

Loveland Fire Rescue Authority



Fire Protection/ Emergency Services *Strategic Plan*

2012 Edition

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I. EXECUTIVE SUMMARY

If a community desires to provide a fire-safe environment for its citizens and visitors, the fire protection and emergency service needs must be identified, planned for, and properly addressed in the most cost effective manner. By acting in partnership with the newly-formed Loveland Fire Rescue Authority (LFRA), the City of Loveland and the Loveland Rural Fire Protection District have recognized the importance of planning for the future around a shared vision that provides the best protection for the community. LFRA has developed the 2012 Strategic Plan to provide the Department a roadmap for the future.

The strategic plan for the Loveland Fire Rescue Authority (LFRA) will be based on an eight to ten year timeframe, with annual evaluations and progress reports being made to the various governing bodies.

It is anticipated that this strategic plan for the Loveland Community will:

- Provide an accurate description of the Loveland area's past, present, and future fire protection and emergency services situation.
- Provide an accurate description of the current fire protection and emergency services systems, its capabilities, and its limitations.
- Establish an agreed upon model of operation that can address the future fire and rescue needs.
- Establish a set of goals and objectives that will determine the desired performance level (often referred to as service levels) and establish service level indicators that provide a standardized way of measuring the effectiveness of the fire protection and emergency services system of the future.
- Establish a plan for initiatives that will help prevent harm from emergencies or limit the potential destruction.
- Provide a safe, fairly-funded, proactive, and cost effective fire protection and emergency services system.

Because of the difficulty of making accurate predictions during the current economic climate (2012), the strategic plan will be a dynamic document that will continue to evolve, adapting to the changes that unfold over the next eight to ten years. Periodic evaluations and progress reports to the Fire Authority Board of Directors will be an essential part of this planning process. These updates and progress reports will be included in an annual report made by the Fire Chief and the organization to communicate to the Fire Authority board members and the public the progress made on the stated organizational goals and objectives.

The recommendations include two segments: (1) strategic plan priorities for LFRA and (2) other organizational needs. The plan's priorities are based primarily on elements of the current staffing and deployment plan known as Model One Basic Services Expansion Plan (see Section VI). The plan is organized into four phases of implementation and four subcategories defining levels of priority for implementation: high priority, intermediate priority, future priority, and additional priorities and needs. The Model One plan offers a minimum staffing of each fire company with three firefighters and utilizes the current three-tiered workforce of reserves, part-time paid, and full-time paid firefighters. Model One is expressed on the following page with estimated costs and implementation phases.

Model One Basic Services Expansion Plan

| | COST | 2012/ 13 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|--|---------------------|-------------|------|------|------|------|------|------|
| PHASE 1 2012-2013 | | | | | | | | |
| Add 6 FT firefighters for Engine 6 & Truck 6 | \$ 426,777* | | | | | | | |
| Add funding for part-time paid F/F program | \$ 70,420* | | | | | | | |
| Add Public Safety Administrative Director position | \$ 130,000* | | | | | | | |
| Add 1 Lieutenant position to CSD | \$ 106,140* | | | | | | | |
| TOTAL Increase for O&M for Phase 1 | \$ 733,337 | | | | | | | |
| Expand Station 6 | \$ 930,000 | | | | | | | |
| Purchase new fire engine | \$ 483,000 | | | | | | | |
| TOTAL Capital \$ for Phase 1 | \$1,413,000 | | | | | | | |
| PHASE 2 2014-2015 | | | | | | | | |
| Add 6 FT positions for new Heavy Rescue Squad 2 (3 Lieutenants and 3 Engineers) | \$ 694,389* | | | | | | | |
| TOTAL Increase for O&M for Phase 2 | \$ 694,389 | | | | | | | |
| Construct new Station 2 | \$2,900,000** | | | | | | | |
| Purchase new Heavy Rescue Squad | \$ 500,000 | | | | | | | |
| Replace Aerial Tower | \$1,200,000 | | | | | | | |
| Refurbish 2000 Smeal Aerial Ladder for Reserve Truck | \$ 475,000 | | | | | | | |
| TOTAL Capital \$ for Phase 2 | \$5,075,000 | | | | | | | |
| PHASE 3 2016-2017 | | | | | | | | |
| Add 9 FT position for new Station 10 (3 Lt., 3 Eng., 3 FF) | \$ 980,434* | | | | | | | |
| Add 1 Administrative (secretarial) position | \$ 54,450* | | | | | | | |
| TOTAL Increase for O&M for Phase 3 | \$ 1,034,884 | | | | | | | |
| Build new Station 10 | \$2,299,000** | | | | | | | |
| Replace fire engine | \$ 530,000 | | | | | | | |
| Refurbish Water Tender 1 | \$ 237,000 | | | | | | | |
| TOTAL Capital \$ for Phase 1 | \$ 3,066,000 | | | | | | | |
| PHASE 4 2018-2020 | | | | | | | | |
| Add 3 FT firefighters for coverage/rover positions | \$ 262,308* | | | | | | | |
| TOTAL Increase for O&M for Phase 4 | \$ 262,308 | | | | | | | |
| Refurbish Water Tender 5 | \$ 357,000 | | | | | | | |
| Replace Front Line engine (2020) | \$ 597,388 | | | | | | | |
| TOTAL Capital \$ for Phase 4 | \$ 954,388 | | | | | | | |

*All O & M costs include a 3.5% annual inflationary increase ** These estimates were provided by City of Loveland Facilities in early 2011; they will need to be re-evaluated in the coming years based on the construction trends and costs per square foot.

High Priority
 Intermediate Priority
 Future Priority

II. INTRODUCTION

BACKGROUND

History of the Fire Authority and the Development of Model One

The development of the Fire Authority for LFR spanned nearly two and one half years and involved three committees. The first committee set out to evaluate several different governance models, identifying which one would be the best for LFR. The conclusion of this group's research suggested that the Fire Authority would be the best model considering all of the characteristics and particulars involved within the organization. The second committee took the work of the first committee and focused on the feasibility of a Fire Authority for LFR. One of the important outcomes from this committee's work was the recognition that a Fire Authority would be feasible for LFR, but significant organizational improvements would have to be made in staffing, deployment, and planning for a Fire Authority to be feasible and successful. This group's efforts included an analysis of the community and fire-rescue needs and the gaps that existed for those services. The third committee, made up of policy and decision makers from both the City Council and the Rural Board of Directors, set to work on identifying how a Fire Authority would work for LFR. Two critical documents emerged from this committee.

The intergovernmental agreement (IGA) for how the Fire Authority would work was developed from this third committee. This document was reviewed and approved by both governing bodies for the Fire Authority. It establishes the legal parameters for how LFRA will be operated and managed. A second document also emerged from this third committee; it became known as *Model One*. During one of the committee's progress reports to the City Council and Rural Board, two models for staffing were presented. *Model One* focused more on the three-person company as the minimum-staffing model. *Model Two* had as its base the four-person company for staffing levels. After review by both governing bodies, *Model One* was chosen.

Model One is more inclusive than simply specifying the staffing levels for operational fire companies (see Section VI). However, from a planning perspective, the needs for increased staffing levels are a high priority for this plan. As the third committee continued to meet for over a year, *Model One* was refined and eventually approved by both governing bodies as the guiding document for expansion of LFRA for the next eight to ten years.

Timelines for Expansion and the Variables

Timelines for expansion for *Model One* are included as targets for this plan. Variables have been identified that will affect the Department's ability to meet these targets. One of these variables is funding. The next segment of the document focuses on long-range financial planning. However, for the purposes of planning, timelines have been identified and specified for the areas of needed expansion. Growth in the community could also impact the need and timelines for expansion. For example, a project the size of the proposed Rocky Mountain Center for Innovation and Technology (RMCIT) could impact LFRA's ability to provide the appropriate level of fire-rescue services. The arrival of additional retailers to the Loveland area or the unexpected expansion in the retail or commercial developments could have an impact on this plan as well. One final variable in the plan is the Fort Collins Loveland Airport complex and its development. An unexpected growth in the number of flights to and from the airport could impact the timelines and direction for expansion that are listed within this plan.

Long-Range Financial Planning

Uncertainty regarding the long-range financial stability for LFRA is an issue that is unique for this planning process. Most strategic plans have identified funding streams or sources that serve as the vehicle to ensure that the targeted expansion is funded. However, because LFRA is in the incipient phase of its development, certain ambiguities and uncertainties are unavoidable. Both the City and the Rural District have expanded financial obligations for ensuring that the Fire Department will be able to expand its services at the appropriate level to ensure quality service to the Loveland community. The Rural District Board has evaluated its financial obligation and is seeking a mill levy increase in property taxes to meet its financial obligations for expansion. The city has also identified expansion of the Fire Department as a high priority and has done some evaluation and reorganization for how some of these expansions can be funded. Neither governing body has procured the necessary funding streams for all of the planned-for expansion at the time of the writing of this plan.

Financial options for the Fire Authority will be an ongoing focus for the City Council, the Rural District, the City Manager, and the Fire Chief. For the city, this focus will likely transcend the needs and issues of the fire service to include the needs of the Police Department and will likely be viewed as part of an overall community safety or public safety initiative. For the fire department, the gap between community or public safety needs and the ability to fund those needs is reflected in past funding inequities. The research that has been presented to both governing bodies, the City Council and Rural Board of Directors, suggests that the Fire Department is underfunded and understaffed by nearly 30% when compared to six of the comparison departments within the Front Range Fire Consortium of which LFR is a member. Financial options for the city will be fleshed out in the near future as part of the City Council's plan to address the Fire Department's funding needs. LFRA could need new funding sources to meet its financial requirements and the community's public safety needs.

THE NEED FOR FIRE PROTECTION AND EMERGENCY SERVICES PLANNING

The primary purpose of local government is to provide protection, public safety, and support through infrastructure for its citizens. Public fire protection and emergency services, as a function of local government, has the responsibility of saving lives and property from natural or human-caused situations and preventing harm through planning and pre-incident mitigation. Local governments, through the fire protection and emergency services delivery systems, must also ensure that those persons that own or operate businesses or manage property do so without endangering those who use their services or are affected by their property.

Any fire protection and emergency services system should reflect the needs and desires of the community and be managed and operated within an affordable and efficient financial system. It has always been important for local governments to operate in a manner of good stewardship of the public funds. Today, under the constraints of diminishing revenue and shrinking budgets, good financial stewardship has become one of the prime directives for communities and their citizens. Local fire protection and emergency services operations should support the overall goals and objectives of the community. In the western part of the United States, the term "community" has been defined in a broader manner than simply meaning the defining lines of a city or borough. Often, community is more reflective of an area or region that may encompass a city and its surrounding district. Local governments and fire protection and emergency services delivery systems are challenged to be more effective and to even do more with less; they must

look beyond the simplicity of single jurisdictional boundaries and adjust operations to have more of a community approach. Such is the case with the creation of fire districts and fire authorities. These new governance models are built around concepts that encourage greater efficiency, effectiveness, and cost-savings.

Historically, in both the emergency and non-emergency setting, the fire service has waited for a problem to develop and then react to it. This operational method of being reactive rather than proactive has contributed to an unbalanced and oftentimes ineffective and inefficient service delivery model. The lack of adequate planning has also contributed to many fire service organizations being unprepared to protect their citizens adequately and unable to provide for appropriate levels of community safety from the hazards of fire and natural or human caused destruction.

If a community desires to provide a fire-safe environment for its citizens and visitors, the fire protection and emergency service needs must be identified, planned for, and properly addressed in the most cost effective manner. By acting in partnership with the creation of the Loveland Fire Rescue Authority, the City of Loveland and the Loveland Rural Fire Protection District have recognized these needs and the importance of planning for the future around a shared vision that provides the best protection for the community.

Strategies that include solid planning assumptions, the development of community goals and objectives, and recommendations for implementation have been formulated within this strategic plan for the future of the Loveland Community.

ANTICIPATED BENEFITS

It is anticipated that this strategic plan for the Loveland Community will:

- Provide an accurate description of the Loveland area's past, present, and future fire protection and emergency services situation.
- Provide an accurate description of the current fire protection and emergency services system, its capabilities, and its limitations.
- Establish a set of goals and objectives that will determine the desired performance levels (often referred to as service levels) and provide a standardized way of measuring the effectiveness of the fire protection and emergency services system of the future.
- Establish an agreed upon model of operation that can address the future needs for fire and rescue operations.
- Establish a plan for initiatives that will help prevent harm from emergencies or limit the potential destruction.
- Provide a fire protection and emergency services system whereby:
 - Deaths, injuries, and loss will be minimized.
 - The funding for fire protection and emergency services is more properly distributed between city and rural citizens.
 - A fire protection and emergency services system evolves over time and emphasizes control over the fire and rescue situation through planning rather than being simply reactive to it.
 - The fire protection and emergency services system is cost effective and efficient for the citizens, potentially saving the community money over time.

ACCURACY OF DATA

Every attempt has been made in this plan to provide the most accurate data and information possible. The data used as a basis for many of the planning assumptions and stated goals and objectives were derived from extensive studies of various local risk potential and local fire and rescue history. Comparison data was gleaned from other like departments in Northern Colorado and Southern Wyoming. Most of the data used from comparison departments was gleaned from those with like population and demographic models, similar services provided, and similar regional logistics. No attempt was made to be specifically selective or to "cherry pick" certain departments in order to make a stronger case for Loveland Fire Rescue Authority. Other data models, when used, were selected from the consortium of Colorado departments within the framework of the cohort group from the International City/County Managers Association (ICMA). Finally, any other data used within this plan, other than what has been specified, will be clearly cited for their use within the plan. The data that is listed in this plan can and does provide a good and reliable picture for fire service benchmarks and comparison data. However, it should not be viewed as all-inclusive or as absolute but should be considered as the best data and information that are available at the time.

PLANNING PROCESS OVERVIEW

The strategic planning project for Loveland Fire Rescue Authority has been conducted utilizing seven basic steps (Fig. 2-1). The first step was to establish the need for strategic planning within the organization as integral to constructing and accomplishing the organization's goals. The second step involved evaluating the current fire protection and emergency services systems and determining realistic capabilities of the Department. The third step involved evaluating the community and its threat from both natural and human-caused calamity, in effect conducting a community risk analysis. This included the areas known as the wildland urban interface. The fourth step involved the evaluation of the current fire-rescue and emergency services and capabilities, and the identification of gaps in service as compared to the overall community risk levels. Step five involved the creation of concise and accurate planning assumptions to meet service level needs of the community. Step six involved the creation of specific, measurable, and actionable goals and objectives for the plan. Finally, step seven involved developing a comprehensive set of recommendations for the strategic plan to ensure that the most efficient and cost effective methods were targeted for improvements to the fire protection and community fire related emergency services.

Seven Steps for Strategic Planning

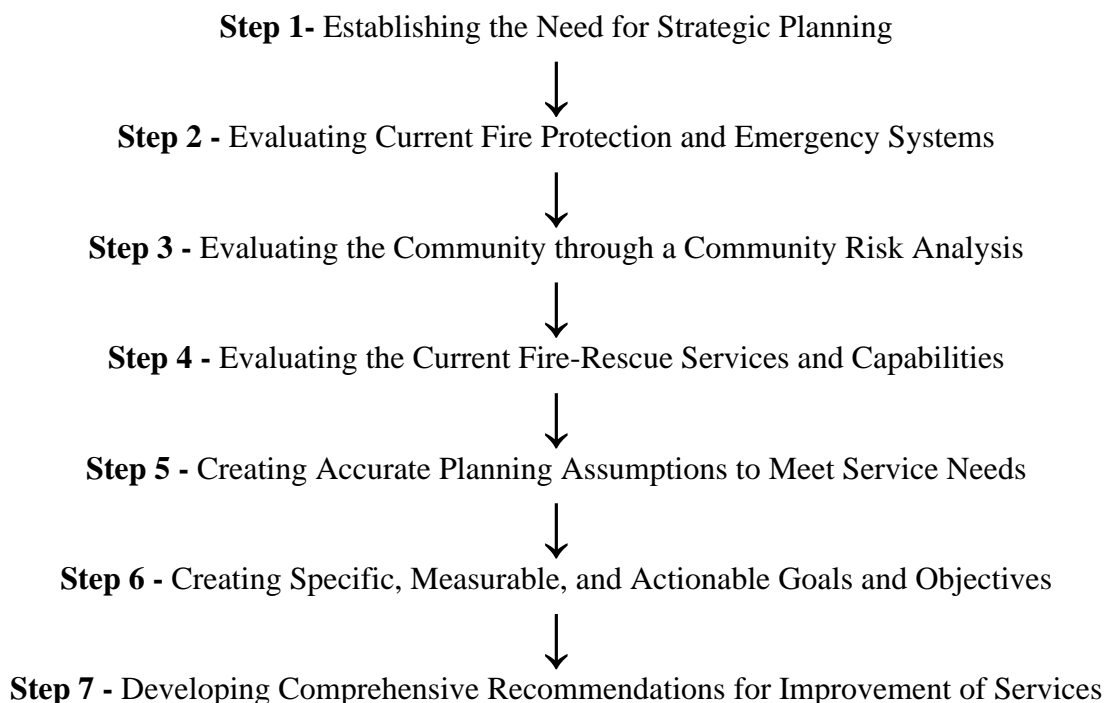


Figure 2-1. Steps for Strategic Planning

The planning process has been carried out primarily by two complementary groups (Fig. 2-2). The Planning and Writing Team, which is made up of personnel from Loveland Fire and Rescue Authority, Thompson Valley EMS, City of Loveland Staff, and others has done much of the actual work for research and writing for the plan. The Community Advisory Commission was made up of members from the city's Fire Rescue Advisory Commission (FRAC), Rural District Board members, and representatives from the Loveland City Council. This group functions as the plan's steering committee and initial document review group. The group met at least monthly and kept the process moving forward and in the correct direction to meet the targeted timelines. The other entities or individuals that contributed to the planning process were the Loveland Fire Authority Review Committee and later the Fire Authority Board, which provided overall direction, set the goals, and approved the objectives set for the strategic planning process. The Fire Chief worked directly for the Committee/Authority Board to ensure that their directions and goals were carried out; the Chief also functioned as the liaison from the Committee/Authority Board to the other team and commission members to ensure consistency of mission and completion of planning processes. The Strategic Planning Commission leader worked directly with the Fire Chief to coordinate with the Community Advisory Commission; the leader also provided the link for citizen input.

