	
Ability to get "the seat of the fire" due to quick response	
Firefighter camaraderie	2
Fully staffed	2
The ability to go to sectional schools, for increased knowledge/training	
Paging system	
Being able to take vacations	2
Ability to get most of the equipment needed, through grants	

Level of training we are at, just need ongoing training	
ISO rating	
Everyone knowing their duties on a fire scene	1
The collaboration between fire and building inspectors is working very well,	
Having a full-time Chief that is moving department forward	
Mutual aid (with Manchester and Clarks Grove fire depts.)	
5 fire depts. split coverage in county for extraction calls	1
Fire investigation team for Freeborn County's fire dept.	
Full-time secretary	
Being out in the community a lot.	
Non-traditional duties for the community	1
Emergency services being provided	
Non-emergency services being provided	
Cohesiveness of the shifts, they are still working as a team	
Current management structure	1
Cooperation throughout the department	
Senior citizens call-in program	

Below are the issues that have been identified by you as issues of concern. These will be the areas that will be addressed during the strategic planning process in March. There have been seven categories developed from your initial responses. Your responses have been combined and placed in the categories that best defines them. Once you have established the most to least important areas of concern, we will use those areas of concern for the strategic planning session. Review these responses and then complete the electronic prioritization form that has been provided to you.

Service Delivery

Fire investigations- not using the CFIs,	
Minimum manning of 5 per shift	
Vacations when short on staffing	
Getting called more quickly to medical calls	
Fragment time	1
Paging delays for calls	
Overworked and under paid	
Paid-on-call availability	
Not enough time to complete fire hydrant maintenance	
Hiring physical ability test	
Different requirements for paid-on-call firefighters.	
Non-related tasks	
Recruiting and maintaining of paid on call staff. Turnover of staff is continuing to escalate and finding replacement persons is becoming more difficult.	
Fire investigations inconsistent	1
Respond to all calls in the county as mutual aid	1
Respond to more medical calls	4
EMS/transport ambulance service	2
Service districts should be reviewed and possibly changed to reflect each fire jurisdiction's ability to respond to calls first.	
Improve use or acquisition of equipment and technology such as compressed air foam system, DSPA, etc.	
New fire facility /current facility inadequate	5
Expand our coverage area to provide better service especially around the two interstate highways.	3
Be open to taking on new tasks and learning some existing duties to help out others.	
Develop an effective and efficient service delivery system that meets the needs of the City.	
Increase staffing	
Keep ISO rating the same	

Quicker response time or stay the same	
Upgrade boats	
New aerial ladder	
Have our own HAZMAT tech team or take over Freeborn County heat team.	
Lack of facility storage	1

Training

Training, no consistency, loosely organized, not enough time	9
Lack of training with mutual aid departments	
No criteria for training or ongoing training	
Paid-on-call training	
Paid-on-call physical ability test	
Career development expectations and minimum training/standards within the dept.	
Increased, uniform and frequent training for paid part-time staff	
Make training a priority	
Training with other city depts. and county fire depts.	
Commitment to level of service/training	
The ability to do onsite training, both hands on and class room.	
Train all firefighters to an EMT basic level	1
Improve training within the dept. be a regional training site for county fire dept.	
New station, that promotes training	

Management

Fire Chief with little or no training, understanding or experience within a fire dept.	1
Uncertain future for the dept., a plan is needed to move forward	
Review contract with Albert Lea Township	1
Lack of unified goal / set expectations	
Mixed messages as to priorities of dept.	
Lack of commitment to a set path	
Communication and collaboration between inspections and fire are improving, but could be better	
Understanding of roles and responsibilities.	
Utilization of fire instructors to provide training, courses for a possible fee (revenue)	
Temporary staff	
Lack of direction, vision	3
Lack of security in career	
Lack of clear written expectations	
Lack of staff for inspections	
Chain of command structure weak	