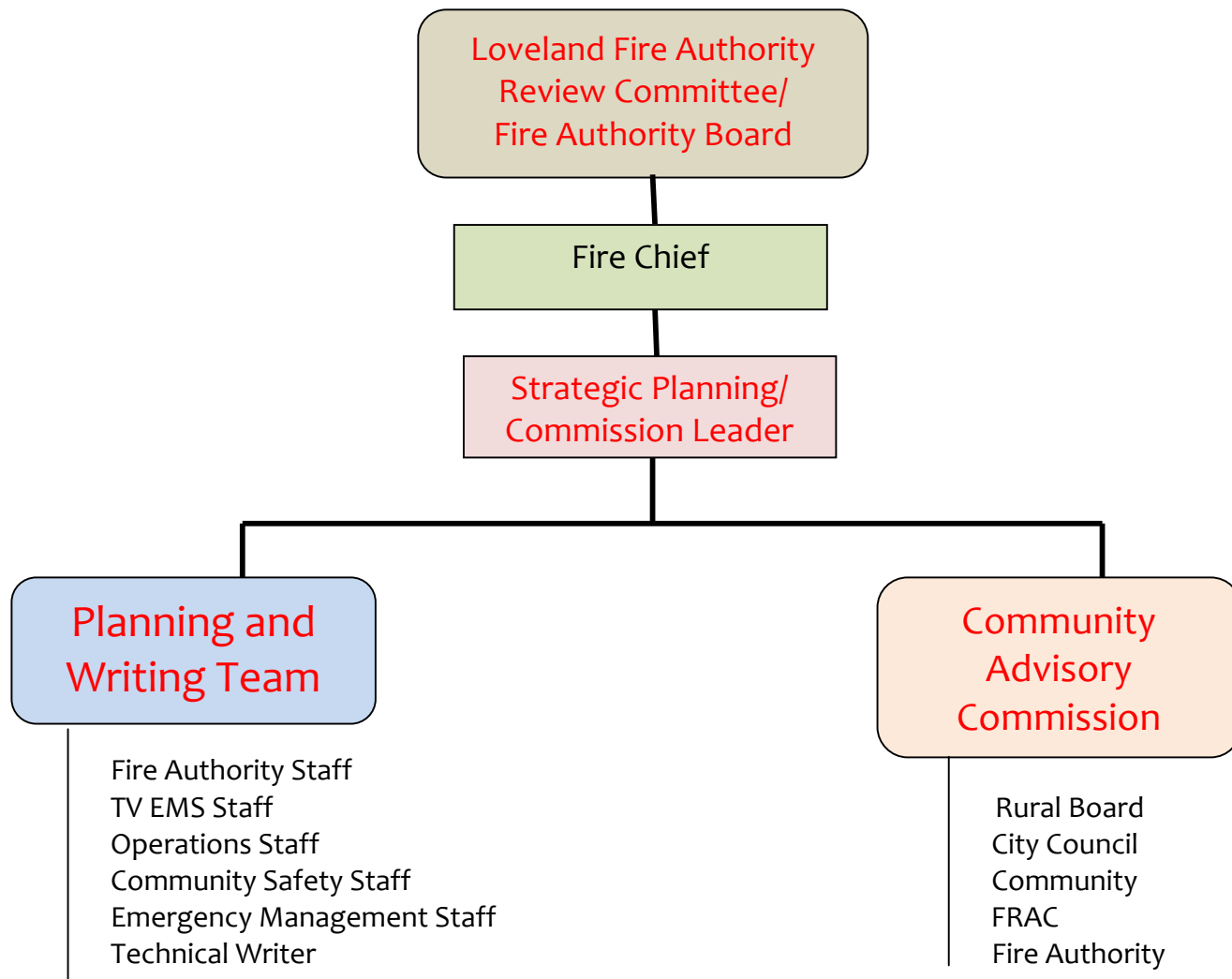


Figure 2-2. Planning Process Groups

STRATEGIC PLANNING STEERING COMMITTEE, DIRECTORS, AND LIAISONS

The strategic planning process included a combination of Department subject matter experts, experts in various fields outside of the Department, and citizen representation. Directors for the various areas within the plan were assigned to ensure that proper methodology, documentation, and accuracy of information is written for the plan. The following is a list of the members of the strategic planning process for Loveland Fire Rescue Authority (LFRA).

COMMUNITY ADVISORY COMMISSION (Steering Committee)

- Janet Bailey..... Strategic Planning Commission Leader (FRAC)
- Mary Moore..... FRAC Chair
- Tim Hitchcock..... FRAC Vice-Chair
- Paul Pfeifer..... FRAC Member
- Jeff Swanty..... Fire Authority Board Member (Rural Board)
- Andy Anderson..... Rural Board Member
- Randy Mirowski..... Fire Chief

STRATEGIC PLANNING DIRECTORS/LEADERS - LFRA/ Thompson Valley EMS

| | |
|-----------------------|---------------------------------------|
| Randy Mirowski..... | Fire Chief |
| Rene Wheeler | Public Safety Administrative Director |
| Merlin Green..... | Division Chief |
| Ned Sparks..... | Division Chief |
| Michael Cerovski..... | Battalion Chief |
| Rick Davis..... | Battalion Chief |
| Tim Smith..... | Battalion Chief |
| Greg Ward..... | Battalion Chief |
| Randy Leshner..... | EMS Chief |

FIRE AUTHORITY BOARD - Strategic Planning Review Board

| | |
|----------------------|--|
| Jeff Swanty..... | Board Chairman/ Rural Board Member |
| Cecil Gutierrez..... | Board Vice-Chair/ Mayor City of Loveland |
| John Fogle..... | Board Member/ City Council Member |
| Dave Legits..... | Board Member/ Rural Board President |
| Bill Cahill..... | Board Member/ City Manager of Loveland |

ORGANIZATION OF THE STRATEGIC PLAN

The 2012 LFRA Strategic Plan is organized into 11 sections:

SECTION I: Executive Summary - A brief overview of the entire document with a focus on history, process, timelines, and Model One-the Basic Services Expansion Plan.

SECTION II: Introduction - Establishes the case for strategic planning and anticipated benefits; addresses the data portion, its accuracy, and the overall scope of the strategic plan.

SECTION III: Loveland Fire Rescue and the Fire Authority - Basic Planning Assumptions Includes a brief overview of the organization, funding, and future revenue allocations of the Fire Authority along with the mission, vision, values, and basic planning assumptions.

SECTION IV: The Fire Protection and Emergency Services Situation - Covers the basic demographics of the response area including population, growth, vulnerability, forecasting, and current emergency services. Includes a comparison to other regional departments.

SECTION V: Staffing and Deployment - Highlights the basic staffing and deployment needs for LFRA and gives an overview of the Three-Tiered Staffing Model in use by the Department, which includes benefits, cost-effectiveness, and concerns.

SECTION VI: Model One Basic Services Expansion Plan - Includes the history and the specifics of Model One. Includes areas such as current and future staffing needs and expansion, large capital replacement and facilities expansion, and the four-phased process for implementation and estimated costs.

SECTION VII: Specialized Areas - This section highlights future needs and the specific services provided within the specialized areas including EMS, Wildland, Specialized Operations Team, Training, and the Community Safety Division.

SECTION VIII: Performance Measurements and Standards and Communications

Presents an introduction to performance measurements and history including segments about ISO and ICMA, fire department accreditation, and LFRA's current and future use of performance measurements.

SECTION IX: Fire Protection and Emergency Services Goals, Strategies, and Service Level Indicators - This section creates and establishes the organizational goals and objectives and identifies the service level indicators that will be used to track and measure organizational performance during the operational period of the strategic plan.

SECTION X: Recommendations/ Implementation - Recommendations and timelines are listed in this final section.

APPENDIX: Contains associated documents that are linked to the plan.

SCOPE OF THE STRATEGIC PLAN

The intent of this Strategic Plan is primarily to provide guidance in formulating major policy decisions and setting overall direction for the fire authority. The scope of this plan has been somewhat limited to exploring major philosophical changes for Loveland Fire Rescue Authority, both strategically and operationally, and their impacts on:

- Taxpayers in the region.
- Performance of the fire protection and emergency services systems.
- New and existing development.
- Safety of the public and emergency services personnel.
- Future expansion and needs for staffing and services.

Items such as equipment specifications, operating procedures, and resource management have, for the most part, been purposely omitted from this plan. These relate to more operational or task levels and can be best addressed in other documents and procedures within the organization.

Another area that has been purposely omitted from this plan is a detailed analysis for a funding mechanism to achieve the expansion that is listed in the Model One Basic Services Plan. Although the fire district has limited options for expansion of its funding and contribution rates (i.e., increasing the mill levy for district residents), the details for how much of an increase is needed and the manner in which it is achieved are better left to a general acknowledgement that funding increases will be needed. This issue is even more complicated on the City side as there are a myriad of ways that funding increases and contribution rates can be improved. For the purpose of this plan, it is acknowledged that in order for the needed improvements in staffing and services to occur, both the City of Loveland and the Loveland Rural Fire Protection District will need to increase their contribution to the Fire Authority.

It is extremely important to emphasize that this Strategic Plan is dynamic and may need to be adjusted over time. The most significant aspect of this plan is that it establishes a framework for formulating and addressing changes and improvements in the fire protection and emergency services situation in the future. Periodic reviews and updates will be necessary to keep up with the changing environment and the economic profile of the community.

III. LOVELAND FIRE RESCUE & THE FIRE AUTHORITY - BASIC PLANNING ASSUMPTIONS

ORGANIZATIONAL BRIEF

Loveland Fire Rescue Authority (LFRA) is a consolidated fire protection and emergency service agency specializing in fire and rescue-related services. LFRA serves the City of Loveland and the Loveland Rural Fire Protection District covering approximately 194 square miles of area. The organization's 65 full-time uniformed members, its three civilian support staff members, 12 part-time firefighters, approximately 20 firefighter reserves, and seven non-combat reserves provide the workforce for the agency. LFRA operates five fire stations staffed 24 hours, seven days per week, plus three reserve stations. The station at the Fort Collin-Loveland Airport is staffed on an as-needed basis for aircraft flight stand-by services. The Department operates six paid fire companies, including one aerial truck company and a heavy engine/squad currently doing dual duty as an engine and heavy rescue company. Within the fire district are the communities of Johnstown (I-25 & Hwy 34) and portions of Masonville and the Pinewood Reservoir area. In 2012 approximately 88,000 people live within the area served by LFRA.

LFRA was formed in January of 2012 with the consolidation of the City of Loveland fire department (Loveland Fire and Rescue) and the Loveland Rural Fire Protection District. The City and Rural District adopted an intergovernmental agreement (IGA) establishing the Fire Authority. The IGA is the basis of LFRA's existence and outlines the governance, management, funding formulas, and operation of the Fire Authority. A five-person board of directors, appointed by the City Council and Rural District Board, governs LFRA. The Board includes two City Council members, two Rural Board members, and the City Manager of Loveland. LFRA's Fire Chief is a city employee and serves the Fire Authority Board and the City Manager. All firefighters for LFRA are city employees assigned to the Fire Authority. LFRA is organized into three divisions: Suppression, Community Safety, and the Big Thompson Canyon Division. Support services are provided within the confines of these three divisions and are assigned to the Community Safety Division.

FUNDING FOR THE FIRE AUTHORITY

LFRA is funded by the City of Loveland and the Loveland Rural Fire Protection District through a combination of property taxes in the Rural District plus property and sales taxes in the city via the general fund. LFRA also generates a small amount of revenue from fire prevention-related permits and reimbursements for fire-rescue services for wildland and specialized deployments. For 2012 LFRA has a base budget of approximately \$7.8 million dollars and ancillary services costing approximately \$790,000 for a total full-cost budgeting amount of approximately \$8.6 million dollars. Capital expenditures vary from year to year depending on equipment purchases and facility construction or improvement. Funds are received from the City's capital replacement fund, capital expansion fees (CEFs), and capital dollars from the Rural District. The current plan, Model One, calls for the involvement of both the City and Rural District's capital apparatus funds to continue independently until the year 2017 when the Fire Authority's capital for apparatus will be funded through annual contributions from the City and Rural District at an 82% (City) and 18% (Rural) ratio. Section V (page 31) contains the expanded financial plan and model for the Fire Authority.

City of Loveland and Loveland Rural Fire Protection District

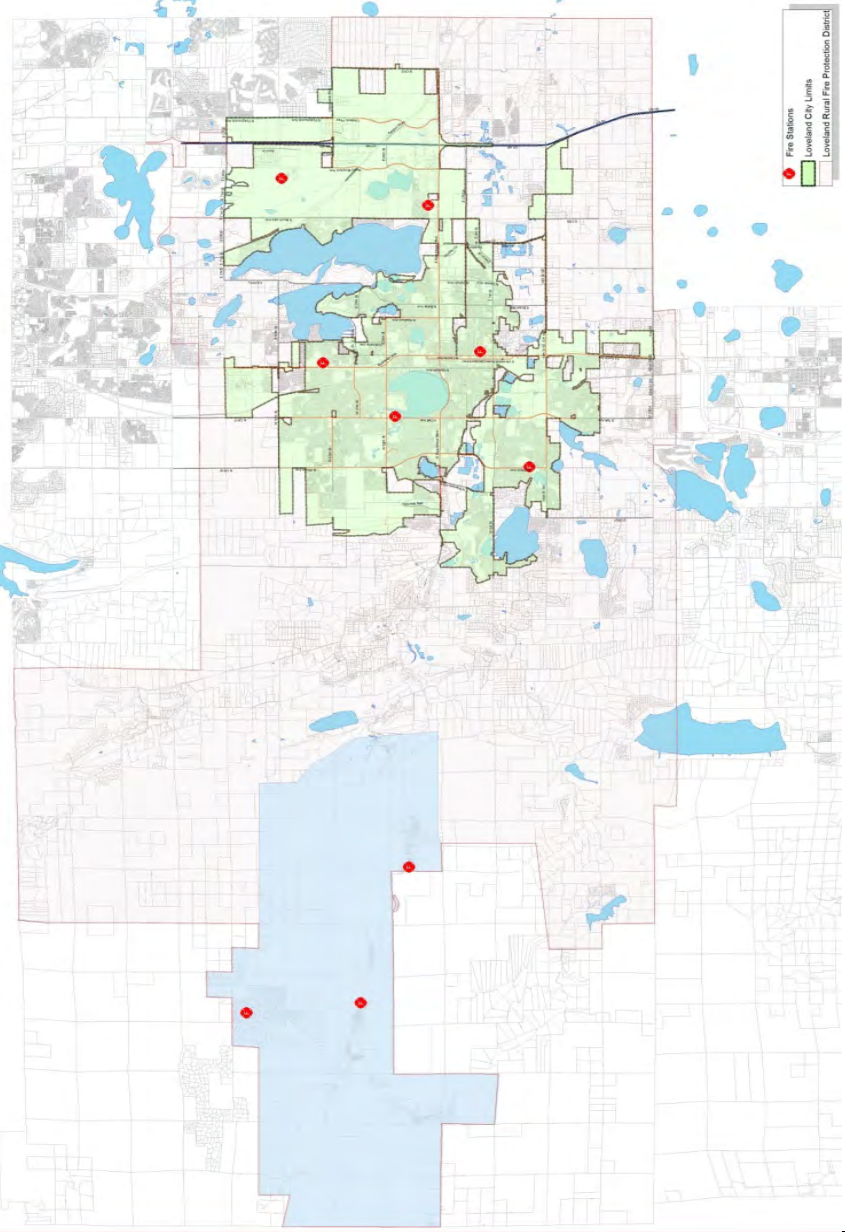


Figure 3-1. City/District Map

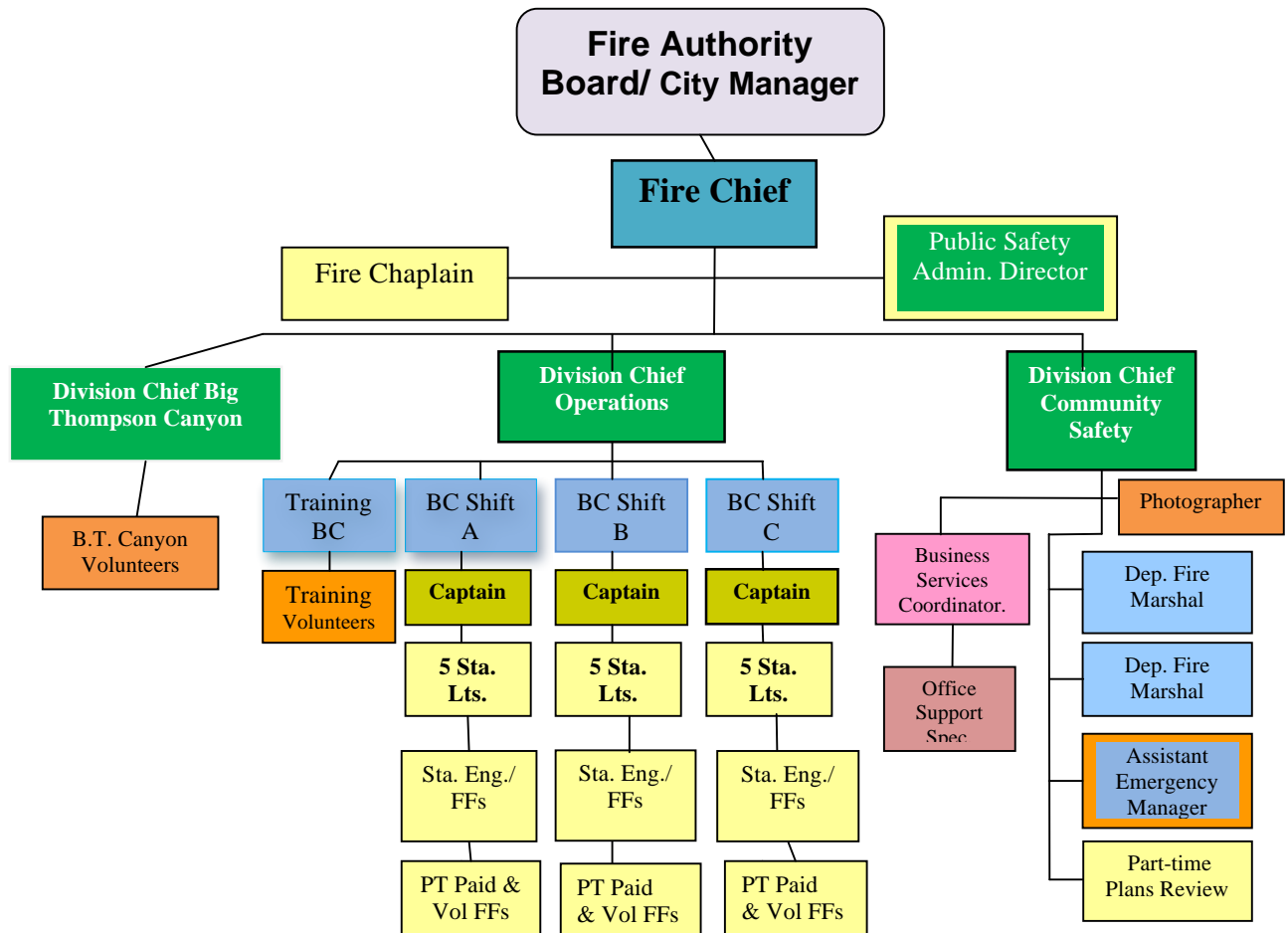


Figure 3-2. LFRA Organizational Chart

FUNDING AND THE REVENUE ALLOCATION FORMULA

The Fire Authority uses a Revenue Allocation Formula (RAF) for determining the contribution ratio for both the City of Loveland and the Loveland Rural Fire Protection District. The IGA for the Fire Authority breaks out the ratio as follows:

| | |
|--|------------|
| * City of Loveland Contribution | 82% |
| * Loveland Rural District Contribution | <u>18%</u> |
| Total Contribution for Full Cost Budgeting | 100% |

The RAF is based primarily on call load, or more specifically the percentage of calls that firefighters respond to in the City and Rural District. These percentages are not intended to be exact, but rather a target representing the call volume and workload over a longer period of time. Trending to achieve these percentages for the RAF spanned more than 20 years from 1990-2010. These percentages and the entire RAF should be reviewed periodically for accuracy and continued relevancy.

MISSION, VISION, AND VALUES STATEMENTS

Loveland Fire Rescue Authority is committed to providing the highest quality services for the citizens that are served by the Department. The mission statement is:

"Through commitment, compassion, and courage, the mission of the Loveland Fire & Rescue Authority is to protect life and property."

These three values, commitment, compassion, and courage, are the hallmark and heritage of the American fire service. LFRA has adopted these timeless values as a benchmark for measuring the Department's members and the services that are provided to ensure that the desired quality is continually and consistently being provided. The vision for the organization is to embrace the concept of continuous improvement with each and every member doing all that he or she can do to help move the organization from good to great. LFRA is committed to delivering the best possible citizen service to our community with promptness and professionalism. The vision is to continually seek ways to enhance citizen services and firefighter safety within the framework of the organization's service delivery model. It is the Department's primary goal to be recognized by the community of Loveland and those in the fire service community as a model of excellence in providing fire protection and emergency services in the most cost-effective manner.

BASIC PLANNING ASSUMPTIONS

The basic planning assumptions for LFRA are broken out into two distinct areas: Phase One and Phase Two. Phase One covers seven basic planning assumptions that serve as the basis of the first strategic plan for LFRA from 2012-2020. The planning assumptions listed in Phase One have identified goals and objectives and have amortized cost estimates for each area of expansion or improvement. Phase Two is based on long-term expectations of what may occur. It is more general and contains no real goals or objectives, but rather assumptions that are likely to occur within a set timeframe for the organization after year 2020. These long-range planning assumptions should prove to be more valuable as the plan for Phase One nears the end of its cycle. Planning assumptions are the forecasting tool for staffing and large capital expenses.