Minimum housing officer position on FD funding?	
Organizational structure and leadership	
Fire Chief with fire experience, one that could do inspections and fire prevention also.	1
Clear plan of what is reasonably expected for services and how to deliver services.	
Albert Lea Fire Dept. be the main fire Dept. of county, with maybe 4 other depts. covering the rest of the county.	
Short term, mid-term & long term plans and goals for the fire dept. include capital improvements.	2
Fire Chief from outside	
Establish expectations	
Timely communication	
Consistency in all areas	
Collaboration with are fire entities on training and similar equipment acquisition.	
Strong dept. organizational structure with job descriptions, defined leadership roles	1
Remove city center cleaning maintenance responsibilities	
Implement user fees for fire calls (structure fires), false alarms, extrication of vehicles on highways, ice rescues, HAZMAT.	
The contract between the city and the township fire dept. needs to be looked at.	1
Charge a fee for services rendered to all non-city taxpayers	1
Cover the Albert Lea Township area	1
Incorporate Albert Lea Township	
Increase coverage area on extrication calls in the county	
Join the consortium for medical training.	
Philosophy that encourages Public Interaction and flexible apparatus staffing	
Make our core services such as training, in-service inspections and lockbox checks a priority as they used to be	

Internal Department Operations

Inspections (building and permits) processing needs some improving (i.e. forms, applications, filing, how items are processed, etc.)	
Fire Marshal's division to coordinate investigations, inspections (commercial/rental) and training for inspectors.	1
More collaboration with city police dept. on training, communication, etc. other services such as code enforcement, officer training to respond to fires in addition to fire personnel, shared leadership of depts. should all be considered.	
Utilize fire personnel more for inspections, minimum housing inspections, etc.	
More rental and commercial inspections and training	
Emphasis on fire prevention, inspections, and code enforcement	

External Department Operations

Doing custodial work in city hall	5
Scheduling with other depts. (street) flowing and checking hydrants	
Build better relationships with other depts. especially the ones that are close to our area so we can provide automatic mutual aid. This will provide better service and a much faster response time for these areas.	2

Communications & Dispatch

Dispatching	
Training for dispatchers specific to fire dept. dispatching	2
Change in dispatch culture; dispatch fire depts. to fire incidents before law enforcement	

Supervision

Lack of leadership-untrained officers	4
Each shift doing their own thing	1
Lack of use on Incident Command and an IC	
Officer development	
Chain of command is not well defined or followed	1
Lack of accountability	
Utilization of the depts. talent (training, leadership, office specialist, etc.)	
Fire personnel not wanting to take one new tasks.	
Lack of goodwill and sense of pride in dept.	
Employee Accountability	1
Automatic dispatching to MVA with injuries	
Act as a dept. and have the shifts function the same	
Stronger formalized chain of command system	

Appendix 2: Strategic Planning Process for the Albert Lea Fire Department

The following are the major categories for consideration and evaluation during the strategic planning process for the Albert Lea Fire Department.

The nominal group technique for prioritization will be used to establish the most to least important categories. Once priority is established we will then work though the most important categories and their related responses to conduct the Strategic Planning process.

To prioritize the categories below you will score each item. The most important category receives the number 7 the least important the number 1. Do not reuse a number, meaning you will use each number between 7 and 1 once.

Ranking	Category
105	**Response System**
93	**Training**
83	**Communications & Dispatch**
63	**Management**
62	**Interdepartmental Communications and Relations**
53	**External Department Relations**
46	**Supervision**

Appendix 3: SWOT Analysis

Strengths	Weaknesses
Willingness to help (city & count-wide any task) Strong fire prevention Effective emergency response Desire to improve 24/7 hour staff coverage Well trained staff Good equipment, well equipped Team Orientated Potential Ability to partner Provide external training Willingness to serve (community) Positive public image Knowledge of community Lack of competition Function with reduced resources Central location (county-wide)	Lack (weak) leadership No mission, vision, values, goals Training Morale Dispatch Underutilized (medical, Haz-Mat) Fire investigations Facility Lack of ICS No long range planning Outside FD tasks Outdated equipment Technology (RMS) Poor Communications Fear of Change Lack of interagency interaction Apathy Undefined community expectations
Opportunities	**Threats**
Partnering Resource sharing Functional mergers New Facility (external use) Interdepartmental training within the City EMS Annexation Promotion of Organization Confined space contracts and training Technical Responses Aging population (educational opportunities)	Budgets Uninformed decisions Unrealistic utilization of FD resources Unfair comparative Analysis Staffing cuts Work schedule Candidate pool for firefighters Public Safety Director Loss of grant opportunities Political turf wars Reduction in services Reduced service demand Mandates (unfunded) Increased service demand