Planning Assumptions for Loveland Fire Rescue Authority for Phase 1 and Phase 2

Phase 1 (2012-2020) will include organizational strategic goals and objectives with costs identified

Phase 1 Planning Assumptions

1. **Service Levels Provided** - The Fire Authority expects to maintain or improve current City and Rural District response service levels and those projected for future expansion, with the noted exceptions listed for new stations and service areas.
2. **Population Expansion** - Projections for expansion will assume a flat growth for the next two-three years (2011-2013) and project an approximate 2.5% growth per year from 2014-2020. This would calculate into a population of approximately 102,025 in 2020 for the Fire Authority service area or response area.
3. **Station/Fire Company Expansion** - Projections for replacement or addition of new fire stations and staffing would include:
 - Adding 6 full-time (FT) positions for minimum staffing for Engine 6 and Truck 6.
 - Adding 1 Heavy Rescue Company to Station 2 (6 FT positions).
 - Adding 1 new Engine Company to the west area of the District (9 Positions.)
 - Adding 3 FT positions for coverage or fill-in.

These projections would include building a new fire station in the northwest portion of the district to replace the current Station 2 and building a new fire station in the west part of the district (Hwy 34 and Co Road 27 area). Projections for fire company expansion would be a target for minimum fire company staffing at three firefighters per company and a targeted goal of .94 to .95 firefighters per 1000 population.

4. **Workforce Staffing Methods** - Projections for this phase would include the use of the three-tiered system of reserves, part-time paid, and full-time paid firefighters. The expectation would include assigning of reserves on an as-needed basis for accomplishing the criteria for minimum hours worked (currently 36 hours/month). It is expected that part-time paid firefighters would be assigned shifts as part of the daily minimum staffing criteria for no more than 15% of the paid workforce or no more than three on-duty fire companies using a part-time firefighter for minimum staffing criteria.
5. **Additional Non-Uniformed FTEs** - Projections for workforce expansion should include a minimum of a public safety administrative director (to help administrate the Fire Authority and to work with Loveland PD), one additional administrative assistant, and one technical specialist or inspection services manager in the Community Safety Division.
6. **Selection of Model One Basic Services Plan** - Model One Basic Services Plan is to be the plan of choice for future planning assumptions.

Phase 2 Planning Assumptions

Phase 2 (2021-2030) will include planning expectations without identified funding streams. These planning assumptions are expected to be very general and based on a historical and projected forecast of what the Department's needs will be during this timeframe.

1. **Organizational Planning Goals/Expectations** - Projections for this next phase (2021-2030) should include *consideration* for:
 - Re-staffing of the airport station (Station 4) for area coverage and addressing expanded airport operations, and/or expansion in the commercial business park or commercial area around the airport. This will be reviewed on an "as needed basis" within the City of Loveland and the Rural District's planning process, and periodically with the Airport Director and the Director of Public Works to ensure proper service level needs are maintained.
 - Addition of one fire station to the south/southeast corridor, projected for the area of South Boise and Highway 402.
 - Expansion of an additional truck/ heavy rescue company.
 - Expansion for a paid staff position for Big Thompson Canyon station (40-hour training and response position).
 - Increase of minimum staffing from three firefighters per fire company to four.
2. **Workforce Staffing Analysis** - Projections in Phase 2 should include a comprehensive analysis of the three-tiered workforce plan with recommendations for revision or change to the most appropriate workforce/staffing system to best meet the community's fire/rescue needs. This would include a workforce staffing and needs analysis of the Big Thompson Canyon area of the district.

IV. THE FIRE PROTECTION AND EMERGENCY SERVICES SITUATION

THE PLANNING AREA PROFILE

The City of Loveland and the Loveland Rural Fire Protection District area are located 50 miles directly north of Denver, Colorado, along the eastern foothills of the Rocky Mountains and the Arapaho and Roosevelt National Forest. The planning area includes the City of Loveland, Big Thompson Canyon, Masonville, Pinewood Reservoir, and a portion of the City of Johnstown at I-25 and Highway (Hwy) 34.

The planning area encompasses 194 square miles. Within this area land uses vary from high-rise hotels and apartment buildings to agriculture and farm acreage. The present population is approximately 87,500 people, with nearly 65,000 living within the City of Loveland and an additional 22,500 living in the rural fire protection district. The population in the planning area is expected to grow to over 100,000 by the year 2020. The additional people are expected to live in higher densities and work in a variety of new industries and high tech businesses with an emphasis on clean and new or alternative energy sources. This expected growth could be dramatically influenced with the addition of and expansion of new industries such as the proposed Rocky Mountain Center for Innovation and Technology (RMCIT) project, or one like it, which is expected to start operations in 2012-2013. Upward of 5000-7000 jobs could be gleaned from a project like this; however, none of this is certain. This strategic plan's focus is on predictable business expansion and residential growth, not for high impact and growth ventures like the RMCIT project.

Loveland Fire Rescue Authority (LFRA) provides fire protection to a total area of 194 square miles, and Thompson Valley EMS responds to an even larger area beyond the scope of LFRA's responsibility. This strategic plan will take into account the entire urban and rural area in its scope; however, specific focus is placed on the urban response level-of-service area, which covers roughly 100 square miles. The wildland urban interface area (WUI) is addressed as a separate theater for operations; information about this can be found in Section VII, Specialized Areas. The topography of the WUI planning area is predominantly low, rolling hills, directly adjacent to the eastern range of the Rocky Mountains at an average elevation of over 5000 feet above sea level. There are also steep mountainous areas within the wildland urban interface zone that have elevations over 7000 feet above sea level. The Big Thompson River runs diagonally from the west through the planning region. The planning area also contains numerous streams, lakes, and ponds.

The Loveland area enjoys a moderate climate with an annual average of more than 300 days of sunshine. The relatively low humidity tends to make winters feel warmer and summers cooler than might be experienced in the midwestern part of the country. The average high and low temperatures range from 86 degrees F in July to a low average of 14 degrees F in January. The area receives approximately 13.9 inches of annual precipitation. While the area typically receives moderate amounts of snowfall, snow can and often does become extreme, particularly in the months of March and April.

Housing within the planning area ranges from high-density apartments to widely separated farm and ranch acreages. Housing surveys conducted by the census revealed approximately 20,000 units within the city.

The Loveland community is rapidly becoming a major retail and financial center serving Northern Colorado. Retail centers such as Centerra, other regional and neighborhood shopping malls, and the downtown centers make up the majority of the shopping in the planning region. Other areas of commerce include the growing Crossroads Boulevard Center, which includes The Ranch and Embassy Suites and other retail and hotel complexes. The proposed technology project housed within the old Agilent/HP site is expected to become one of the largest employers in the region. Agriculture also plays a significant role in the local economy and commerce in the planning area, although with the closure of the Great Western Sugar factory, there is no longer a major agricultural product processing facility within the planning area.

The planning area is bordered by an interstate highway to the east plus a major state highway running through the middle of the fire-rescue response boundaries. Major railroad lines used for freight transport run through the City and Rural District. In the northeast portion of the planning region resides the Fort Collins-Loveland Airport. This burgeoning air transportation center is home to several airlines, including Allegiant Air, which is the major commercial carrier offering direct flights to many cities in the west and southwestern part of the country. The industrial and commercial park adjacent to the airport continues to show growth and could be a major economic factor in the expansion of the planning area's population and development.

URBAN RESPONSE AREA

As stated earlier, LFRA provides fire protection and rescue and emergency medical services for basic life support to a large area encompassing both urban and rural environments. In this strategic plan, reference is often made to urban and rural response, including the wildland urban interface areas, related data, and the associated risks in all of these theaters of operation. Even though LFRA is a single agency and strives to maintain as much uniformity as possible in service provision, it does recognize that these theaters are distinctly different environments. It is unrealistic for citizens living in the more remote areas of the district to receive the same level of service relative to response times and deployment as those living in the City of Loveland. There are differences in fire risk, resident expectations, and different environments where fire-rescue personnel are expected to operate. With these two distinctly different environments it is also increasingly difficult, by comparison, to have effective performance measurements that can be applied universally.

In general, the Urban Response Area is defined as the City of Loveland and the adjacent surrounding urban areas of the Loveland Rural Fire Protection District. The more specific definition of this area would be described roughly as the area bordered on the north by County Road 30, to the east by County Road 3 (intersecting with Hwy 402 then to County Road 11), to the south by 42nd Street, and to the west by County Road 29. This entire area, known as the Urban Response Area, encompasses approximately 100 square miles. This area would also be very similar to what Larimer County has identified as its Growth Management Area. It is within this Urban Response Area that the performance measurements for the organization will be utilized. Data collected for such critical dimensions and benchmarks for the first unit on scene and total response times will be used. A map of these boundaries and the defined Urban Response Area are listed in Figure 4-1.

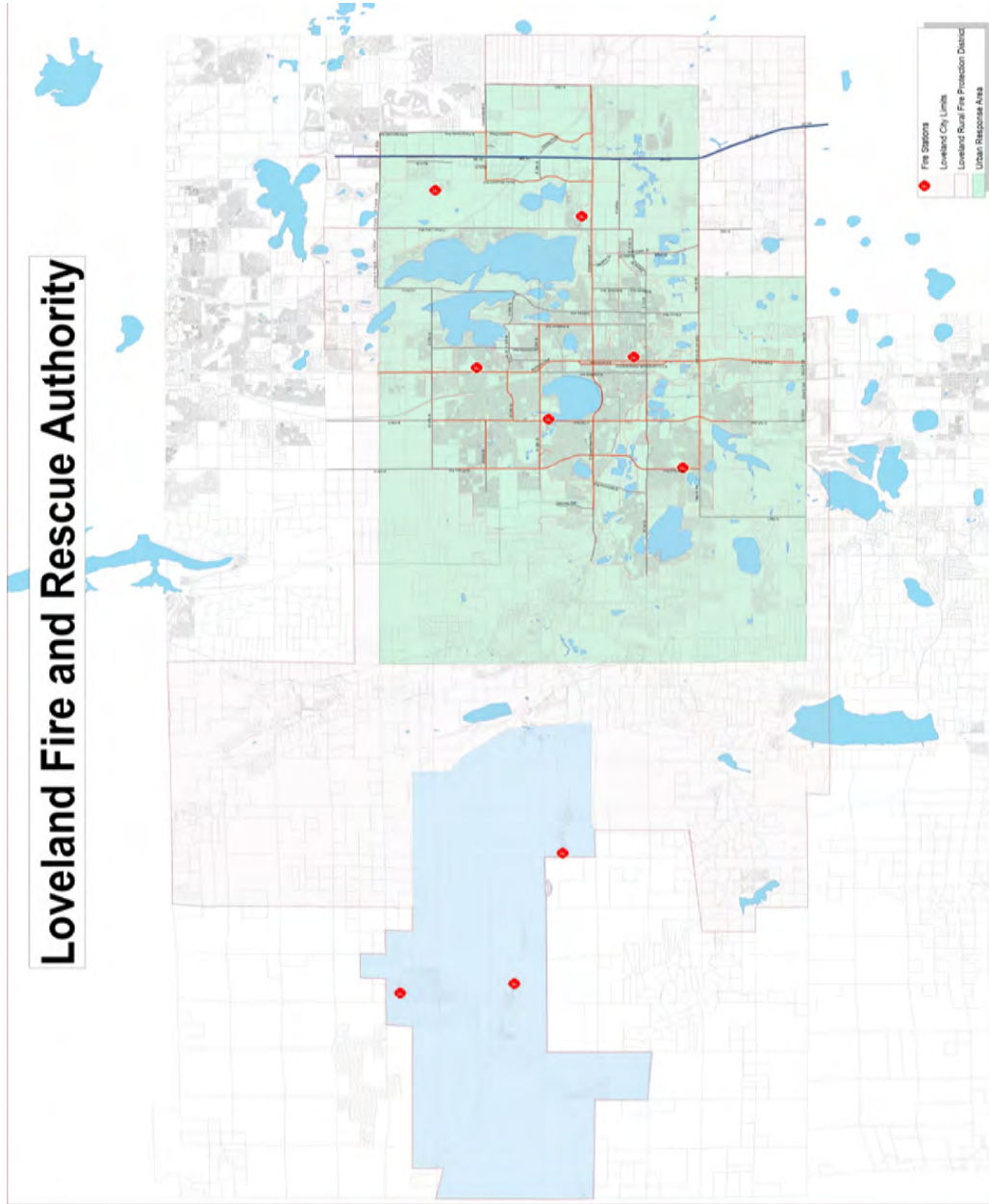


Figure 4-1. Urban Response Area

VULNERABILITY ASSESSMENT

Loveland Fire Rescue Authority's response district is situated along the eastern edge of the Rocky Mountains. The area's most prominent geological features are the Rocky Mountain Range to the west and numerous fresh water lakes, ponds, rivers, and waterways throughout the district. The elevation in the city is 4982 feet above sea level, but in other areas to the west the elevation can be over 7000 feet. There are more than 350 miles of existing streets in the City of Loveland alone and an undetermined number of county roads and unimproved travel ways within the Rural District. The transportation infrastructure consists of one major Interstate highway (I-25), which has a north-south perspective, and one U.S. highway (Hwy 34), which has an east-west perspective. These two highways, along with Highway 287, handle the bulk of traffic in the area. Connections to two other major Interstate highways are less than 60 miles in either a north or south direction. The area also has a major railway corridor, used primarily for freight transportation, and a general aviation airport shared with the City of Fort Collins that provides both private and commercial air services. Burlington Northern Santa Fe (BNSF), Great Western, and the Union Pacific railroads use the rail system. The largest commercial air carrier is Allegiant Air, which in 2011 was making 25-30 flights per month out of the airport.

Most of Colorado's population, industrial and commercial development, and the seat of state government are located along the Colorado Front Range. Tourism, one of the most vibrant industries in the state, accounts for a large portion of out-of-state visitors using the Front Range areas as part of their visitation and vacation destinations. Given the high population concentration, major industrial activities, and history of disaster events, the Front Range represents the area of greatest vulnerability for repeated occurrences of civilian death and injuries and disastrous events. The combination of high hazard areas and large numbers of out-of-state visitors who are unfamiliar with local conditions and emergency response capabilities represents a unique emergency planning and response challenge to both state and local governments and responders.

Larimer County and the entire Loveland area have experienced a multitude of natural and man-made emergency incidents and disasters; the area continues to be vulnerable to floods, wildfires, hazardous materials incidents, and a host of other weather-related incidents including tornadoes and wind-driven events. Some of these major events could simultaneously strike in a number of communities close to the Loveland community. In-depth information on these and other hazards is available in the Northern Colorado Regional Hazard Mitigation Plan 2009. This information is currently located at <http://larimer.org/bcc/100518/2009HazardMitigationPlan.htm>

Contained within this information are certain planning assumptions relative to the local, state, and federal response to the more routine responses to large-scale disasters. An expectation is embedded in this plan that the first response will be made by the local fire rescue services responders and that certain elements within that response will meet national standards and known good practices. It is helpful therefore to get an understanding of what the current emergency services situation is within LFRA, how the current situation measures up to comparable communities, and where gaps for service delivery exist for LFRA. The next portion of this document evaluates the expected population growth and the current emergency services situation.

POPULATION AND URBAN GROWTH

Of all of the future events that may affect local fire protection, emergency medical and rescue services situations and rapid or unanticipated growth would have the most significant impact on these services. In 2010 the population in the City of Loveland was estimated at 65,000 and the population in the Loveland Rural Fire Protection District was estimated at 22,500 for a total population estimate in the entire planning area of 87,500. Projections for expansion in the planning area assumed a flat growth rate (.5% or less) for the years 2011-2013. During the subsequent years of 2014-2020, the growth rate is expected to be between 2-3%. For the purposes of this strategic plan, an expansion rate of .5% was used for the years 2011-2013. From 2014-2020, a 2% growth rate was used. These numbers were gleaned from the City of Loveland's area population growth expansion projections. Based on these expansion rates, a projected population in the planning area of 102,025 should be expected in the year 2020 (see the chart below for an estimate of year-by-year expansion).

It should be noted that these are expectations of normal expansion and could be significantly impacted with large commercial or high tech facilities coming into the area. At the time of this writing, the impact of the proposed technology projects and the associated population growth is uncertain. It is expected that urban growth in new areas will continue to develop along the lines of employment and retail centers. However, another factor that is unclear, at least at the time of this writing, is the Loveland downtown development effort. It is unclear how successful this effort will be during the years of this plan and what population impacts will occur.

| <u>YEAR</u> | <u>ESTIMATED POPULATION</u> |
|--------------------|------------------------------------|
| 2010 | 87,500 |
| 2011 | 87,931 |
| 2012 | 88,377 |
| 2013 | 88,819 |
| 2014 | 90,595 |
| 2015 | 92,407 |
| 2016 | 94,255 |
| 2017 | 96,140 |
| 2018 | 98,063 |
| 2019 | 100,024 |
| 2020 | 102,025 |

The planning estimates used to derive these numbers have utilized a more conservative approach rather than a more liberal or higher forecasting of the increases in population for the planning region. A 2% growth factor beyond 2012 was used as opposed to a 3% to 4% increase that is being used by some demographers. One important use of these population estimates is in planning for the proper number of firefighters an organization should have. Historically, it has been difficult to precisely determine the number of firefighters needed within a given city or district. One common planning dimension used identifies the number of firefighters per 1000 population in a given city or district. Other dimensions and comparison data are needed for predicting the correct number of firefighters for each community. However, for planning purposes, the most important aspect in using population estimates is their accuracy. In order to ensure accuracy, these estimates must be reviewed and adjusted periodically, particularly when staffing issues are affected.

CURRENT EMERGENCY SERVICES SITUATION

Loveland Fire Rescue Authority currently operates five stations staffed by paid personnel within the planning area and one auxiliary station located outside the planning area that is staffed by reserves; this station is located in the Big Thompson Canyon area. In addition, the Department operates a fire station at the Fort Collins Loveland Airport on an as-needed basis and operates a full-service training center. Seven of these stations/areas are in good condition, while one, Fire Station 2, has been deemed to be "undesirable" for a number of reasons. The station is an asbestos-containing building, and it is too small for current staffing and deployment needs. Cost estimates for remodeling have been prohibitive for the value. In addition, the station is located in an area that places it strategically too close to other fire stations to meet the Department's targeted five-minute response model. For these and other reasons, this station is classified as "undesirable."

| <u>FACILITY</u> | <u>ADDRESS</u> | <u>CONDITION</u> | <u>DIVISION</u> |
|-----------------|---------------------------------|------------------|--|
| Station 1 | 410 East 5 th Street | Good | Operations/ Fire & EMS Community Safety |
| Station 2 | 2750 North Taft Ave. | Undesirable | Operations/ Fire & EMS |
| Station 3 | 900 South Wilson Ave. | Good | Operations/ Fire & EMS |
| Station 4 | 4900 Earhart Road | Good | Operations/ Fire & EMS Airport Operations |
| Station 5 | 251 Knobcone Drive | Good | Operations/ Fire & EMS |
| Station 6 | 4325 McWhinney Blvd | Good | Operations/ Fire & EMS |
| Station 8 | Big Thompson Canyon | Good | Operations/ Fire & EMS |
| Training Center | 100 Fire Engine Red Ave. | Good | Training Division |

The Fire Authority has a current inventory of five pumping Frontline fire engines, two reserve engines, one training engine/reserve engine, one ladder truck, one reserve telesqurt, one rescue squad, one Haz-Mat/Special Operations Squad, and approximately a dozen other support vehicles.

The Fire Suppression Division represents the largest division within the Fire Authority and is directly responsible for handling emergency situations and calls for citizen service. This division responds to fire and rescue calls, emergency medical calls, specialized rescue calls, wildland fires, and a myriad of other service requests. The staffing model is built around the use of a three-tiered staffing workforce using fully-paid, part-time paid, and reserve¹ personnel. The deployment model is what would be considered a traditional model utilizing engine companies and truck or support companies to mitigate emergencies at the strategic, tactical, and task level. Staffing and deployment models are built around the structure fire model.

STRUCTURE FIRES

- First Alarm Assignment:

| | |
|------------------------------|---------------|
| - 2 closest engine companies | 4-6 personnel |
| - 1 truck company | 2-3 personnel |
| - 1 squad company | 3-4 personnel |
| - 1 battalion chief | 1 personnel |

- Second Alarm Assignment

| | |
|--|---------------|
| - 2 additional engine companies | 4-6 personnel |
| - Shift and staff recall | |
| - Notification for mutual aid coverage | |

SINGLE ENGINE RESPONSE

- Emergency medical calls (only life-threatening calls: Charlie, Delta, Echo)
- Rubbish fires
- Grass fires
- Automobile fires
- Any other minor outdoor fire
- Citizen assist

Loveland Fire Rescue Authority (LFRA) can be expected to extinguish a fire in a building or a fire-separated area of up to an average of 5000 square feet with a first alarm assignment. A second alarm assignment could then be expected to extinguish a fire in a building or fire separated up to 10,000 square feet. These estimates assume an average fire flow produced by the attacking companies and a building where the fire has not progressed to the flashover level. Other variables could impact these estimates, but for planning purposes these predictions have proven reliable in other departments and locales. In all of these models, interior firefighting operations are pre-supposed as the tactical norm. Historically, this model has proven to be the best and most effective firefighting model in saving lives and property. In determining the firefighting capabilities of LFRA, three sets of criteria have been used.

The first criterion used was to determine what LFRA firefighting forces could actually do on a fire scene. This includes not only water application but also other necessary firefighting functions such as forcible entry, search and rescue, ventilation, salvage and overhaul, and fireground command.

¹ LFRA now uses the term "reserve" in place of the previously-used word "volunteer."

The second criterion used was to determine how much water it takes to control and extinguish a fire in a given-sized building or fire-separated area. Many formulas have been devised to accurately predict needed fire flow (a.k.a. water flow). The formula that LFRA believes best represents the actual situation is documented by the National Fire Academy as the NFA Fire Flow Formula. This formula has been derived from numerous field tests and the experiences of many different firefighters. The formula is:

$$\text{Needed fire flow} = \frac{(\text{Length} \times \text{Width})}{3} \times \% \text{ of involvement}$$

Using this formula for a 5000 square foot structure would derive a needed fire flow of approximately 400 gallons per minute in a structure with 25% involvement. The LFRA 1st alarm response could be expected to meet this flow requirement with the companies allotted.

The third criterion considered was the emphasis on firefighter and citizen safety during firefighting operations. Beyond the expected duties of water application and support functions, consideration must also be given to firefighter and citizen safety in the form of Rapid Intervention Crews and Two-In, Two-Out Crews, which are all a part of Fed-OSHA Laws or NFPA Standards addressing firefighter safety. The criteria expressed in NFPA 1710, Standard for the Organization and Deployment of Fire Suppression Operations... stipulates a minimum response of 14 personnel for a 1st alarm structure fire. LFRA agrees with these personnel minimums and has targeted such numbers into the performance measurements for initial fire attack operations.

This basic emergency response model targeted for LFRA has become known as the "Five Minute Response Model" based on the intent of NFPA 1710. This model for LFRA stipulates:

- First engine will arrive at emergencies within five minutes after dispatch 90% of the time.
- For structure fires, the balance of the response will arrive nine minutes after dispatch 90% of the time.
- A factor of 59 seconds should be added to these times as "turn-out" (dressing in protective gear and preparing) time.

The personnel criteria for this model for LFRA would be for all firefighting companies to be staffed minimally at three paid firefighting personnel with the exception of the truck company, which would be staffed minimally at four firefighting personnel. With these staffing criteria and the expansion outlined in Section VI of this document, LFRA could meet the expectations of the above-mentioned firefighting criteria. At the time of this writing, the LFRA cannot meet these targets for emergency response in the same manner in which other departments in the region can.

COMPARISON ANALYSIS FOR LFRA AND OTHER REGIONAL DEPARTMENTS

Research completed by the Fire Authority Review Committee in 2010-2011 clearly suggests that Loveland Fire and Rescue was underfunded and understaffed by nearly 30% when matched to its comparison departments in the region. These factors have a direct and negative impact on both citizen and firefighter safety. Statistical data has been compiled in this portion of the report to give a more succinct view using standard performance measurement data recognized throughout the industry. Figure 4-2 gives an overview of six important dimensions comparing seven regional departments. A more complete view of the statistical data can be found in Appendix B of this report.

Comparison data was reviewed from Loveland and six other similarly-sized departments within the region. Five of these departments are in Northern Colorado and one is in Southern Wyoming. All of these comparison departments have similar emergency response profiles with reasonably common citizen demographics. All of these departments are members and partners of the Front Range Fire Consortium (FRFC). Three of these are city fire departments with no rural area responsibilities, one is a city fire department that contracts for fire protection services with a rural area on one side of their boundary line, one is a fire protection district, and two are fire authorities (this group includes LFRA).

The list of comparison departments includes Boulder Fire Department, Cheyenne Fire Department, Greeley Fire Department, Longmont Fire Department, Loveland Fire Rescue Authority, Mountainview Fire Protection District, and Poudre Fire Authority (Fort Collins). Critical comparison dimensions in this part of the report include:

- Operating budget
- Number of uniformed personnel
- Population served
- Costs per capita for services
- Size of area in square miles
- Number of fire stations
- Number of firefighters per 1000 population

Fire Department Statistical Data Comparison
Front Range Fire Consortium Departments

| City or Department | Operating Budget | Number of Uniformed Personnel | Population Served | Cost Per Capita | Size of Area by Square Miles | Number of Fire Stations | Number of Firefighters per 1000 Population |
|--------------------------------|---------------------|-------------------------------|-------------------|-----------------|------------------------------|-------------------------|--|
| Boulder | \$13,500,000 | 99 | 103,650 | \$130.25 | 28 | 7 | 0.96 |
| Cheyenne | \$8,700,000 | 88 | 58,000 | \$150.00 | 26.2 | 5 | 1.52 |
| Longmont | \$9,200,000 | 88 | 88,000 | \$104.55 | 22.4 | 6 | 1.00 |
| Mountain View | \$12,500,000 | 70 | 55,000 | \$227.27 | 185 | 7 | 1.27 |
| Poudre Fire Authority | \$23,600,000 | 166 | 175,000 | \$134.86 | 236 | 10 | 0.95 |
| Greeley | \$11,070,000 | 96 | 100,000 | \$110.70 | 64 | 6 | 0.96 |
| Loveland Fire Rescue Authority | \$ 7,800,000 | 64 | 87,500 | \$89.14 | 190 | 5 | 0.73 |
| TOTALS | \$86,370,000 | 672 | 667,150 | \$946.76 | 751.6 | 46 | 7.39 |
| | | | | | | | |
| Mean/Average | \$12,338,571 | 96 | 95,307 | \$135.25 | 107.5 | 7 | 1.06 |
| Weighted Average | \$10,994,000 | 88 | 87,430 | \$126.07 | 98.64 | 6 | 1.03 |
| | | | | | | | |
| Source of data is FRFC | | | | | | | |
| | | | | | | | |

Figure 4-2. Fire Department Statistical Comparison Data

LOVELAND FIRE RESCUE AUTHORITY PRESENT AND FUTURE COMPARISONS

The chart below shows a comparison between Loveland Fire Rescue Authority within the identified dimensions (from Fig. 4-2) and the mean/weighted averages of the other FRFC departments. It also shows a comparison between the same dimensions in the future (2016 after the proposed expansions) and the mean/weighted averages from that same year. In each dimension for comparison, the lower number between mean and weighted average was used. Expansion numbers for the mean/weighted average were calculated on a 3.5% expansion per year, except for population increases, which were increased at a rate of 2% per year. This chart will provide a view of the impact of the implementation of planned future expansion that is articulated in *Model One Basic Services Plan*, which is found in Section VI of this plan.

Present Comparisons 2011

| | Operating Budget | # of Uniform Personnel | Population Served | Cost Per Capita | Size of Area | # of Fire Stations | # of FFs per 1000 pop. |
|-------------------------------|------------------|------------------------|-------------------|-----------------|---------------------------|--------------------|------------------------|
| Average | \$10,994,000 | 88 | 87,430 | \$126.07 | 108 Sq. Miles | 6 | 1.03 |
| LFR | \$7,800,000 | 64 | 87,500 | \$89.14 | 190 | 5 | 0.73 |
| Difference In % + or - | (-29%) | (-27%) | Even | (-29%) | + Nearly 2 times the size | (-17%) | (-29%) |

Future Comparisons 2016 (Impacts from Implementation of Model One)

| | Operating Budget | # of Uniform Personnel | Population Served | Cost Per Capita | Size of Area | # of Fire Stations | # of F/Fs per 1000 pop. |
|-------------------------------|------------------|------------------------|-------------------|-----------------|-----------------------|--------------------|-------------------------|
| Average* | \$13,057,421 | 104 | 98,000 | \$133.34 | 108 Sq. Miles | 6 | 1.06 |
| LFR | \$10,851,468 | 85 | 94,000 | \$115.44 | 190 | 6 | 0.90 |
| Difference In % + or - | (-17%) | (-18%) | (-4%) | (-13%) | + Nearly 2 times size | Even | (-15%) |

Figure 4-3. Present and Future Comparisons

* Note: Expansion plans for other regional comparison departments are uncertain. More conservative expansion predictions were used in calculating LFRA community growth numbers; other communities often project higher numbers than what are used herein, which could impact the data used for comparison.

V. STAFFING AND DEPLOYMENT

A critical component in carrying out the objectives of the Model One Basic Service Expansion Plan will be an appropriate and effective plan for staffing and deployment of personnel and resources. This section of the strategic plan focuses on staffing levels and a preferred deployment model to meet those objectives. The "three-tiered" staffing model for LFRA is a primary focus of this section for specific staffing practices. Other important areas in this section include the benefits derived from utilizing the three-tiered staffing model, the ancillary needs for this staffing model to be effective, and the noted concerns for using the three-tiered staffing model over the duration of the strategic plan. In addition, the need for a future staffing and workforce analysis will be reviewed. The major focus of this section is on deployment and its connection to staffing within the Operations Division. However, other areas within LFRA, such as the Community Safety Division, administration, and training need to be considered as part of the overall staffing model and are mentioned within this section and others (see Section VII).

BASIC STAFFING AND DEPLOYMENT PLAN

Established within the framework of the Model One Basic Services Expansion Plan is the directive for a three-person, minimum staffing level design for each fire company. This particular design is the most common and has become the *accepted* standard for minimum staffing levels for most fire departments in Colorado and the Rocky Mountain Region. Although this design does not meet the initial criteria for deployment as set forth in National Fire Protection Association standards (NFPA 1710 *Standard for the Organization and Deployment of Fire Suppression Operations...*), this design can, if properly applied and supported with an appropriate deployment strategy, meet the intent of NFPA 1710. It should be noted that no fire department in the entire Northern Colorado region is staffed using a four-person minimum staffing model; thus none meet the exact criteria as set forth in NFPA 1710. There are also response time criteria set within the NFPA 1710 standard; these issues are addressed elsewhere within this plan (see Section IV).

Various technical committees and research teams, both regionally and nationally, have conducted many staffing and deployment field testing experiments to arrive at a minimum staffing design model to effectively fight a structure fire (most fire departments in the nation build their staffing models on projections for needed staffing for structure fires). LFRA conducted field testing of its own and corroborated other studies that suggested the minimum number of firefighters needed to effectively engage in offensive, interior firefighting operations was 14 firefighters (this design model is nearly identical to the findings that were set forth and published in the standard for NFPA 1710). The specifics of the design model for deployment are listed below:

- | | | |
|---|---|---------------------------|
| • Command IC | 1 | |
| • Attack engine (fire attack crew) | 3 | |
| • Back-up crew with group supervisor | 3 | <i>Total Staff</i> |
| • Inside truck crew | 2 | <i>Needed = <u>14</u></i> |
| • Outside truck crew w/group supervisor | 3 | |
| • Rapid intervention team | 2 | |

The individual deployment assignments for each of these fire companies or teams can be seen visually on the next page in Figure 5-1.



Figure 5-1. Deployment Design Model

The design model for deployment that is depicted above is appropriate for minimum staffing levels for what would be considered a standard fire attack on an average-sized residential structure. Large residential or commercial buildings would normally require more resources and often extra alarms. Other factors such as access problems, delayed notification or response, exceptionally high winds, lack of adequate water supplies, etc., would also require additional

staffing and resources to address these challenges. Other resource needs that are not addressed within this model are the support personnel including EMS paramedics, law enforcement, utility personnel, fire investigators, and citizen advocates. This basic modeling design is appropriate for planning assumptions for minimum staffing and deployment options for fire departments; LFRA has adopted this staffing and deployment model as part of the targeted outcomes for the application of the Model One Basic Services Expansion Plan.

There are, of course, other staffing positions within LFRA that should be mentioned in this section of the plan. Positions within the Community Safety Division, administration, and the training division are all critical to the mission of the organization. The appropriate number of personnel in each of these divisions or areas will be a matter of ongoing analysis. Most are addressed for need and expansion in the Model One Basic Services Expansion Plan. As in other areas within this plan, the forecasted need and numbers associated with staffing are based on normal, planned expansion. Increases in population or expansion of businesses or industrial complexes within the Fire Authority's area that are beyond these norms may overtax the system, and in the future more resources and personnel could be required.

THE THREE-TIERED STAFFING MODEL

The acceptance of a minimum staffing level (at three or four personnel) per fire company represents the first step in the process of developing an overall staffing plan. The next step in the process should deal with how staffing levels will be maintained using various models. Many fire departments opt for a staffing model utilizing only full-time paid firefighters; this is the least complicated model, but also the most expensive. Other fire departments (most of them being smaller in size and scope of responsibility) opt for using only volunteer firefighters. A fairly recent occurrence for staffing has been the advent of using part-time paid firefighters for staffing needs. LFRA utilizes all three types of staffing: reserve, part-time paid, and full-time paid for firefighters within its workforce. This is known as the three-tiered staffing model.

The bulk of LFRA's staffing (nearly 70 percent) is made up of full-time paid firefighters. At the time the 2012 strategic plan was written, the approximate numbers for total staffing included the following:

| | |
|--------------------------|-----------|
| • Full-time paid | 65 |
| • Part-time paid | 12 |
| • <u>Reserve</u> | <u>20</u> |
| Total Staffing Available | 97 |

Part-time paid firefighters came into LFRA's workforce in 2010 as part of a Staffing for Adequate Fire and Emergency Response (SAFER) grant to improve staffing levels; the grant was for three years (2010-2013). The 12 part-time firefighters are all assigned to two specific engine companies (Engine 3 and Engine 5) and make up the third firefighter on those two engines. The part-time firefighters, just like the full-time paid firefighters, are a part of the minimum staffing levels for each shift and each fire company. Reserves are assigned to various fire companies as they are available. Reserves work a minimum of 36 hours each month and are not included as part of the daily minimal staffing levels for each shift and each fire company. The total numbers for the reserves firefighters fluctuate between 18 to 25 annually, and on average reserves only stay with the Department 2.5 years.

Within the Model One Basic Services Expansion Plan, all three tiers of the workforce are utilized throughout the years targeted in the strategic plan (2012-2020). A future workforce analysis is included within the plan and is addressed later at the close of this section. Within future staffing projections for Model One, both full-time paid and part-time paid firefighter staffing numbers are increased; the reserve firefighter program and its staffing levels remain unchanged throughout the years of the plan. The staffing numbers currently used for the reserve program are believed to be the maximum that can be effectively managed within the LFRA system and infrastructure.

ADVANTAGES OF THE THREE-TIERED STAFFING MODEL

There are numerous advantages of the three-tiered staffing model; four will be reviewed in this section. This particular system of staffing is cost-effective, provides for greater firefighter availability (particularly for multiple alarms and special calls), offers greater efficiency and effectiveness for hiring full-time paid firefighters, and provides effective developmental experiences for helping reserves and part-time paid firefighters achieve their goals for becoming full-time paid firefighters. Each of these areas will be elaborated on in the following paragraphs.

| Comparison of Costs Part-Time versus Full-time Firefighters | Single FT Position | 5 Full-Time Positions | Single PT Position | 12 Part -Time Positions |
|---|---------------------------|------------------------------|---------------------------|--------------------------------|
| Pay Level 7 - highest firefighter salary in 2010 (full-time) | \$ 48,000 | \$ 240,000 | \$ 10,159 | \$ 121,910 |
| Estimate of benefits as a percentage of salary (primarily insurance and retirement) (.030)/(.11) | \$ 14,400 | \$ 72,600 | \$ 1,267 | \$ 15,207 |
| Total cost of firefighter(s)- pay and benefits | \$ 62,400 | \$ 312,000 | \$ 11,426 | \$ 137,117 |
| Bunker gear and personal equipment for firefighter(s) | \$ 4,000 | \$ 20,000 | \$ 4,000 | \$ 48,000 |
| TOTAL COSTS - Gear and Personnel | \$ 66,400 | \$ 332,000 | \$ 15,426 | \$ 185,117 |

Figure 5-2. Full-time paid/ part-time paid comparisons

The three-tiered staffing model is extremely cost effective when compared to a conventional staffing system that uses only full-time paid firefighters. The most significant factor causal to this outcome is the pay and benefits differential. The hourly rate for part-time paid firefighters is significantly lower than for full-time paid firefighters; the costs associated with benefits are reduced as well. Figure 5-2 illustrates the cost savings and cost effectiveness of using part-time paid firefighters as opposed to opting for all full-time paid firefighters. This chart compares the costs for the current 12 part-time paid firefighters being used for minimum staffing levels by LFRA on Engine 3 and Engine 5 to a comparable level of full-time paid firefighters working the same number of hours.

The numbers listed in the chart are based on the average of 102 monthly hours of time the part-time paid firefighters are currently working (these are actual tracked numbers and not the same as those projected from our original SAFER grant; those numbers projected the 12 part-time firefighters would equal four full-time firefighters and were based on a work schedule of 72 hours per month for the part timers). The current average for hours worked each month for full-

time paid firefighters is calculated at 240 hours (10 shifts per month @ 24 hours). Using these metrics LFRA is saving approximately \$150,000 annually using the part-time paid firefighters for minimum staffing on Engine 3 and Engine 5. Another factor in the cost-effectiveness modeling is demonstrated when multiple alarms or a shift recall occurs; the overtime costs for part-time firefighters is significantly less than the overtime for full-time firefighters. When considering overtime costs for full-time firefighters, the increase in the cost-effectiveness of the Figure 5-2 model goes up by 1 ½ - 2 times the savings that is shown.

Greater firefighter availability is another advantage of this staffing model. An obvious advantage of the increased number of firefighters available for response can be seen using the above model of part-time paid and full-time paid firefighters. When a multiple alarm or shift recall is needed (currently this occurs approximately 30 times each year, or better than two times each month) 10 off duty part-time firefighters would be available to respond to the recall (two would be on duty at any given time on Engine 3 and Engine 5). Contrast this to the full-time option with two firefighters on duty at these same two engines and you would potentially have three off-duty full-time paid firefighters to respond to the recall. Thus, more than three times the staffing is potentially available to respond to the recall or multi-alarm call with part-time firefighters as opposed to the numbers available with only using a full-time staffing option.

Effectiveness and efficiency in hiring full-time firefighters is an additional advantage of the three-tiered staffing model. Traditionally, the hiring of full-time firefighters has been a mixture of both art and science; the organizations that do this effectively balance both in their hiring processes. Nevertheless, even in the best hiring process, positive outcomes are never guaranteed. LFRA's three-tiered staffing model is unique and advantageous in that the process is based on two additional tiers or levels of participation, where the organization gets the opportunity to observe and evaluate its future full-time firefighters actually working in the role as reserves and/or part-time paid firefighters before they are ever offered a position as a full-time firefighter. This system allows both the firefighter and the organization the opportunity to work together and in effect "try each other out" before the long-term commitment is made in the form of a full-time position. With very stringent and specific employment laws in place, employers need to be as sure as possible that the hiring of a full-time firefighter is a good fit for the organization. Hiring from the list of reserves and part-time paid firefighters is the most effective and efficient way to ensure that quality candidates are selected to the ranks of full-time firefighters for LFRA.

LFRA's three-tiered staffing model is also developmental and a real advantage for firefighters entering the profession. One of the most significant changes in the reserve firefighter workforce in the last 20 years has been the profile of the typical reserve. Twenty years ago it was not uncommon to have a large portion of the reserve workforce serving from a motivation of community service only, with no real interest or intention of seeking a full-time firefighter position. Today, nearly every reserve that enters the workforce for LFRA hopes to eventually be employed as a full-time paid firefighter. In the past reserves would stay with the organization and receive a pension after 10 or 20 years. Today, most reserves are staying less than five years, and their interest is in building a stronger résumé and gaining more training and certifications to enhance their chances at employment. LFRA's three-tiered staffing model is designed to assist the reserves and part-time paid firefighters by providing greater training opportunities while completing task books that address not only certifications but also qualifications of the individual firefighter. Currently, there is real competition for positions within LFRA for both reserves and part-time paid firefighters. It is understood by most firefighters that being a member of the LFRA

workforce carries a high degree of respect throughout the firefighting community in Colorado and offers an advantage for those seeking full-time employment as a firefighter.