Staffing Option 1	Costs
Maintain full-time fire department with staffing of 1 Fire Chief, 4 Captains, 12 firefighters. TVFD 1 Chief, 2 Captain 14 firefighters.	1,704,599*

Advantages:	**Report Section:**
Increased Productivity by:	2.3.3
1. Being able to continue aggressive rapid interior attack when conditions allow, controlling property loss	3.1.4
2. Being able to expand into providing emergency medical service	3.1.3
3. Being able to offer services outside the community, (Regional Fire Services)	2.2.4
4. Being able to meet increased training requirements	3.14/3.1.19
5. Being able to increase inspection responsibilities	3.2
6. Being able to develop delivery of regional training program for fire, rescue and disasters	2.2.4
7. Being able to increase community interaction	3.2
Maintaining ISO 3 rating for community with stabilized insurance rates for commercial property. (No change for residential property)	3.1.7
8. Current staff will be able to handle projected growth	2.1.6
9. Being able to maintain pool of full-time recall pool.	

Disadvantages:	
1. Cost	
2. Available pool of part-time employees may continue to be reduced.	3.1.4

* Refer to Recommendation Matrix for further detail.

The cost associated with maintaining the current staffing and administrative organizational plans of the department are $ 1,704,599, the current budget must be increased. The Interim Fire Chief has discovered that essential lifesaving equipment testing has been eliminated and equipment maintenance and service has been underfunded. Consequently, noted cost restores required line items to the budget.

Staffing Option 2	Costs
Reduce full-time fire department staffing to 1 Fire Chief, 4 Captains, 9 firefighters. TVFD 1 Chief, 2 Captain 14 firefighters. (Reduction of 3 full-time firefighter positions)	$ 1,318,688 *

Advantages:	**Report Section:**
1. Cost saving	
Disadvantages:	
Limited to no Increase in Productivity:	2.3.3
1. Limited ability to continue aggressive rapid interior attack when conditions allow, less control of property loss. Increased losses could negatively affect residential property insurance. (State Farm)	3.1.4
2. Very difficult to meet required 2 in/2 out requirements and maintain scene safety through proper Incident Command	3.1.4
3. Less staffing will restrict ability to be available to expand into providing emergency medical service	3.1.3
4. Limited ability to offer services outside the community, (Regional Fire Services)	2.2.4
5. Limited ability to meet increased training requirements	3.14/3.1.19
6. Limited ability to increase inspection responsibilities	3.2
7. Limited availability to increase community interaction	3.2
8. ISO 3 most likely reduced to a 4 rating upon next evaluation, insurance increases would be minimal (1 – 3%) in commercial property insurance rates (No impact of residential)	3.1.7
9. Current staff may not be able to handle projected growth	2.1.6
10. Limited ability to develop delivery of regional training program for fire, rescue and disasters	2.2.4
11. Continued loss of available part-time candidate pool	3.1.4
12. Recruitment and retention of part-time staff	3.1.4
13. Reduction in available full-time recall personnel pool	3.1.4

* Refer to Recommendation Matrix for further detail.

The cost associated with Option 2 includes the first year cost to lay off 3 firefighters including unemployment and accrued time payouts which is $ 114,276. It does not include the cost to replace the vacant firefighter positions with the appropriate number of volunteer firefighters. The Nationally recognized standard is 1 full-time position requires 3 volunteer/part-time positions. The cost to add the 9 firefighters required to assure the City is able to maintain its insurance ratings and provide close similar firefighting capability would be $7,000 per new hire for a total of $63,000.