Organizationally, LFRA benefits from the program's reputation, as some of the best and brightest are working hard to become LFRA reserves. The three-tiered workforce is a benefit to LFRA as the base-level reserve comes in as a highly competent candidate, which will typically result in the best of the volunteers being selected for part-time positions. Then the next step would be the selection of the best part-time paid firefighters for full-time positions as they are available. If the model works as intended, the participants in the workforce gain from the program, and LFRA and the community benefit from the program as well. In other words, the three-tiered staffing model is a "win-win" for all involved.

ANCILLARY NEEDS FOR THE THREE-TIERED STAFFING MODEL

Although the three-tiered staffing model is one of the best for small to medium-sized fire departments, with significant advantages for both the organization and the firefighters, there are ancillary requirements for implementing and successfully managing this type of system. One of the most important ancillary needs of this model comes in the form of a solid recruiting plan. In order for the three-tiered staffing model to work most effectively, excellent recruiting for reserves is essential. Another important element for this model to work is to adequately care for the logistical needs of the reserves that are brought into the organization. The most successful departments that opt for this kind of a three-tiered model for staffing utilize a Recruitment, Retention, and Logistics (RRL) Officer. Within LFRA, staffing levels remain low within the Operations Division and Administration. Currently, there are no extra positions available to adequately perform the essential functions of recruiting and providing logistics support for LFRA's volunteers.

Presently, this system is working, and certainly has worked for two years (2010-2011), but longevity for reserves is a concern, along with adequately recruiting and appointing qualified members of protected classes. It is believed that the hiring of an RRL Officer is essential for LFRA if this three-tiered staffing model is to be effective for the duration of the years covered by this strategic plan. LFRA has applied for a SAFER Grant for this RRL Officer position and hopes to be successful in the grant application process. If this award is not forthcoming, the organization will have to pursue other means to carry out effective recruiting and retention efforts and logistical support methods for the reserves within the organization. Another need for the three-tiered staffing model will be an on-going analysis of the model to ensure that the organization's workforce needs are being met.

CONCERNS FOR THE LONG-TERM USE OF THREE-TIERED STAFFING MODEL

Much has been stated about the positive aspects of the three-tiered staffing model for LFRA; however, concerns do exist. Based on historical data and information relative to how much reserves and part-time paid firefighters can be used effectively within a workforce staffing model, there are limits for the use of part-time firefighters. For example, the fire service has a built-in need for its members in strategic, tactical, and task level positions to have Knowledge, Skills, and Abilities (KSAs) for firefighting operations. A significant portion of these KSAs can only come with experience. Typically, reserves and part-time paid firefighters are the least experienced of the crew members. Thus a real concern for this type of staffing program is in the experience level of the firefighters on duty. Because of this, LFRA has a targeted staffing criteria

maximum of no more than 15% of the daily workforce, or no more than three on-duty fire crews, utilizing part-time paid firefighters to achieve minimum staffing levels. It is believed that this targeted maximum level of use for part-time paid firefighters will ensure that on-duty paid firefighters have the needed experience level and capabilities for combat firefighting operations.

Perhaps the most significant concern about this model is its ability to be adaptable and effective in the distant future (next 10 years or more) for LFRA. The Loveland community and LFRA will grow in the future. As more people come into the area, more fire service personnel will be needed to accommodate the demands for more emergency calls. The organization should commit to regularly (annually) evaluate the three-tiered workforce-staffing model to ensure it remains effective. A comprehensive workforce analysis should also be completed during the next three to five years of the 2012 Strategic Plan. This analysis should forecast, based on research and predictions, what the best and most needed workforce will be for LFRA in the future.

The nation's and the region's economies will have an impact on LFRA's ability to continue using the three-tiered model, particularly the ability to attract and retain qualified reserves. Future strategic planning considerations and the potential for additional funding mechanisms will need to be addressed if there is a move away from the current three-tiered staffing model. Identifying potential funding streams should be a part of the analysis if there is a recommendation to move away from the current staffing model.

PLANNING ASSUMPTIONS

Staffing and Deployment Planning Assumption 1 - Fire companies (those working on engine and truck companies) for LFRA are to be staffed at three personnel minimum with a target for deployment for structure fires at 14 firefighting personnel, meeting the intent of NFPA 1710.

Staffing and Deployment Planning Assumption 2 - The three-tiered staffing model, made up of reserves, part-time paid, and full-time paid firefighters, is the workforce staffing model that will be used by LFRA throughout the years of operation of this strategic plan (2012-2020).

Staffing and Deployment Planning Assumption 3 - Numerous organizational advantages exist with the utilization of the three-tiered staffing model, including significant annual cost savings for LFRA.

Staffing and Deployment Planning Assumption 4 - A need exists for a full-time Recruitment, Retention and Logistics Officer if the three-tiered staffing model is to operate at a level of efficiency and dependability.

Staffing and Deployment Planning Assumption 5 - The three-tiered staffing model has two major concerns that can impact its future use: overuse of the part-time paid firefighters and their lack of overall firefighting experience. The feasibility for using the three-tiered staffing model in the future must be considered for future planning.

Staffing and Deployment Planning Assumption 6 - Periodic, ongoing evaluations for the efficiency and effectiveness of the three-tiered staffing model are needed. In addition, there is a need for a future, more comprehensive, workforce-staffing analysis to determine the best and most effective future-staffing model for LFRA.

Staffing and Deployment Planning Assumption 7 - All future staffing levels within every division of LFRA are based on normal forecasted expansion of population and businesses or industrial complexes within the Fire Authority's response area.

VI. MODEL ONE BASIC SERVICES EXPANSION PLAN

During the years of 2010-2011, the Fire Authority Review Committee was charged with the task of determining what it would take to be able to implement and manage a fire authority. A significant amount of time was spent evaluating the Department's resources and its ability to provide adequate staffing and equipment for the variety of emergency response calls in the City and Rural District. Three clear objectives were established for addressing the Department's current and future needs:

1. Establish an adequate initial response for staff and equipment.
2. Provide for reliability in the emergency response system beyond the 1st alarm assignment, using Department's resources and not being reliant on mutual aid response for system coverage.
3. Plan for expansion in the emergency response system to address future gaps in coverage.

Several other criteria were evaluated, including the appropriate minimum staffing model that would be utilized. The committee spent months in the evaluation of the Department's resources and compared those resources to the community risk. Other departments were also evaluated for their level of services provided and their community risk.

Other criteria that entered into the analysis included the Department's evaluation by the Insurance Services Office (ISO) in 2008. During this evaluation, the ISO noted that the Department was short on overall personnel and two fire companies, citing the need for a service or support/truck company and another engine company in the district.

At the conclusion of the analysis, two models were developed. The first model had at its core an expansion of services to include three-person fire companies as the minimum staffing model. The second model utilized a four-person crew for its minimum staffing model. In addition to the staffing component, other expansions such as the service (support) company and an additional engine company were included in both models.

Both of these models were presented to the Loveland City Council and Rural Board in the early portion of 2011. Both governing bodies chose to endorse, in concept, Model One Basic Services Plan as the model of choice for the strategic plan for the Fire Authority. The components of that model are included in the following pages.

In the early part of 2012, the Model One Basic Services Expansion Plan was presented to the new Loveland Fire Rescue Authority Board. The plan has been broken out into four phases of expansion with the years targeted for expansion and the total estimated costs listed at 2013 dollars. A partial phased-in plan is displayed in Figure 6-1 and the fully detailed phased plan is shown in Figure 6-2.

Funding sources for the Model One Basic Services Plan for Phase 1 and Phase 2 have been identified. Full funding for Phase 3 and Phase 4 has not been identified at the time of this writing.

PHASED-IN PLAN FOR MODEL ONE - BASIC SERVICES PLAN (2012-2020)

The Model One Basic Services Expansion Plan consists of four phases. The first three phases include a major construction project, a major hiring project, and other significant large capital projects. The fourth phase, by design, is the smallest expansion phase. This fourth phase will allow for any unanticipated capital or operational and maintenance (O & M) growth, or options for implementation in the event of unforeseen economic downturns that delay the expansion plan's timelines. The fourth phase by design provides for some flexibility within the plan for expansion.

Each phase will be highlighted below for its major emphasis in three categories: hiring, construction projects, and apparatus expansion. The next pages will provide a more defined expansion per phase, including cost estimates that are gleaned from best assessments possible.

The remaining pages in this section provide individual details for Model One expansion including staffing and costs for implementation, large capital replacement options, secondary apparatus replacement schedule and costs, updated Fire Rescue City of Loveland capital replacement plan, and improvement and construction costs for fire stations.

The table below shows the abbreviated summary of the phased-in plan for Model One.

| NEW PHASE | TIME | HIRING FOCUS | CONSTRUCTION | APPARATUS |
|--------------|------------------|--|-----------------------------------|------------|
| One | 2012-2013 | Public Safety Admin. Director Minimum Staffing: Engine 6 & Truck 6 Part-Time Paid Program Community Safety Staff | Expansion of Station 6 | New engine |
| Two | 2014-2015 | Staffing for New Rescue 3 Lieutenants & 3 Engineers | Construction of new Station 2 | New aerial |
| Three | 2016-2017 | Staffing for Station 10 Admin/Secretary Position | Construction of new Station 10 | New engine |
| Four | 2018-2020 | Coverage positions/ rovers | None | New engine |

Figure 6-1. Abbreviated phased-in plan

Model One Basic Services Expansion Plan

| | COST | 2012/ 13 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|--|---------------------|-------------|------|------|------|------|------|------|
| PHASE 1 2012-2013 | | | | | | | | |
| Add 6 FT firefighters for Engine 6 & Truck 6 | \$ 426,777* | | | | | | | |
| Add funding for part-time paid F/F program | \$ 70,420* | | | | | | | |
| Add Public Safety Administrative Director position | \$ 130,000* | | | | | | | |
| Add 1 Lieutenant position to CSD | \$ 106,140* | | | | | | | |
| TOTAL Increase for O&M for Phase 1 | \$ 733,337 | | | | | | | |
| Expand Station 6 | \$ 930,000 | | | | | | | |
| Purchase new fire engine | \$ 483,000 | | | | | | | |
| TOTAL Capital \$ for Phase 1 | \$1,413,000 | | | | | | | |
| PHASE 2 2014-2015 | | | | | | | | |
| Add 6 FT positions for new Heavy Rescue Squad 2 (3 Lieutenants and 3 Engineers) | \$ 694,389* | | | | | | | |
| TOTAL Increase for O&M for Phase 2 | \$ 694,389 | | | | | | | |
| Construct new Station 2 | \$2,900,000** | | | | | | | |
| Purchase new Heavy Rescue Squad | \$ 500,000 | | | | | | | |
| Replace Aerial Tower | \$1,200,000 | | | | | | | |
| Refurbish 2000 Smeal Aerial Ladder for Reserve Truck | \$ 475,000 | | | | | | | |
| TOTAL Capital \$ for Phase 2 | \$5,075,000 | | | | | | | |
| PHASE 3 2016-2017 | | | | | | | | |
| Add 9 FT position for new Station 10 (3 Lt., 3 Eng., 3 FF) | \$ 980,434* | | | | | | | |
| Add 1 Administrative (secretarial) position | \$ 54,450* | | | | | | | |
| TOTAL Increase for O&M for Phase 3 | \$ 1,034,884 | | | | | | | |
| Build new Station 10 | \$2,299,000** | | | | | | | |
| Replace fire engine | \$ 530,000 | | | | | | | |
| Refurbish Water Tender 1 | \$ 237,000 | | | | | | | |
| TOTAL Capital \$ for Phase 1 | \$ 3,066,000 | | | | | | | |
| PHASE 4 2018-2020 | | | | | | | | |
| Add 3 FT firefighters for coverage/rover positions | \$ 262,308* | | | | | | | |
| TOTAL Increase for O&M for Phase 4 | \$ 262,308 | | | | | | | |
| Refurbish Water Tender 5 | \$ 357,000 | | | | | | | |
| Replace Front Line engine (2020) | \$ 597,388 | | | | | | | |
| TOTAL Capital \$ for Phase 4 | \$ 954,388 | | | | | | | |

*All O & M costs include a 3.5% annual inflationary increase ** These estimates were provided by City of Loveland Facilities in early 2011; they will need to be re-evaluated in the coming years based on the construction trends and costs per square foot.

High Priority
 Intermediate Priority
 Future Priority

MODEL ONE - BASIC SERVICES PLAN (2012-2020)

This Basic Service Plan offers a minimum staffing of each fire company with three firefighters and uses the current three-tiered workforce of reserves, part-time paid (PTP) and full-time (FT) firefighters. The total build out of this plan would result in the targeted numbers of .95 ffs/1000.

| ADDITIONS/CHANGES TO BUILD THE PLAN: | YEAR |
|---|-------------|
| <ul style="list-style-type: none"> • Add 6 FT firefighters for Engine 6 and Truck 6 to provide for minimum staffing of three firefighters per engine or truck. | 2013 |
| <ul style="list-style-type: none"> • Add Public Safety Administrative Director - needed to address the department's administrative needs to manage and administrate the Fire Authority. * | 2013 |
| <ul style="list-style-type: none"> • Continue funding for PTP program expanding to include 18 total PTP FFs. The part-time-paid program is part of the minimum-staffing plan. | 2013 |
| <ul style="list-style-type: none"> • Add 1 Lieutenant (Lt) for Fire Prevention Community Safety Division - needed to address the current deficiencies in the business inspection program (down 65% since budget reductions in 2009). | 2013 |
| <ul style="list-style-type: none"> • Add 6 FT positions (Lts & Engineers) for Heavy Rescue company, Station 2. This Squad company helps meet minimum staffing levels and the recommendations from ISO (Insurance Services Office). | 2014 |
| <ul style="list-style-type: none"> • Add 9 FT positions (LTs/Engineers./FF) for new Station 10 - required staffing to open the new west side station, which is important for minimum staffing levels and district/area coverage for the 5-minute response. | 2016 |
| <ul style="list-style-type: none"> • Add 1 Administrative Assistant - needed to help address the increase in workload at the admin/secretarial level (currently the department has only two administrative specialist positions). | 2016 |
| <ul style="list-style-type: none"> • Add 3 FT positions for rover/coverage. These positions are needed to cover vacancies due to injury, sick leave, vacation, etc. | 2019 |

* This position is on line in 2012; however, it is budgeted for LFRA as an expenditure starting in 2013.

LARGE CAPITAL REPLACEMENT OPTIONS

Fire Authority Large Capital Replacement Plan – 2010-2025

■ Apparatus Remaining from Current 2010 Capital Program

- 2010 SVI Engine Replaces 1995 General Telesqurt
- 2012 New Engine Replaces 1998 General ALF
- 2014 New Aerial Replaces 2000 Smeal HME
- 2016 New Engine Replaces 2004 General Spartan

■ Primary Apparatus Replacement Schedule 2016-2025

| Vehicle name | Primary Vehicle | Year In Service | Replace (12*) | New/Old Plan | Reserve/Retire (3**) |
|---------------|-----------------------|-----------------|---------------|--------------|----------------------|
| E-1 | SVI/Spartan | 2011 | 2023 | New | 2026 |
| E-2 | Crimson/Spartan | 2008 | 2020 | New | 2023 |
| E-3 | Crimson/International | 2009 | 2021 | New | 2024 |
| E-5 | Pierce | 2010 | 2022 | New | 2025 |
| E-6 | General/Spartan | 2004 | 2016 | Old | 2019 |
| Truck 6 | Smeal/HME | 2000 | 2014 | Old | 2020 (refurb?) |
| Rescue 6 | SVI/Spartan | 2003 | --- | New | 2024 (refurb?) |
| E-Reserve | Smeal/Spartan | 2003 | 2015 | --- | 2020 |
| E-Reserve | General/ALF | 1998 | 2010 | --- | 2016 |
| Truck Reserve | General/Telesqurt | 1995 | 2010 | --- | 2014 |

■ Replacement Plan and Costs for New Primary Apparatus

| | | | | |
|----|------|----------|-----------------------|--------------------------|
| 1. | 2020 | Engine 2 | Crimson/Spartan | \$ 597,388 |
| 2. | 2021 | Engine 3 | Crimson/International | \$ 618,297 |
| 3. | 2022 | Engine 5 | Pierce | \$ 639,937 |
| 4. | 2023 | Engine 1 | SVI/Spartan | \$ 662,335 |
| 5. | 2024 | Rescue 6 | SVI/Spartan | \$ 390,000 (Refurbished) |

TOTAL COSTS - PRIMARY APPARATUS REPLACEMENT \$2,907,957

*12 = target for years of active service

**3 = anticipated years of service as a reserve unit

■ **Secondary Apparatus Replacement Schedule 2016-2025**

| Vehicle Name | Secondary Vehicle | Year In Service | Replace (20) | New/Old Plan | Reserve/Retire |
|---------------------|--------------------------|------------------------|---------------------|---------------------|-----------------------|
| WT-1 | General Frontline | 1996 | 2016 | New (RF) | 2026 |
| WT-8 | General Frontline | 1996 | 2017 | New (RF) | 2027 |
| WT-5 | General Frontline 4x4 | 1998 | 2018 | New (RF) | 2028 |
| DT-2 | SVI/ Frontline | 2004 | 2024 | New (RF) | 2034 |
| HR-2 | Hackney | 2006 | 2026 | New (RF) | 2034 |

* Note: All of these secondary apparatus, except DT-2, are planned for a refurbish (RF) with replacement of cab and chassis as opposed to new replacement vehicles.

■ **Refurbishment Plan and Costs for Secondary Apparatus**

| | | | |
|---------|------|-----------------------|------------|
| 1. 2016 | WT-1 | General Frontline | \$ 237,000 |
| 2. 2017 | WT-8 | General Frontline | \$ 245,295 |
| 3. 2018 | WT-5 | General Frontline 4x4 | \$ 357,000 |
| 4. 2024 | DT-2 | SVI-Freightliner | \$ 304,705 |
| 4. 2026 | HR-2 | Hackney | \$ 180,000 |

TOTAL COSTS - SECONDARY APPARATUS REPLACEMENT \$1,324,000

■ **Total Large Capital Replacement Plan**

| | | |
|---|---|---------------------------|
| Available Capital Funds (\$575,000 X 10 years) | 2016-2025 | <u>\$5,750,000</u> |
| Primary Apparatus Costs | 2016-2025 | (\$2,907,957) |
| Secondary Apparatus Costs | 2016-2025 | (\$1,324,000) |
| Miscellaneous Equipment (Air-Paks, Radios TICs) | (The need for this equipment has been estimated at \$150,000/ per year) | (\$1,518,043) |
| TOTAL NEEDED FOR LARGE CAPITAL REPLACEMENT (2016-2025) | | <u>\$5,750,000</u> |

Updated Loveland Fire and Rescue 2012-2021 Capital Programs

FIRE APPARATUS *(Initial Cost Estimates)*

Current Replacement Schedule:

| <u>Year</u> | <u>Replaces</u> | <u>Cost</u> |
|--------------------|--------------------|---------------------------|
| 2012 | ALF/General Engine | \$ 515,000 |
| 2013 | ----- | \$ 0 |
| 2014 | Smeal Ladder Truck | \$1,200,000 |
| 2015 | Engine | \$ 475,000 |
| 2016 | 2 Engines | \$1,060,000 |
| TOTAL EXPENDITURES | | <u>\$3,250,000</u> |

Proposed Replacement Schedule*:

| <u>Year</u> | <u>Replaces</u> | <u>Cost</u> |
|--------------------|--|----------------------------|
| 2012 | ALF/ General Engine | \$ 515,000 |
| 2013 | ----- | \$ 0 |
| 2014 | Smeal Ladder Truck | \$ 1,200,000 |
| 2015 | 1995 General Telesqurt (Refurbishing Smeal Ladder Truck) | \$ 475,000 |
| 2016 | Smeal Engine | \$ 530,000 |
| TOTAL EXPENDITURES | | <u>\$ 2,720,000</u> |

New Fire Apparatus: *(Funded with CEFs)*

| <u>Year</u> | <u>Purchase</u> | <u>Cost</u> |
|-------------|--|-------------|
| 2014 | Northwest Heavy Rescue Truck (For new company @ Station 2) | \$ 500,000 |

* Note: The current plan for the Fire Authority targets 2016 as the last year for Fire-Rescue to be involved in the City's capital replacement plan. From 2017 and beyond, a factor of \$575,000 annually is needed for large capital replacement. Of that amount 82% would be the City's responsibility, which equals \$471,500 annually for large capital.