Staffing Option 3	Costs
Reduce full-time fire department staffing to 1 Fire Chief, 3 Captains, 6 firefighters. TVFD 1 Chief, 2 Captain 14 firefighters. (Reduction of 1 Captain and 6 fullfull-time time firefighter positions)	$ 1,217,252 *

Advantages:

1. Cost saving

Disadvantages:

Limited to NO Increase in Productivity:	2.3.3
1. No ability to continue aggressive rapid interior attack when conditions allow until additional units arrive. Property loss will increase as department will need to switch to an exterior fire department for initial attack. Increased losses could negatively affect residential property insurance. (State Farm)	3.1.4
2. Not possible to meet required 2 in/2 out requirement until second unit arrives. Difficult to maintain scene safety through proper Incident Command	3.1.4
3. Not enough staffing to expand into providing emergency medical service	3.1.3
4. Not enough staff to offer services outside the community, (Regional Fire Services)	2.2.4
5. Limited ability to meet increased training requirements	3.14/3.1.19
6. Not enough staff to increase inspection responsibilities	3.2
7. Limited availability to increase community interaction	3.2
8. ISO 3 most likely reduced to a 4 rating upon next evaluation, insurance increases would be minimal (1 – 3%) in commercial property insurance rates (No impact of residential)	3.1.7
9. Staff will not be able to handle projected growth	2.1.6
10. Not enough staff to develop delivery of regional training program for fire, rescue and disasters	2.2.4
11. Continued loss of available part-time candidate pool	3.1.4
12. Recruitment and retention of part-time staff	3.1.4
13. Severe reduction in full-time recall personnel pool.	3.1.4

* Refer to Recommendation Matrix for further detail.

The cost associated with Option 3 does include the first year cost to lay off the 7 positions noted including unemployment and accrued leave payouts which is $ 171,103. It does not include the cost to replace the vacant firefighter positions with the appropriate number of volunteer firefighters. The Nationally recognized standard is 1 full-time position requires 3 volunteer/part-time positions. The cost to add the 18 firefighters required to assure the City is able to maintain its insurance ratings and provide close similar firefighting capability would be $7,000 per new hire for a total of $126,000. The larger concern is the available candidate pool. There does not appear to be enough available community members to fill the ranks of volunteer firefighter. All

county departments report difficulty recruiting as well as minimum to no coverage during the work week time period. This option would rely heavily on volunteers to provide the additional firefighters required to make entry into a burning building. Without these firefighters the department would be required to fight the fire from the exterior, greatly increasing the property damage and financial loss. Remember all loss in a fire cannot be replaced by insurance.

Further Reductions

During the analysis for this report further reduction beyond Option 3 were discussed. Reducing the current staff beyond the options described does not appear to be viable for the following reasons. The City does not appear to have a candidate pool of potential volunteers sufficient enough to support the fire activity in the community. Additionally, during the workweek daytime period the majority of responders are the recalled full-time firefighters. Any reduction in full-time personnel will have the corresponding loss of recall personnel. The available candidates to hire would most likely come from other county fire companies thereby reducing their staffing.

To cover the City with an all or majority volunteer force would require two fire stations to reduce the response the reaction and response time of this type of force. A single centralized location can work with a career staff to respond with minimal reaction times. It will not work if firefighters must respond from home and work. The stations would need to be closer to the firefighters.

The corresponding insurance increases and projected increase in fire loss would offset any savings realized while potentially adding to an increase in injuries and deaths. The elected officials and community leaders interviewed all voiced concerns over drastic cuts to fire protection. The majority were interested in increased productivity which this report recommends and describes.