IMPROVEMENT COSTS FOR FIRE STATIONS – (INITIAL COST ESTIMATES*)

CONSTRUCTION COSTS FOR LFRA BUILDING PROJECTS

The following are costs estimates for three building projects associated with the expansion planned for Loveland Fire and Rescue for Model One - the Basic Services Plan.

CONSTRUCTION OF NEW FIRE STATION 2

| | | |
|--|--|---------------------|
| • General conditions | | \$ 230,000 |
| • Site costs | | \$ 400,000 |
| • Building costs (11,885 sq. ft X \$191 per sq. ft.) | | <u>\$2,270,000</u> |
| TOTAL COSTS - Station 2 | | \$2,900,000* |

ADDITIONS TO STATION 6

| | | |
|---|-------------------------|--------------------|
| • General conditions | | \$ 269,150 |
| • Site costs | | \$ 135,000 |
| • Additions: | | |
| - New community room | 500 sq. feet | |
| - New sleeping quarters | 1,200 sq. feet | |
| - Bathrooms | 250 sq. feet | |
| - Office | 200 sq. feet | |
| - Storage | 200 sq. feet | |
| Total Space Added | 2,350 sq feet (X \$191) | \$ 448,850 |
| • Remodel the following: | | |
| - Existing exercise area and community room | 900 sq feet (X \$ \$80) | <u>\$ 72,000</u> |
| TOTAL COSTS - Station 6 | | \$ 925,000* |

NEW STATION 10

| | | |
|---|--|---------------------|
| • General conditions | | \$ 230,000 |
| • Site costs | | \$ 350,000 |
| • Building costs (9,000 sq. feet X \$191 per sq feet) | | <u>\$1,719,000</u> |
| TOTAL COSTS – Station 10 | | \$2,299,000* |

* These estimates were provided by City of Loveland Facilities in late 2010 or early 2011; they will need to be reevaluated in the coming years based on the construction trends and costs per square foot.

VII. SPECIALIZED AREAS

Providing the necessary fire protection and emergency services to the public requires a multi-faceted approach for community fire protection and life safety. Section VII covers several important specialized areas that are integral to the fire department's daily operations and long-term strategy and planning for a fire and rescue-safe community. The order in which these areas are addressed is not intended to imply any rating or level of importance. All of these specialized and miscellaneous services are important to the overall mission of Loveland Fire Rescue Authority (LFRA).

This section focuses on the following six specific specialized areas of operations under the heading of fire protection and emergency services:

- Emergency Medical Services
- Wildland Urban Interface Operations
- Specialized Operations (SOT)
- Training
- Safety
- Community Safety Division

For each specialty area, this section will identify what it is, explain how it operates or is integrated into the department's mission, provide some insight into future needs or concerns, and present some planning assumptions.

EMERGENCY MEDICAL SERVICES - LOVELAND FIRE RESCUE AUTHORITY AND TVEMS

The Emergency Medical Services (EMS) delivery model is normally represented by two different levels of service: Basic Life Support (BLS) and Advanced Life Support (ALS). BLS focuses mostly on delivering the primary services of airway, breathing, and circulation to support life. ALS focuses on the more complex, advanced life support services that include more definitive airway management and intubation, and the administration of life-saving intravenous drugs for pre-hospital care and treatment. Transportation of patients is most often the responsibility of the ALS provider. Two other integral components to a successful EMS system include dispatching for EMS and public medical awareness and training. The emergency medical system in the Loveland Fire Rescue Authority response area is very much like the typical model listed above.

EMS and LFRA

LFRA supports the EMS model by providing basic life support services and working collaboratively with the paramedics of Thompson Valley EMS (TVEMS) during on scene assessment, treatment, and when needed during transportation to a local hospital or health care facility. LFRA's personnel are trained to the level of Emergency Medical Technicians (EMTs) and in the use of Automatic External Defibrillators (AEDs). The current number of EMS-related calls for LFRA is at 47% of the entire call load (in 2011 that was nearly 3000 emergency calls). LFRA normally responds only to EMS calls for life-threatening emergencies, or in field-related terminology, to Charlie, Delta, and Echo medicals. Occasionally, LFRA will respond to non-life-threatening calls such as an unknown coded "Bravo" or when TVEMS responders feel the need for a fire response.

Firefighters for LFRA are required to hold EMT-Basic certification issued by the Colorado Department of Public Health and Environment (CDPHE); LFRA is a recognized continuing education training provider for CDPHE. Certified LFRA EMS trainers provide ongoing training in EMS for required continuing education. Joint or combined EMS training is often provided in collaboration with TVEMS instructors to ensure that all phases of the local EMS model are working in concert with each other and are training to the same protocols.

LFRA strategically envisions remaining a BLS provider in the future and providing a support mechanism for the ALS and transport services being offered through TVEMS. The current operational model and business philosophy of TVEMS and its leadership is conducive to providing a quality, high level of citizen service for EMS. Periodic performance reviews of the service levels should occur regularly and be a part of this strategic planning process. Regular, ongoing meetings with TVEMS executive staff should also be conducted to ensure that both agencies are operating with a high level of performance and within the parameters of their individual portion of the shared EMS service level mission.

EMS and Thompson Valley Emergency Medical Services

Formed in 1983, the Thompson Valley Ambulance Service became Thompson Valley Emergency Medical Services (TVEMS) in 1998 under a new Health Services District agreement. Today TVEMS responds to nearly 10,000 calls per year with its fleet of 10 ambulances, 5 stations, and 55 employees. TVEMS incorporates the most advanced treatment protocols with the latest technology, modern ambulances, computer aided dispatching, medical pre-arrival instructions, and GPS mapping to provide quality services to its citizens and clients. TVEMS provides advanced life support and ambulance transport services to the 450 square miles of the Thompson Valley Health Services District including the cities of Loveland and Berthoud, with portions of Johnstown and Windsor-Severance Fire Protection District included in the service area. TVEMS serves an estimated population of over 100,000.

The mission of TVEMS is to "promote and facilitate the responsible provision of medical services within the Thompson Valley Health Services District." The organization's Vision Statement states, "The vision of Thompson Valley EMS is to provide humane, quality care to the citizens of the Thompson Valley Health Services District. We will commit ourselves to make each patient feel, no matter the intensity of the event, they are worth our time, education, and compassion. This commitment to treat our community with dignity and respect will extend to our co-workers. Our compassion to help each other within the organization is a direct reflection of how well we will care for those we are called to in their time of need. We will strive to always be on the leading edge of medicine and education while working to contain costs and maintain continuity within Thompson Valley EMS."

Successfully managing and operating an emergency medical system with two or more different agencies requires cooperation and collaboration in field operations; it also requires a compatible organizational and business philosophy. The model used by LFRA and TVEMS meets and exceeds these necessary essentials. The focus of both organizations is on providing the highest quality patient care and citizen service possible with an emphasis on collaboration in planning, training, and overall field operations.

Emergency Medical Dispatching (EMD)

The Loveland Emergency Communications Center (LECC) is the Public Safety Answering Point (PSAP) for 9-1-1, covering over 260 square miles of southern Larimer County. LECC Communications Specialists answer both emergency and non-emergency calls. The Center is dispatching for Loveland Police Department, Berthoud Police Department after hours, Loveland Fire Rescue Authority, Loveland Rural Fire Protection District, Big Thompson Canyon Fire, Thompson Valley EMS, and the Berthoud Fire Protection District.

In 2007 the Loveland Emergency Communications Center became one of 82 dispatch centers in the world to become accredited in Emergency Medical Dispatching (EMD). Communications specialists use specialized medical software to triage patients over the phone and send the appropriate medical personnel. An average of 110 calls are listened to and evaluated each month to ensure that our EMDs maintain high standards.

EMD consists of three parts. The first involves triaging the in-coming request for medical service to determine the level of response such as no response, non-emergency transport, or emergency transport. This feature depends heavily on the area's emergency medical facilities and the availability of alternate, non-emergency transport methods and treatment facilities. Many jurisdictions do not utilize EMD, but it is an important and proven component in reducing abuse or overcrowding of the local emergency medical system, reducing incidents (which helps conserve available resources for the fire department, ambulance provider, emergency rooms, etc.), and helping to reduce accidents.

The second part of EMD consists of providing pre-arrival instructions to the callers, so they can immediately help the victim. The level of telephone assistance can vary from just simple advice (call your doctor) to complete instructions for CPR. This is the most visible component of EMD, and for victims, perhaps the most valuable feature: saving lives. Pre-arrival instructions are most commonly provided on computer screens, arranged so the dispatcher can question the caller and based on the answers, quickly go the screen that contains the correct advice or instructions.

The third and most critical feature of EMD is quality assurance. Each EMD program must originate with the complete involvement and cooperation of local emergency medical officials. Each aspect of the selected EMD protocol must be reviewed, revised as needed, and approved by the local or regional EMS agency. This ensures that the information and procedures being given by the dispatchers are correct and appropriate for local conditions. In addition, there must be an on-going review of the use of the EMD protocols by the dispatchers to ensure they're following them correctly and that the protocols are having a positive impact on the victims. This review could involve the random selection of several incidents each month for analysis, grading, providing feedback to the dispatcher, and revising the protocols if necessary.

The EMD component of the EMS system operated by LECC is an integral part of the overall quality citizen service model for pre-hospital care offered in the LFRA and TVEMS districts. This third component of the system ensures a proper response from the emergency pre-hospital care providers and begins the assessment, triage, and treatment phase of the EMS with citizen assistance. The fourth component of the system is public medical awareness and training.

Public Medical Awareness and Training

The knowledge of the general public of symptoms of serious illness and of the proper method to access the EMS system has been shown in community studies to have a positive effect on the overall survival rate of patients in medical emergencies. Citizens trained in CPR are another important factor in patient survival. Approximately 92% of sudden cardiac arrest victims die before reaching a hospital facility. However, statistical data has suggested that if more citizens knew CPR, more lives could be saved. According to the American Heart Association, immediate CPR can double or even triple a cardiac arrest victim's chance of survival.

Quality EMS education is the first step to improving the standard of care. TVEMS offers a wide range of courses, both certification and refresher courses, for pre-hospital emergency health care providers (EMT-basic through paramedic), firefighters, law enforcement personnel, health care providers, and the general public. Citizen training in CPR is an important component of the programs offered by TVEMS; the continuance of this training will positively impact the region's standard of care.

Enhancing the public's knowledge about the proper way to access the EMS system is important to pre-hospital emergency care. A well-informed public can assist the emergency dispatch center in striving to initiate proper and timely notification of medical emergencies.

Response Times and EMS

Response time performance has been used as an indicator of ambulance service quality for many years. The standards are usually applied to all calls regardless of clinical urgency. However, the rationale for using response time as a performance standard is based in researched evidence on the relationship between time and patient outcome for very specific clinical conditions, predominately out-of-hospital cardiac arrest. Many of these research studies were conducted before the advent of the BLS use of AEDs, when defibrillation was an ALS procedure.

Contemporary studies in the U.S. found overall, rapid response in terms of an eight-minute target for ALS makes no discernible difference to survival of patients in cardiac arrest. Nevertheless, there are presumed benefits for the survival of many out-of-hospital cardiac arrest patients. Reducing levels of anxiety, pain, and distress in patients and family members is another benefit of rapid response. Thus for a given level of resources and specific call types, response times should be minimized.

LFRA has adopted the intent of the National Fire Protection's directives for EMS response as a target for performance measurements. These essentially stipulate the arrival of a BLS unit (engine or truck company) within five minutes of the time of dispatch 90% of the time within the urban response area (see Section IV.) LFRA uses a 5:59 target for total response time, and TVEMS uses a nine-minute response model for response with an ALS unit.

TVEMS also uses dispatch call prioritization according to the urgency and seriousness of the patient's condition on the assumption that a faster response to life-threatening emergencies could lead to an increase in the number of lives saved. Armed with accurate information, "prioritized" response times have gained acceptance and for the local jurisdiction are defined as follows:

- Category 1 - Life-threatening emergencies of which 90% should be responded to within nine minutes
- Category 2 - Serious conditions, which should be responded to within 15 minutes
- Category 3 - An unspecified but appropriate response for calls with no immediate clinical need

From the LFRA perspective, any life-threatening emergency (Charlie, Delta, or Echo medical call) is essentially handled as a "Category 1" with the abovementioned response criteria in place. The targeted performance standards of the EMS system within the LFRA response district for life-threatening medical emergencies state that a BLS unit will arrive within 5 minutes and 59 seconds from the time of dispatch, and an ALS unit will arrive within nine minutes from the time of dispatch 90% of the time within the urban response area. These performance targets should be monitored and measured annually for comparisons as to the outcomes for service delivery within the noted response areas. Long-range plans (such as those listed in the Model One Basic Services Expansion Plan) are designed to address current areas of deficiencies where these standards are not being met.

Planning Assumptions for the EMS System

Certain planning assumptions are included in this strategic plan; those for the EMS system within LFRA's response district are listed below. The recommendations that emerge from this section of the plan plus these planning assumptions can be found in "Section X - Recommendations."

EMS Planning Assumption 1 - The current model for the EMS system within the LFRA district, which includes BLS services and support functions provided by LFRA and ALS services and transport provided by TVEMS, provides high quality levels of citizen service and a high level of EMS patient care.

EMS Planning Assumption 2 - The response model that is currently in place, with the noted targets for performance of a BLS unit on scene within 5 minutes and 59 seconds from the time of dispatch and an ALS transport unit on the scene within nine minutes 90% of the time within the urban response area is appropriate as a target for performance goals.

EMS Planning Assumption 3 - Relevant performance measurements need to be monitored, measured, and reviewed at least annually for adherence to specific standards of performance.

EMS Planning Assumption 4 - A collaborative process between LFRA and TVEMS for strategic and operational planning is necessary for the continuance of high quality EMS in the LFRA district.

EMS Planning Assumption 5 - A commitment for continuous improvement in the EMS system within the LFRA district will include Basic Life Support Services, Advanced Life Support Services, Emergency Medical Dispatching, and Public Medical Awareness and Training including activation of the EMS system and citizen CPR training.

WILDLAND URBAN INTERFACE OPERATIONS

Wildland fires are those that involve natural vegetation, sometimes covering large areas and threatening dwellings, agricultural facilities, livestock, and even humans. The wildland urban interface problem has grown in recent decades as higher levels of the population migrated away from cities or urban areas to more of the rural or wildland setting. A large portion of LFRA's response district incorporates areas that are comprised of grass, brush, and timber. As a consequence of growth and development, people have moved further into the areas that are known as the wildland urban interface (WUI). Although the Larimer County Fire Plan identifies the WUI as being west of Range 69 (or west of County Road 23 for LFRA), it is important to understand that there are also WUI locations within and just outside the city limits of Loveland.

Defining the WUI and the Problem

The National Fire Protection Association (NFPA) defines the "wildland/urban intermix" as "an area where improved property and wildland fuels meet with no clearly defined boundary." Chief William Teie of the California Department of Forestry defines the WUI as an area "Where humans and their development meet or are intermixed with wildland fuels." For LFRA, the primary focus of the WUI is in the foothills, generally west of County Road 23 and the hilly areas of Pine Ridge Reservoir, Bobcat Ridge, and along Reservoir Road. Much of this area is in the Big Thompson Canyon's area of initial response. The area includes steep slopes, high concentrations of brush, and areas of relatively dense forest. In the last ten years, this segment of the fire district has had at least four very serious fires; three escalated in size and magnitude to involve both state and federal resources for management and operations. In recent years, building permits in this WUI zone have been down, but a significant portion of 22,500 residents in the Loveland Rural Fire Protection District live in the WUI area. It is likely that as the economy rebounds from the downturn in the late 2000s, the WUI area will see additional population growth and more structures built. Thus, the WUI problem for LFRA is not likely to decline during the years of this plan.

There are several important factors that impact urban interface wildland fire risk, with the most significant factor involving humans. The greater the number of people, residences, and other buildings in the wildland hazard zone, the greater the potential for fires to occur, resulting in large property loss. Building construction and site features such as combustible roofing, siding, large eaves, long narrow driveways, and trees and vegetation close to the structures have all contributed to structure loss and increased fire spread. Buildings with combustible roofing materials are particularly prone to loss and may contribute to fire spread in higher density developments. The lack of adequate water, narrow and steep roads, long dead end roads, and longer distances from fire stations and firefighting resources all hamper firefighting efforts in this theater. Weather conditions, especially high winds and low humidity that are common to Northern Colorado, greatly exacerbate the fire and life safety problem in this high-risk zone.

Addressing the Problem in the WUI

LFRA's first incident priority is the protection of life (Life Safety) followed by the preservation of property; these are the same in the urban structural theater. LFRA's primary strategy is a rapid attack on the fire when it is still small enough to contain. In cases where fires grow too quickly to control with initial attack resources, or escape initial firefighting efforts, the priority shifts to one of evacuation and protection of significant structures or resources. Large wildland fires of this magnitude are infrequent; however, LFRA has experienced several in the last ten years that have involved multiple structures, hundreds to thousands of acres, and millions of dollars in property loss or containment costs. The Reservoir Road Fire, which occurred in September of 2010, destroyed two homes, several other buildings, and more than 750 acres, with costs totaling over two million dollars for firefighting efforts. Fort Collins, Boulder, and Colorado Springs have experienced even more devastating fires in the WUI zone in the last several years.

Currently, there are few planning and regulatory tools available to guide development in wildland areas with the goal of reducing fire risk in the long term. While new public streets and private roads serving multiple homes must meet current development standards, existing roads and many private driveways are severely deficient. Water supplies are almost completely unavailable or inadequate in many areas. Finally, there are no mechanisms in place to control

combustible fuel loads around and between structures. Although there are guidelines and recommendations for home and property owners to reduce the wildland fire risk, experiences in other jurisdictions have shown that many residents are reluctant to take precautionary measures or comply with the recommendations associated with the Red Zone program currently in use by LFRA. Red Zone is an incident mapping and field survey software program designed specifically for wildland fire use. The problem in the WUI zone is difficult and will require a multi-tiered action plan to reduce risk and ultimately save property and lives.

The LFRA Model: Five Point Approach

In order to adequately address the threat of wildfires in the rural areas and the wildland urban interface, the strategic plan utilizes a five point approach focusing on community risk reduction: education, engineering, enforcement, economic incentives, and emergency response.

1. Education: As the wildfire threat continues to grow, there is more of a need to educate the public about the dangers associated with these types of fires and what measures they can take to reduce the potential impact to their property. In order to realize this goal, it is recommended that a multi-faceted approach be taken by using the Internet, social media, printed material, and community meetings. Cost estimates for this effort are unknown at the time of this writing and no funding stream has been identified.
2. Engineering: This portion will be realized through two methods: fuel mitigation near and around structures and through the use of planned "prescribed fire" on public lands. The fuel mitigation will be carried out by property owners but may be assisted through available state grants. Generally these types of grants require a 50/50 match with the requesting agency. Fuel mitigation may also be addressed through cooperative agreements with Larimer County and the State of Colorado. Cost estimates for this effort and the LFRA portion of a 50/50 grant are unknown at the time of this writing and no funding stream has been identified. In regards to prescribed fire, this is a proven method to reduce the threat of large wildfires on public lands. The City of Loveland owns over 4000 acres of open space, and much of that abuts residential areas. Furthermore, there are several thousand acres of open space in the LFRA jurisdiction that are owned by the federal government, the State of Colorado, Larimer County, and the City of Fort Collins. The very real threat of a wildfire spreading into a residential neighborhood can be greatly reduced through the implementation of a prescribed fire program. This can be conducted in cooperation with the State of Colorado, Larimer County, and The Nature Conservancy. In order to adequately perform a prescribed fire program, it will be necessary to increase the annual overtime budget for the costs of off-duty wildland firefighters. Off-duty firefighters are utilized to maintain shift strength and community service levels for other fire protection needs.
3. Enforcement: It is recommended that the Loveland Fire Rescue Authority, City of Loveland, and the Loveland Rural Fire Protection District adopt the most current edition of the *International wildland-urban interface code*TM. In order to fully utilize and enforce the code, it will be necessary to hire another full time employee (FTE) that would be dedicated for the purpose of WUI code enforcement and fuel mitigation. The estimated cost for this position is \$100,000 per year at full cost budgeting. Grants for this position could be an initial option, but a long-term funding stream would need to be identified in order to continue the service.

4. Economic Incentive: Although the City of Loveland and the Loveland Rural Fire Protection District are not in a position to provide direct economic incentives to the public, this portion of the plan may be realized in reduced insurance rates and a reduced wildfire threat to property. Other options in the future could include some type of incentive program that could be conjoined with a reduction or elimination in the Capital Expansion Fees for new developments.

5. Emergency Response: Eventually, the likelihood is that in spite of the best efforts, the previous four methods will have some failure and a wildfire will break out. This will happen through lightning, downed power lines, unattended campfires, intentionally lit fires, etc. When this occurs it will be necessary to respond in a timely and professional manner with an adequate level of resources, staffing, and equipment to successfully mitigate a wildland fire.

The emergency response approach is without a doubt the most costly and the most impactful of all of these five points. It will be necessary to address emergency response through training and apparatus.

Training: Currently all suppression personnel within LFR are required to maintain the S130/190/L180 Basic Wildland Firefighter certification. Officers are also required to maintain S215, Structure Protection in the Wildland Urban Interface. Beyond that level captains and chief officers must have S290, Intermediate Wildland Fire Behavior. In order to ensure that all officers of LFRA have a high level of proficiency it is recommended that every officer and acting officer obtain S290 and the appropriate classes for the engine boss qualification. It is also necessary for captains and chief officers to obtain qualification at the strike team/task force leader, group/division supervisor, and Incident Commander Type 3 levels. In order to accomplish this, cost increases for wildland firefighting operations will occur. Cost estimates for this effort are unknown at the time of this writing and no funding stream has been identified.

Apparatus: LFRA currently operates with two brush trucks, and the Big Thompson Canyon VFD has one. To adequately meet the operational needs for safe and efficient wildland firefighting, it will be necessary to purchase at least one more brush truck (a Type 6 Engine) and have a Type 3 Engine in the fleet for wildland firefighting and structural protection. Cost estimates for this equipment are unknown at the time of this writing and no funding stream has been identified; these types of apparatus are not a part of the current equipment schedule plan in the City of Loveland or the Loveland Rural Fire Protection District through the year 2020.

Future Changes in the WUI Theater

As with so many of the issues identified within this strategic plan, predicting the future is an uncertain venture; this is particularly true in the wildland urban interface theater. It is unclear what the population, structures, or building increases will be in the LFRA WUI zone in the identified years of this plan (2012-2020). It is also unclear what additional funding will be available to enhance the capabilities, both operationally and in pre-planning and pre-fire mitigation, for the Fire Authority's district. What is also uncertain is the amount of support that will continue to be provided by the federal government and state government for local wildland fire operations. Recent events suggest that federal resources and funding are likely to be reduced and that state and local authorities will probably assume more funding responsibilities.

A recent study published by the National Wildfire Coordinating Group (NWCG) titled *Evolving Incident Management: A Recommendation for the Future* suggests that a shift in responsibility for incident management will likely occur, with the state and local jurisdictions taking on more management responsibility in the form of localized Incident Management Teams. A corresponding outcome of this will also likely be a shift in the responsibility for costs of such incidents. Clearly, this theater of operation is in a state of flux, and change is to be expected. It will require due diligence on the part of LFRA staff members to anticipate, plan for, and adjust operations as necessary to adapt to future changes. One key area of focus should be on developing an even stronger relationship with regional departments and forming even stronger operational partnerships for the future.

Wildland Planning Assumptions

Wildland Planning Assumption 1 - Future trends suggest that the WUI problem is likely to grow to a much higher level during the time of this plan, including more people and more structures within the WUI zone.

Wildland Planning Assumption 2 - The current model of fire protection and mitigation for wildland fire operations will likely not be adequate for the future. More resources and funding will need to be invested to keep up with the anticipated future needs.

Wildland Planning Assumption 3 - Current federal and possibly state resources, upon which we currently depend, will likely be reduced or possibly eliminated in the future.

Wildland Planning Assumption 4 - Development of even stronger operational partnerships and regional cooperative relationships will be needed to offset the loss of federal and state resources in order to maintain an adequate and reliable emergency response. Local Incident Management Teams (IMTs) should be evaluated and developed for future operations in the region of Northern Colorado, including areas within the LFRA response district.

Wildland Planning Assumption 5 - Funding streams for wildland fire apparatus such as Type 3 and Type 6 Engines need to be identified and included in long-term planning for the Fire Authority.

Wildland Planning Assumption 6 - If voluntary programs such as education and engineering in the Five Points approach above are successful, many of the problems listed in this section of the plan could be adequately addressed. Any improvements, trigger points, and tracking of data should be identified and implemented into the long-range future plans.

LOVELAND FIRE RESCUE AUTHORITY SPECIAL OPERATIONS

Special Operations for the purpose of this planning document are defined as those fire-rescue operations such as hazardous materials, specialized and technical rescue, and responses to various community disasters. It has been a long-standing tradition of the fire service to be ready to respond to virtually any emergency call that is not specific to another department or division's responsibility - for example, law enforcement. From this commitment to citizen safety and citizen service, the fire service adopted an approach of specializing its training and responses for a wide variety of emergencies, which calls for a "special operations team."

For LFRA, the Special Operations Team (SOT) was developed in late 2005 by combining long standing teams operated by LFR such as the HazMat and dive teams. The concept of SOT is to have one team cross-trained to handle all special rescue and hazardous materials incidents. The team's mission statement is as follows: *"The Special Operations Team goal is to provide coordinated and efficient specialized rescue services and hazardous materials response to the citizens of Loveland and the Loveland Rural Fire District. Maintaining a high degree of mobility with the ability to deploy a response element as requested throughout the region {sic}."*

SOT is divided into three main operational areas: Dive Rescue, Hazardous Materials Response, and Urban Search and Rescue (USAR). Several sub-rescue areas are derived from these overall categories including swift water and open water rescue, low angle and high angle rescue, trench and confined space rescue, and more.

SOT is made up of 34 LFRA members, two Berthoud Fire Department personnel, and seven Thompson Valley EMS (TVEMS) SOT paramedics. All personnel are trained to the operations level (or higher) in each discipline. Each operational area has several technician level-trained staff. SOT personnel are spread out among all three shifts providing an on-duty response to any SOT incident. Off-duty SOT Members are paged for response as needed. Fire Station 2 houses all of the SOT apparatus and equipment. This station is staffed with a minimum of three SOT personnel at all times.

LFRA SOT has developed professional relationships with several area emergency response agencies, including TVEMS, Berthoud Dive Rescue, Larimer County Search & Rescue, Northern Colorado Bomb Squad, Larimer County Dive Rescue, Colorado State Patrol HazMat Response, Poudre Fire Authority HazMat, Greeley Fire Department's HazMat, and the Longmont Fire Department's HazMat and Technical Rescue Teams.

The number of trained specialized rescuers at a technician or higher level for LFRA in the various SOT disciplines includes the following numbers:

- Collapse rescue 8
- Confined space rescue 4
- Hazardous materials technicians 12
- Large animal rescue 2
- Rope rescue 18
- Swift water 12
- Trench rescue 19

Current and Future SOT Operations

The existing model for specialized operations for SOT is adequate for the current demographics and response demands of the community. Since 2005 LFRA has developed one of the region's most capable and strongest specialized rescue teams. The team has proven its value, capabilities, and proficiency on numerous calls within the LFRA district and region, including the Windsor tornado in 2008. The team concept, as used by LFRA, is a unique approach to dealing with specialized operations and has been emulated by other departments and agencies. However, from a strategic perspective, there are both current and future needs for the LFRA SOT. In addition, there are legitimate concerns about the future availability of federal resources and support for federal rescue teams such as Colorado Task Force I, which is a deployable Urban Search and Rescue Team (USAR) located in Colorado. Many of these future concerns for a continuance of federal and/or state resources and support are driven by economic variables and are similar to the concerns outlined in the wildland urban interface portion of this plan.

The current LFRA SOT has done well with limited funding, but the team has identified future needs that must be addressed in order to be able to maintain an adequate and reliable response to future specialized emergency calls. There are some equipment and capital items that are needed for the team to operate to the desired level of proficiency. Some of those needs include the purchase of a flat bottom boat for water rescue and certain additional rigging and rescue equipment as well. An important part of the future planning is to maintain and in some cases increase the number of trained technicians on the team. The two most significant of these training needs are these: (1) to train six additional rescue divers and swift water swimmers and (2) to train six additional HazMat response technicians.

The team has an annual budget affixed to it for operations and maintenance of current standards and equipment; however, the additional equipment and training for personnel identified above is beyond the annual budget of the team.

Heavy Rescue 2

One of the more significant operational enhancements outlined within this plan is the addition of a northwest heavy rescue squad (or support unit) at the new Fire Station 2 (Heavy Rescue 2). Not only will this additional company enhance the day-to-day fire-rescue operations, it will also enhance specialized operations. Currently, a single engine company (Squad 2) conducts all operations in the northwest part of the LFRA response area. This northwest engine is actually doing dual duty as a regular engine company, and when needed, acts as the second truck company (or support unit) for the overall system. The need for a northwest truck or support company has been discussed earlier in the plan. However, with the advent of this heavy rescue company, a significant portion of the on-duty specialized operations responsibility will be assigned to this company. Operationally, this addition will significantly enhance shift resources for specialized operations by having a designated unit that will carry the needed tools and equipment for SOT operations.

From a strategic perspective, planning will need to be completed for the design of this apparatus and the type and quantity of equipment that it will carry. Also, LFRA must identify what operational changes will need to be made for the interface with the heavy rescue company and the other ladder truck company for support and specialized rescue operations. The purchase of the new heavy rescue truck is attached to Capital Expansion Fees (CEFs), and this money has already been accounted for in the City of Loveland long-range planning. Equipment for the

heavy rescue squad, beyond the normal equipment affixed to the truck, may need to be funded through additional revenue streams.

Regional Specialized Rescue Teams and USAR

One of the needs currently being evaluated for SOT is for a regional specialized rescue team in Northern Colorado. In addition to these discussions, interfacing with the state's USAR Team, Colorado Task Force I, is an important component to a regional response to community disasters. Some work has already been done, and some operational agreements are in place within the region for mutual aid and response, particularly in the area of structure fires, wildland fires, and hazardous materials calls. Much of the regional effort is currently focused around the departments within the Front Range Fire Consortium (FRFC); however, more work in developing cooperative operational agreements for specialized operations should be done. Several of the FRFC departments, including Longmont and PFA, have team members with the state's USAR team. Expansion of the concept of a regional or local specialized operations team or USAR team that can interface with the current FEMA USAR team should be evaluated further for operational effectiveness and feasibility.

SOT Planning Assumptions

Special Operations Planning Assumption 1 - The current model for SOT is adequate for the current call load and community demand for services in this area.

Special Operations Planning Assumption 2 - Future growth in the community and region surrounding LFRA's response area will likely place much more demand on the services of the department's SOT.

Special Operations Planning Assumption 3 - Additional funding will likely be needed to account for additional training and equipment for SOT processes. Alternate funding streams, including grants and other more reliable streams, will need to be investigated to address the needs created by growth and expansion.

Special Operations Planning Assumption 4 - The addition of Heavy Rescue 2 in the northwest portion of the LFRA response area will greatly improve the day-to-day operations for SOT and other specialized operations.

Specialized Operations Planning Assumption 5 - A regional approach to the problem of enhanced services needed for SOT is perhaps the most viable and best option for maintaining and improving overall specialized operations service levels within the LFRA response area. The idea of developing a regional team for specialized operations should be investigated within the time parameters set forth by this plan.

Specialized Operations Planning Assumptions 6 - The linkage to the state's FEMA USAR Team, Colorado Task Force I, is a viable option and enhancement to the local and regional team approach for special operations. Work should be done within the timeframe of this plan to investigate and incorporate the best linkage to this resource. State USAR Team membership may be an option, but at the least, a seamless process for request for service, dispatch, response, and deployment should be developed for the local and/or regional specialized operations team.

LOVELAND FIRE RESCUE AUTHORITY AND TRAINING

One of the most important missions of LFRA is the effective training of its personnel to meet the challenges of emergency response, fire protection, and prevention services. The department has had a long history and commitment to training. Back in 1979 the Loveland Fire Department and the volunteer firefighters of that era began building the Department's training facility, located south and east of 1st Street and Railroad Avenue. This facility has now become one of the most versatile and state-of-the-art training centers in all of Northern Colorado. The physical aspects of nearly every fire/rescue-related training function can be carried out at this facility. There is a major emphasis on the use of props and replication to achieve the highest level of virtual reality training and reality-based training. However, LFRA training and the Department's training program are much more than just facilities, buildings, and props; training for LFRA is a core value.

Loveland's fire department has long been known for its commitment to training. The minimum hours required for certification and continuing education are routinely met by every LFRA fire company and individual firefighter. In addition, the Department does more live fire burns and training evolutions than any other department in the region. Today, LFRA continues to be committed to training and is building on the great foundation laid by the Department's firefighters from the past. The training division for LFRA is committed to continuous improvement and maintenance of the core values around a strong program.

The Training Model and Staff

The current training model and staffing supports a managed plan for both centralized (training division-sponsored) and decentralized (company-managed) training. The training staff consists of one Training Battalion Chief (BC) and three shift Training Captains; a reserve firefighter also assists with basic training functions on an ad-hoc basis. The Training BC is a full-time, 40-hour position that is devoted primarily to the training division. The three shift Captains are assigned to Ladder Truck 6 and have an array of duties and responsibilities in addition to functioning as the shift Training Officer. Training functions within the Community Safety Division are carried out within the division or via outside training classes and courses.

Regional Training Cooperative

The LFRA Training Division devotes a portion of its time to regional training in a mutually cooperative and mutually beneficial agreement. This includes academies and other ad-hoc training through the Front Range Fire Consortium (FRFC), of which Loveland has held membership for over a decade; Aims Community College and its Fire Science/ Fire Academy programs; and other regional departments. The cooperative nature of the agreements has been advantageous for LFRA over the years. The Department receives many tangible and intangible benefits from the cooperative regional relationships and agreements crafted through the training division. In recent years LFRA has taken on more of a leadership role in Northern Colorado's firefighting community; the training efforts have been one of the key reasons why. Relationships forged through training with regional departments have had a real and positive impact on LFRA through the many mutual aid and automatic aid agreements that the Department holds and with which it operates.

The Current and Future Needs for Training

The existing operational training model for LFRA is working with the Department's current call load and staffing levels. However, as the Department sees increases in call volume and the number of personnel, the demands on the training division will likely exceed the division's ability to meet those demands. Regional training responsibilities, while valuable to LFRA and its overall operations, add to the workload and demands on a minimally-staffed training division. A full-time firefighter is needed in the training division to relieve the Training BC of much of the basic labor that is required to manage and operate the training facility. The Department's training reserve firefighter has helped in this area, but the hours typically available from this position (36 hours a month) are not nearly enough for the current workload.

What is needed is the establishment of a developmental, rotational training firefighter position that can help with the current workload. Currently, no funding stream exists for this position, so grants or other alternate funding mechanisms will need to be evaluated. In addition, a long-term, strategic evaluation of the training division needs to be done to effectively assess what will be needed in the way of staffing for the future. This planning effort should be incorporated into this current strategic plan.

In addition to the staffing needs for the future, a careful analysis should also be conducted to determine how training would be managed and carried out in the future. There should be a comprehensive analysis with a resulting plan made up of three areas of responsibility: Centralized - what the training division's staff will provide; De-centralized - what the company level training management model will be; and Ad Hoc Training - what will be offered from outside sources on a one-time or specialized effort. The outcome of this analysis and planning should result in a multi-year training plan for LFRA that is in alignment with future long-range plans.

Training Planning Assumptions

Training Planning Assumption 1- The current training plan and staffing model is mostly adequate for the internal training needs of the organization, based on current staffing levels and call loads.

Training Planning Assumption 2 - There is an immediate need for an additional full-time 40-hour firefighter within the training division to help with the more basic level training work.

Training Planning Assumption 3 - Several training division assessments are needed to evaluate the division's future staffing and financial needs. This analysis and the findings, along with recommended countermeasures, should be a part of this strategic plan.

Training Planning Assumption 4 - A comprehensive long-term analysis for how the training efforts will be carried out in the future using the Centralized, Decentralized and Ad Hoc training delivery methods should be carried out and included as part of this and future strategic plans for LFRA.

LOVELAND FIRE RESCUE AUTHORITY AND SAFETY

Both firefighter and citizen safety are fundamental and primary elements of the Fire Authority's overall mission. In today's fire service, safety is one of the most focused areas of concern and one of the least thought of as part of the strategic planning process. LFRA is committed to a department that has as one of its core values *the enhancement of citizen and firefighter safety*. This one area is directed by the Fire Chief to be a part of the Department's overall commitment to quality and continuous improvement. The relationship between safety and strategic planning is not unique to the fire service, but it should be an integral part of any strategic plan if the stated commitment to safety while operating with a mindset of the enhancement of the safety culture is more than mere words.

The LFRA Safety Model

Enhancing safety in fire and rescue operations can be a very difficult task. Firefighting and rescue operations by their nature are likely to be unsafe and at times unpredictable environments. Nevertheless, at least historically, the American fire service has learned a great deal since 1985 and the advent of the first National Fire Protection Association (NFPA) standard on firefighting and safety, *NFPA 1500 Standard on Fire Department Occupational Safety and Health Program*. This landmark document set the stage for expectations for all aspects of fire-rescue operations and the needed health programs to ensure firefighter health and safety.

The current safety effort and model for the LFRA ensures health and fitness through attention to the following: firefighter staffing levels on fire companies that meet minimum requirements; proper firefighting apparatus and equipment that comply with industry standards; fitness evaluations and screening; adequate training programs and certifications for safe tactical and task level operations; command level training and certification for all officers and acting officers; training in situational awareness and tactical decision making under stress; specific training programs dedicated for firefighter safety and survival; and finally, staying active and current with city-wide safety and health policies and operational methods.

From a strategic perspective, the challenges for LFRA in this important area are really threefold: first, having a long-term financial strategy and plan that supports current efforts to enhance firefighter safety; second, having a plan in place to stay current on changing safety trends and the various laws or standards that affect operations; and third, having a strong and rational method of evaluation of the Department relative to current and future changes.

Current Safety Needs

Overall the current state of LFRA's safety program would be considered adequate by most standards. Several programs are in place and functioning to ensure that the Department continues to make progress towards enhancing citizen and firefighter safety. However, there is a lack of a specific, long-term plan and funding mechanism that deals with supporting the enhancement of safety. This should be a part of this plan and future strategic plans as well. In addition, the Department has several highly important capital projects that are directly related to firefighter and citizen safety that have no direct funding mechanism. Some of these include the current Self-Contained Breathing Apparatus program (SCBA), 800 MHz radios and communication equipment, Automatic External Defibrillators (AED), and other equipment. Most of these listed items are in need of immediate replacement with no identified funding mechanism. However,

efforts are underway with some success utilizing grant dollars (radios, SCBAs and AEDs in 2012), yet long-term replacement strategies need to be developed.

Future Safety Needs, Concerns, and Evaluation

The area of safety is a continuing and evolving process. History has proven that changes in laws and standards will likely continue and will also have a financial impact on fire departments as they work to meet new laws and standards. These changes can come in the form of changes for apparatus and equipment, which cost more to purchase and have a defined shelf life, or in new regulations that require additional staffing or positions on the fireground. Most fire departments do not plan for these kinds of changes and are caught behind the proverbial "power curve" when something like the Fed-OSHA "Two-In, Two-Out" regulation (requiring additional firefighters staged on an emergency scene for rescuer safety) is passed. As part of this strategic plan, methods of current and future operations should be evaluated based on safety regulations, and standards and methods should be developed to meet the intent of such changes so they can be incorporated into Department operations and budgets.