4.0 Recommendation Matrix

No.	Section	Recommendation	Procedure	Responsibility	Time Frame	Priority	Revenue/Cost Implication
1.	2.1.3	Introduce and Educate all members on the Dept. Mission, Vision, Values	Policy	Fire Chief	3 months	High	Staff Time
2.	2.1.4	Develop schedule to review and update Strategic Plan	Policy	Strategic Planning Committee	3 months	High	Staff Time
3.	2.2.4	Develop plan to offer services to neighboring fire companies	Policy	Fire Chief	12 months	Medium	Staff Time
4.	2.2.4	Encourage FCFC to develop a regional response plan for RIT	Program / Policy	Fire Chief/Staff	12 months	Medium	Staff Time
5.	2.3.1	Chose Organizational Chart and Leadership Plan for Department	Policy	City Manager	6 months	High	Staff Time
6.	2.3.1	Reorganize City Hall Maintenance Program	Policy	City Manager	6 months	High	Staff Time
7.	2.3.1	Reorganize responsibilities in Building/Inspections	Program	City Manager/Fire Chief/Building Official	6 months	High	Staff Time
8.	2.3.1	Provide Smart Phones for Inspection Staff	Policy/Program	Chief/Building Official	3 months	Medium	TBD
9.	2.3.1	Conduct analysis of wireless technology for inspections	Policy/Procedures	Chief/Building Official	6 months	Medium	TBD
10.	2.3.1	Establish Policy to add part-time staff during emergencies in Inspections	Policy & Procedures	Chief/Building Official	6 months	Medium	Staff Time
11.	2.3.1	Establish automated payroll system for Fire	Policy	Chief	12 months	High	TBD

No.	Section	Recommendation	Procedure	Responsibility	Time Frame	Priority	Revenue/Cost Implication
12.	2.3.1	Expand Inspections webpage functionality	Policy	Chief/Building Official	24 months	Medium	Staff Time
13.	2.3.1	Add a full-time maintenance/cleaning person	Policy	City Manager/Fire Chief	3 months	High	$80,000
14.	2.3.1	Evaluate the work of the maintenance/cleaning person, add a part-time person if needed	Policy	City Manager/Fire Chief	9 months	Medium	$25,000
15.	2.3.1	Establish Captain OT hiring list	Policy	Chief	12 months	Low	Staff Time
16.	2.3.2	Implement a daily staff briefing	Policy & Procedures	Chief	3 months	Medium	Staff Time
17.	2.3.2	Implement a monthly staff meeting	Policy & Procedures	Chief	3 months	Medium	Staff Time
18.	2.3.2	Implement an employee suggestion program	Policy & Procedures	Chief	3 months	Medium	Staff Time
19.	2.3.2	Safety Committee meeting program	Policy & Procedures	Chief	6 months	High	Staff Time
20.	2.3.2	Develop a monthly department newsletter	Policy & Procedures	Chief	12 months	Medium	Staff Time
21.	2.32	Establish defined Chain of Command with Open door policy.	Policy & Procedures	Chief	3 months	High	Staff Time

No.	Section	Recommendation	Procedure	Responsibility	Time Frame	Priority	Revenue/Cost Implication
22.	2.4.2	Establish a Grant Committee	Policy	Chief	6 months	Medium	Staff Time
23.	2.4.2	Consider the use of impact fees	Policy	City Manager/Chief	12-24 months	Medium	Staff Time (Revenue Generation)
24.	2.4.2	Consider Implementing Fire Response Fee	Policy	City Manager/Chief	12 months	High	Staff Time (Revenue Generation)
25.	2.4.2	Consider Implementing Fire Inspection Fees	Policy	City Manager/Chief/ Building Official	12-24 months	Medium	Staff Time (Revenue Generation)
26.	3.1.3	Establish relationship with MCHS for expansion into EMS	Policy/Procedures	City Manager/Chief	12-24 months	High	Staff Time
27.	3.1.4	Strive to maintain 4 minute average response time	Policy & Procedures	Chief	Continuous	High	Same as Current
28.	3.1.4	Have TVFD respond to all City calls from their station	Policy & Procedures	Chief	Immediate	High	None
29.	3.1.4	Respond proper amount of personnel to fires	Policy & Procedures	Chief	Immediate	High	None
30.	3.1.4	Eliminate operational differences between Shift Captain at emergencies	Policy & Procedures	Chief	Immediate	High	None
31.	3.1.4	Establish a Safety Officer at all working incidents	Policy & Procedures	Chief	Immediate	High	Staff Time

No.	Section	Recommendation	Procedure	Responsibility	Time Frame	Priority	Revenue/Cost Implication
32.	3.1.4	Add computer technology to command vehicle	Policy	Chief	12 months	High	$2000.
33.	3.1.4	Establish committee to consider addition of fire dispatching	Policy	Chief/Police Chief/FCFC	24 months	Medium	Staff Time
34.	3.1.4	Appoint Dispatch Liaison	Policy	Chief	Completed	High	Staff Time
35.	3.1.4	Establish regular dispatch meetings	Policy	Dispatch Liaison	Completed	High	Staff Time
36.	3.1.4	Establish dispatch procedures	Policy	Dispatch Liaison	6 months	High	Staff Time
37.	3.1.4	Recruit City Employees to volunteer for City Fire (employees that are volunteers elsewhere)	Policy	City Manager/Chief	12 months	High	TBD after analysis of people interested, training and gear costs
38.	3.1.15	Choose new fire station site	Policy	City Manager	12-24 months	Medium	TBD
39.	3.1.15	Establish a new fire station committee	Design/Function	City Manager/Chief	12-24 months	Medium	Staff Time
40.	3.1.16	Audit personnel for NFPA & OSHA compliance for specialty response	Policy	Chief/Training Committee	6 months	High	TBD

No.	Section	Recommendation	Procedure	Responsibility	Time Frame	Priority	Revenue/Cost Implication
41.	3.1.17	Review and update all SOP	Policy& Procedures	Chief/Committee TBD	6 months	High	Staff Time
42.	3.1.17	Write all required SOP	Policy & Procedures	Chief/Committee TBD	12 months	High	Staff Time
43.	3.1.17	Propose all operational SOPs be adopted by every dept. in FCFC	Policy	Chief	12 months	High	Staff Time
44.	3.1.18	Train FF Berven in ImageTrend	Program	Chief	3 months	High	TBD (minimal)
45.	3.1.18	Establish ImageTrend training for all personnel	Program/Policy	Chief	6-12 months	High	$2000
46.	3.1.19	Establish a training committee	Program/Policy	Chief/Committee	3 months (started)	High	Staff Time
47.	3.1.19	Identify minimum training requirements	Program/Policy	Training Committee	3 months (started)	High	Staff Time
48.	3.1.19	Establish training calendar	Program/Policy	Training Committee	6 months	High	Staff Time
49.	3.1.19	Establish a training budget	Program	Training Committee	9 months	High	TBD
50.	3.1.19	Establish a training program for regional delivery	Policy/Procedures	Chief/Training Committee	24 months	Medium	Staff Time (program to generate revenue)

No.	Section	Recommendation	Procedure	Responsibility	Time Frame	Priority	Revenue/Cost Implication
51.	3.1.19	Define a location for required drills	Program	Training Committee	3 months	High	Staff Time
52.	3.1.19	Develop schedule for pre-fire plan updates	Program	Training Committee	12 months	Low	Staff Time
53.	3.1.19	Research electronic pre-fire plans software	Program	Training Committee	6 months	Medium	Staff Time (TBD)
54.	3.1.19	Develop Post Incident analysis procedure	Policy/Program	Chief/Training Committee	12 months	High	Staff Time
55.	3.2.2	Develop fire inspection accountability program	Program	Chief/Building Official	6 months	High	Staff Time
56.	3.2.2	Develop new inspection program for Group B & E	Policy	Chief/Building Official	6 months	Medium	TBD
57.	3.2.2	Research wireless technology for fire inspections program	Policy/Program	Chief/Building Official	12 months	Medium	$2,000
58.	3.2.3	Develop SOG for fire investigations	Policy/Program	Chief/Fire Investigators	6 Months	High	Staff Time
59.	3.2.3	Report annual property saved ratio	Policy/Program	Chief/Fire Investigators	3 months	High	No Cost
60.	3.2.4	Continue fire prevention committee	Policy/Program	Chief	Continuous	High	No Change

No.	Section	Recommendation	Procedure	Responsibility	Time Frame	Priority	Revenue/Cost Implication
61.	3.2.4	Continue Fire Prevention Poster Contest consider expanding	Policy/Program	Chief/FP Committee	Continuous	High	No Change
62.	3.2.4	Continue first grade T-shirt program	Policy	Chief/FP Committee	Continuous	High	No Change
63.	3.2.4	Continue fire prevention programs	Policy	Chief/FP Committee	Continuous	High	No Change
64.	3.2.4	Continue BP program	Policy	Chief/FP Committee	Continuous	High	No Change
65.	3.2.4	Continue Reassurance program	Policy	Chief/FP Committee	Continuous	High	No Change
66.	3.2.4	Continue Smoke/CO detector program	Policy	Chief/FP Committee	Continuous	High	No Change
67.	3.2.4	Continue FD open house	Policy	Chief/FP Committee	Continuous	High	No Change
68.	3.4.2	Consider use of High School-future teachers in delivery of prevention programs	Policy/Program	Chief	12 months	Low	Staff Time
69.	3.4.2	Expand web page to offer NFPA links to children	Program/Program	FP Committee	18 months	Low	Staff Time

No.	Section	Recommendation	Procedure	Responsibility	Time Frame	Priority	Revenue/Cost Implication
70.	3.5.2	Establish Public Information Program	Policy/Program	Chief	12 months	High	Staff Time
71.	3.5.2	Recruit PIO from existing staff	Policy/Program	Chief	12 months	High	Staff Time
72.	3.3.1	Conduct an audit on NIMS compliance for fire personnel	Policy/Program	Chief/EM Director	3 months	High	Will result in training recommendations
73.	3.3.1	Conduct an audit on NIMS compliance for all City employees	Policy/Program	EM Director	3 months then Annually	High	Will result in training recommendations
74.	3.3.1	Conduct an audit on NIMS compliance for associated emergency response personnel (MCHS)	Policy/Program	EM Director	3 months then Annually	Medium	Will result in training recommendations
75.	3.3.2	Establish a fire sprinkler ordnance for all new construction of all building in the City	Policy/Program	City Manager/Chief	24 months	High	TBD by final policy
76.	3.3.4	Establish a plan of action to strive toward fire department accreditation	Policy	Chief	60 months	Low	Staff time, $1000
77.	3.3.2	Send personnel to National Fire Academy for training	Policy/Program	Chief/Training Committee	12 Months	High	Time and Food costs $500.
78.	3.3.2	Send personnel to Emergency Management Institute for training	Policy/Program	Chief/Training Committee	12 Months	High	Time and Food costs $500.

No.	Section	Recommendation	Procedure	Responsibility	Time Frame	Priority	Revenue/Cost Implication
79.	3.4.1	Acquire 100 % capture vehicle exhaust system for current fire station	Program	City Manager/Chief	Immediate	High	$33,000
80.	3.4.3	Review and consider adopting vehicle replacement schedule	Policy	City Manager/Chief	Annually	Medium	$114,000
81.	3.4.3	Replace vehicles per proposed schedule	Policy	City Manager/Chief	6 months	High	$1,143,000
82.	3.4.5	Add a thermal imaging camera when purchasing new ladder truck	Program	Chief	6 months	High	$10,000
83.	3.4.5	Add straight tip attack nozzles to pumpers	Program/Policy	Chief	6 months	High	$3,000
84.	3.4.5	Add foam capability to all new apparatus	Policy	Chief	Continuous	High	Included in apparatus replacement costs
85.	3.4.6	Develop a program to provide a second set of protective clothing to all personnel	Program	Chief	24 months	High	$66,000
86.	3.4.7	Develop a SCBA replacement program	Policy/Program	Chief	3 Months	High	$14,000
87.	3.4.8	Store protective clothing following manufacturers guidelines	Policy/Program	Chief	3 months	High	$1,000