Evaluation

LFRA needs to develop a workable method for Department evaluation relative to safety and current standards or regulations. It is not reasonable for a department to expect to meet each and every industry standard related to safety (such as every provision stipulated in NFPA 1500). However, it is reasonable to have in place an effective and reliable system of evaluation in order to meet most safety standards and all legal requirements for safe, sane, and predictable operations. Developing short and long-range planning to address the Department's areas of deficiency when it comes to safety, and meeting the intent of all safety guidelines and standards are reasonable expectations. Without an identified and respected planning process, it is doubtful that LFRA will keep pace with the changing standards for safety, and the goal of continuous improvement in this arena will be severely hampered.

Safety Planning Assumptions

Safety Planning Assumption 1 - LFRA currently has a good safety culture and a commitment to firefighter and citizen safety.

Safety Planning Assumption 2 - Safety deficiencies do currently exist in the organization, and efforts will be required to address those deficiencies.

Safety Planning Assumption 3 - There will be a cost to staying committed to enhanced firefighter and citizen safety. Currently, several unfunded priorities that have a direct impact on firefighter and citizen safety exist within the Department. A plan to address these unfunded priorities should be developed and made a part of this strategic plan.

Safety Planning Assumption 4 - Safety planning needs to be a part of this strategic plan and other plans that follow.

COMMUNITY SAFETY DIVISION

The Loveland Fire Rescue Authority Community Safety Division (CSD) has responsibilities over Public Education, Code Enforcement, Plan Reviews and Permits, Emergency Management, Community Outreach, and Public Information. All of these programs work in concert with each

other and work in tandem with fire suppression activities to build, educate, and sustain a safe and vibrant community for the Loveland area. The CSD was one of the most affected areas within the fire department during the City of Loveland's overall effort to reduce budgets and reductions in force starting in 2009. The impact of the reductions in 2009 and 2010 has caused the CSD to reorganize and reduce many of the previously offered community outreach plus safety and prevention programs. The result of the reductions has also caused a shift in workload and in some cases an overload situation for the division.

Each of the programs listed below has a varying degree of impact on the CSD staff and the suppression staff based upon community needs and organizational needs. Annually, the division evaluates each of the programs and their effectiveness and measures their outcomes to ensure they are in alignment with the overall mission of LFRA. The order in which these six specialty areas are explained is not an indicator of importance; they are merely identified in alphabetical order.

Code Enforcement/Inspections

The inspection program and the code enforcement process are important parts of the Department's mission of ensuring a fire-safe community. Since 2009 the CSD has seen a 72% reduction in the number of annual business inspections due to a 50% reduction in staffing. While there has not been a dramatic increase in the number of fires at commercial occupancies, historical data based on national information indicates that reduced education and awareness to the business community does have negative consequences that are often not seen or realized for several years. National averages show that over 80% of all fires start in residential structures. However, approximately 20% of all fires do occur in commercial-oriented occupancies, and these by far are the most expensive fires on a per capita basis. Further, historical records suggest that the majority of businesses that have a serious fire never reopen after the fire, often creating serious economic consequences to communities and families. Thus, a more proactive approach in inspections and code enforcement is warranted, with an emphasis on community fire safety education and collaborative partnerships to address the fire and life safety issues. By taking advantage of a "customer service" approach versus a "regulatory enforcement" approach, the desired impact for the community is greater fire safety in residential, business, and commercial occupancies. The next service deliverable, community outreach, addresses the total community safety effort further and in a much different manner.

Community Outreach

Community outreach programs are not a new concept in the fire service, although they do have varying degrees of success based on community needs and involvement. Most, if not all, outreach programs have a direct impact on those community members that do not have the resources or the knowledge to recognize their vulnerability. Two programs that are highly successful in Loveland are the Juvenile Fire Setter (JFS) program and the child car seat installation program. Both programs have a positive impact on the community by educating the parents and reducing the potential of severe injuries to children and young adults.

Juvenile fire setting has been identified as the fastest growing fire threat in the United States. Annual statistics show that fires set by children kill more than 300 people and destroy nearly \$300 million dollars in property. More than 30 percent of the victims are the children themselves. Understanding what circumstances lead children to start fires and following a few

basic fire safety practices can lead to a reduction in the chances of children starting destructive fires. Curiosity about fire is part of a child's growth process, especially between the ages of two and nine. The majority of fires set by young children are set out of curiosity or experimentation. The CSD offers education, training, and counseling for the juvenile fire setters program to the individual and the entire family when appropriate.

The child car seat installation program has grown dramatically within LFRA in the last few years. The CSD is the division directly responsible for managing the program and utilizing personnel to assist families in the community to ensure that children are protected by properly-installed car seats. According to the National Highway Traffic Safety Administration (NHTSA), three out of four car seats are improperly installed. LFRA has trained car seat technicians that are available to the community to properly install car seats at no charge. Although it is difficult to track data locally for car seat installation and the numbers of infants and children saved from injury, it is certain that this program is making a difference in community safety and there is a demonstrated need. In 2011 LFRA, under the supervision of the CSD, installed over 160 car seats, mostly for mothers of infants and young children who did not feel able to do this for themselves.

Emergency Management

For many years, the responsibility for emergency management for the City of Loveland has belonged to the Fire Department although this program has operated as an independent division or area. When the fire prevention bureau reorganized in 2010, emergency management became an integral part of the CSD. This relationship makes a great deal of sense in the perspective of overall community safety and emergency management.

The CSD's Emergency Management program has made positive strides within our organization at the local, regional, and state level. Response and recovery efforts through training and planning at all levels of the organization continue to improve. As part of the planning efforts, the Office of Emergency Management (OEM) will continue to perform community risk analysis profiles that will help to identify those areas of our community that are "at risk" for natural or man-made disasters. These risk profiles will also assist with the ability to request federal assistance to support mitigation efforts for those "at risk" areas. The other area of highlighted importance is training. Through recent events and through discussion, the OEM has identified the need to increase our training program to include City staff members that have a direct influence on the community and on our ability to recover from disasters. An enhanced training effort began in 2011 and will continue throughout 2012 for improvement in the area of emergency management response, Emergency Operations Center activation, roles and responsibilities for department heads and direct reports, and disaster planning scenarios.

Plan Reviews/Permits

The CSD has an essential role in the plan review process, particularly as it relates to fixed fire protection systems and response-related codes and ordinances in development and building. The CSD has provided timely, quality plan reviews that meet the customers' expectations and follow the plan review process that has been adopted at most levels within the city, resulting in varying degrees of success. In the last two years, a significant effort on the part of CSD personnel to assist the City of Loveland with an overall improvement process for building and plans review was undertaken; a great deal of improvement in the process was realized, but more

work needs to be done. While recognizing that an expedited plan review process may potentially stimulate economic development, providing consistent quality reviews also provides for a quality, attractive, and fire-safe community. The CSD has carefully balanced the need for responsible code enforcement and compliance with providing reasonable and responsible plan reviews, while doing all within reasonable and acceptable timelines.

Ensuring quality development also leads to economic stability and vitality. By providing a consistent plan review process that is made available to the development community, timely reviews are then achievable. By removing unknowns in the review process or eliminating assumptions that were not communicated at all levels in the organization, the time to process a new review will actually decrease. LFRA, and more specifically the CSD, is in a unique position. The division reviews building plans that are processed through the Building Department, but also processes plan reviews and permits for fire alarm and sprinkler systems in the CSD. This dual role does provide an avenue to ensure that public safety concerns have been addressed with regard to applicable building codes and also allows the CSD to ensure that fire codes are being met. The building and plans review process is an ongoing, evolving process within the City of Loveland. The CSD will continue to play a major role in the effort directed at continuous improvement for economic vitality and for the maintenance of an overall fire and life safety community.

Public Education

Public fire safety education has been the responsibility of the fire service for over 100 years. In the Loveland community, that responsibility belongs primarily to the CSD. Various community safety programs fall under the umbrella of "public education." However, differing levels of success exist for these programs. One of the most successful educational programs ever implemented in the fire service is delivering the fire safety message to the students at the elementary school level. Statistically these individuals are identified in the high-risk category for potential injuries, but also the most impressionable age group to understand the risk of fires and other related safety concerns. LFRA has developed a very robust Public Education program that not only targets fire related educational messages, but also includes an emergency preparedness element that provides a more in-depth understanding of manmade or natural emergencies that could impact the citizens in our community. Our Public Education program works in unison with the Loveland Police Department, Larimer County Safe Kids Coalition, area hospitals, and other affiliated organizations to maintain a collaborative and cooperative approach in the education of our community members. This team of Safety Educators stays abreast of national trends, local trends, and statistics that have a direct impact in the development of our educational material.

Other areas of outreach within the public education field will evolve for the Loveland community in the coming years. The community will need more programs and adaptive programs as its demographics grow and change. One of those areas will likely be in the area of apartment-safe living. Loveland has experienced a tremendous growth in the number of apartment complexes within the community and a sizeable growth in the number of people living in these apartments. Most of these newer occupancies are 3-4 stories, some with garden levels, and nearly all made from Type V or combustible construction. Both national and regional trends show an abnormally high number of fires and civilian injuries and deaths occurring in these types of occupancies. A cogent public education effort within LFRA through the CSD for these types of occupancies will be necessary to reduce the numbers of fires and civilian injuries.

Public Information

Keeping the public informed from a life safety or an educational perspective is a challenging role that has been assigned to the CSD. This role has been made even more difficult in a high-technology world and time of diminishing budgets and reduced staffing.

With the advent of social media, texting, tweeting and cameras on every cell phone, along with the ability to shoot, store, and transmit videos of the latest breaking news, the expectation from the public is to deliver information as rapidly as it becomes available. This has had a dramatic effect on LFRA's ability to report accurate information in a timely and effective manner. Many times information that is being distributed to the media or distributed to other related media outlets has not been confirmed. Thus false information is being shared which then leads to additional time spent to correct or dispel inaccurate information. This can be increasingly challenging when property or lives have been lost. Public Information is a critical position that can be extremely beneficial to assist with educational information to the community. Some of those unrealized benefits include maintaining updated website information, recruiting reserves, and addressing current concerns such as burn restrictions, home safety tips, etc. Unfortunately, staffing limitations do not provide for a dedicated person to fill this role within the CSD.

CSD Planning Assumptions

CSD Planning Assumption 1- LFRA needs to develop a future inspection program based on education and collaboration, targeting small businesses and involving line or suppression personnel as well as CSD staff.

CSD Planning Assumption 2 - Specific occupancies within the community will require specialized training and knowledge, skills, and abilities (KSAs).

CSD Planning Assumption 3 - Maintenance of trained personnel for the juvenile fire setters program and car seat installation program has a direct and needed life-safety impact.

CSD Planning Assumption 4 - The enhancement of training and outreach for emergency management and EOC operations is integral to a total overall community outreach safety plan.

CSD Planning Assumption 5 - LFRA's role in plans review and building review processes is critical to ensure a strong fire-rescue perspective in the review process and a more effective community safety impact in the built environment.

CSD Planning Assumption 6 - The overall review process is an evolving process that will change, improve, and transform over time.

CSD Planning Assumption 7 - Enhancements in the area of public education will be needed in the future, targeting "at-risk" citizens or areas within the community.

CSD Planning Assumption 8 - Public information and media outreach to the community are vital parts of the emergency response protocol that, in part, belongs to LFRA through the CSD; efforts for continuous improvement are a part of future planning.

CSD Planning Assumption 9 – Other developing areas such as hydraulic fracturing will require greater involvement and resources from CSD.

VIII. PERFORMANCE MEASUREMENTS AND STANDARDS AND COMMUNICATION

Important ancillary components to providing fire protection and emergency services are performance measurements and standards of comparisons for the evaluation of the services provided to the community. This section of the strategic plan looks at the history of fire service benchmarking and performance measurements, the International City/County Managers Association (ICMA) method of measuring performance measurements, and current regional methods of measuring performance. Two other methods of measuring the performance outcomes of the fire service are also included: the Insurance Service Office (ISO) and fire service accreditation. In addition, this section focuses on the important aspect of communication, both internal and external communication, and its impact on gathering important data to accurately measure performance and communication with citizens (as customers being served) and to the employees (as the service providers).

PERFORMANCE MEASUREMENTS AND STANDARDS

History of Fire Service Benchmarking

Benchmarking is a system of measuring performance against a standard established from comparisons to other similar agencies at the local, regional, and national level. These standards and performance measurements are most often developed in conjunction with research and data collected by organizations such as the National Fire Protection Association (NFPA), ICMA, and ISO. From this collection of data, fire departments and emergency service providers, like LFRA, can measure the effectiveness and efficiency of services provided and the methods developed and being used to meet or exceed these standards. The data and the dimensions measured can provide policy makers, government leaders, citizen groups, and employees with realistic measurements of organizational performance and can identify where areas of improvement need to take place.

Most departments that operate with active strategic plans have used some form of benchmarking for many years. In the 1994 Master Plan, Loveland Fire and Rescue used performance objectives that were developed using historic local experience and comparisons with standards, such as those collected and produced by NFPA. Poudre Fire Authority (Fort Collins) has used similar performance objectives since the 1980s, but expanded them and re-classified them in their 1995 plan as "service level indicators." These are the organizational performance measures the Poudre Fire Authority Board of Directors review annually and use to make strategic and policy level decisions about the Department's operations.

Within the last decade, regional performance measurements were consolidated by a larger consortium that was connected directly to ICMA in an attempt to standardize what the comparison departments along the Front Range of Colorado were using related to performance measurements; Loveland Fire and Rescue was a part of this group. Approximately 19 other cities and agencies from Denver's north metro area, all the way up into the northern and eastern parts of the state, participated in data collection and performance measurements. This data and information has been collected and utilized for the City of Loveland in annual reports to City Council and to the community as a whole.

ICMA Performance Measurements

For more than five years, the City of Loveland has participated in a data collection consortium, the Colorado Performance Measurement Consortium (CPMC), where the ICMA data templates have been used to track specific data points and dimensions for performance management. The CPMC was made up of approximately 18 other municipalities within Colorado, including some of the comparison departments used for LFRA. Although it is not completely clear why the organization chose to be involved with this regional consortium, it is presumed that the tracking of performance data would be used to assist in plans for improving performance. Unfortunately, it does not appear that this goal has been met utilizing the CPMC as a vehicle for organizational improvement. At the time of this writing, several members of the CPMC have dropped out of the consortium, and it is unclear if the City of Loveland will continue its membership in CPMC beyond the year 2012. Regardless of history and current status within the CPMC, data gathering and performance measurements have a clear and needed place in organizational improvement.

The *CPM Survey* is completed annually by each CPMC participating organization. It has 36 questions addressing areas such as the size of department, number of responses made, and the total costs for fire and EMS protection on a per capita basis. The survey contains distinct divisions: Fire Services and Emergency Medical Services. Under the section of Fire Services, prevention-related data such as inspections and number of violations written are recorded and tracked. The data from the *CPM Survey* is submitted to a data bank and compiled into a comprehensive comparison report distributed among the reporting agencies. It is presumed that the data is intended to serve as a template for measuring existing services and performance against other reporting agencies within the region. Measured dimensions for yearly analysis for the *CPM Survey* include:

- Total population served
- Total number of calls for fire and EMS
- Percent of fires confined to room of origin
- Percent of fires confined to structure of origin
- Average total response time for fire and EMS from dispatch of call
- Total number of fire personnel injured
- Fire personnel injured per incident
- Total fire personnel casualties
- Total number of civilian injuries and casualties
- Total number of fire inspections
- Total number of violations written
- Fire inspection violations written per 100 inspections
- Total number of violations brought into compliance
- EMS and fire call percentage
- Total hours paid to personnel in a reporting year
- Total overtime hours paid in a reporting year
- Total expenditures for fire and EMS in a reporting year

Of the dimensions listed above, some reflect critical information that can and should be used for planning purposes for performance management. Other dimensions seem to have questionable value in performance management for LFRA.

What is clear, at least at this point in time, is that there has been a great deal of data collection for the organization using the ICMA system and the *CPM Survey*. What is also clear is that for

several years, at least, this information has been collected, printed, and distributed without a real cogent plan for using it in a performance management system. In 2010 the City of Loveland hired a new city manager who questioned the collection and use of this data for the City and LFRA. A decision was made by the City Manager to discontinue the use of the ICMA method for data collection and performance measurement. In 2012 the City Council for Loveland will be considering the use of performance measurements for the future for the City of Loveland and what role this current model, if any, will play in performance management systems.

For the Fire Authority and for the purpose of this strategic plan, two plans for the future will be utilized. The first is to participate in discussions at the City's management team level and City Council discussions for any new designs or programs for performance management systems. The second will be to establish a list of critical performance measurement dimensions that will be used by the Fire Authority board and the Department's staff to help measure the Department's performance and manage data and information that will be used to affect positive change and assist the organization in its efforts for continuous improvement. It is the latter portion of these two plans that the next section will focus on.

Use of Measurements & Standards (Service Level Indicators) for the 2012 Strategic Plan

The standards and performance measurements used in this 2012 Strategic Plan represent a combination of comparisons with other communities, fire districts, and fire authorities that LFRA most nearly compares with; all in this category are in the Front Range of Colorado or Wyoming. Both regional and national statistical information and data are used specifically for targeted applicable dimensions. In addition, past, present, and future targeted outcomes for performance are used within the plan. Some forecasting is used within the dimensions of the data collection and applied as future targeted outcomes. These predictions and forecasting dimensions are based on past trends and current data to make the most accurate prognostications possible.

Use of terms is important. For the purpose and use of this strategic plan, the term *service level indicators* rather than *performance measurements* is being used. Although it is certainly acceptable to use the term *performance measurement*, the *service level indicator* term is being chosen as a more accurate and compatible term for what LFRA actually does. Fire departments provide a service to their citizens and the term *fire service* is generically used to describe organizations all across the country carrying out the same mission (generally) that LFRA does. Based on this terminology, it makes more sense and seems more compatible to use *service level indicators* when measuring fire department performance. Thus the term will be used predominantly within this plan.

Any comparisons and/or standards that appear in any graphs and charts used for service level indicators will, when possible, use the data that is the most current and relevant to the specific dimension or service level indicator being measured. The purpose of all of this effort is to help LFRA track its performance in providing citizen service in one or more of the following ways:

- Comparing LFRA to the targeted Front Range Fire Consortium departments.
- Comparing LFRA to Front Range, western, or Rocky Mountain regional data.
- Comparing LFRA to national standards and/or data.
- Using a locally established standard of performance or service level when a recognized standard is unavailable.
- Tracking data over longer periods of time to establish and show trends.
- Differentiating between the quantitative (number of) versus the qualitative (character of) nature of the data provided.

The intention of this strategic plan is to consolidate or combine the targeted service level indicators and the selected strategic plan benchmarks in the form of goals and objectives (Section IX). Other service level indicators may be used, but the majority will be connected with the goals and objectives listed within the plan. The service level indicators that will be tracked and measured include (not listed in any order of priority):

- Civilian fire deaths per 100,000 population
- Civilian fire injuries per 100,000 population
- Firefighter deaths
- Firefighter injuries per 100 fires
- Number of fires per 1,000 population
- Intercession before flashover
- Response times
- Direct estimated fire loss per capita
- Direct and indirect loss to a five-year average
- Loss per fire
- Confinement of fires to building of origin and percent of time within urban response area
- Minimization of impact of wildland fires
- Control of wildland fires within two hours 95% of time
- Control of wildland fires within first 12 hours 99% of time
- Intercession with wildland fires before reaching structures 99% of time
- Maintenance of per capita costs for fire protection
- Maintenance of ISO rating
- Limiting of HazMat incidents to two per 1,000 population
- Maintenance of customer satisfaction ratio

Other service level indicators may be developed and utilized within the structure of this plan; however, the intent is primarily to connect the service level indicators to the overall goals and objectives included in the 2012 plan. Ultimately, these service level indicators will become a part of the Department's annual report provided to the various governing bodies associated with the Fire Authority. More importantly, this data and information will be used to track performance and serve as a useful tool to help in the process of making any needed changes within the organization in order to improve citizen service and enhance firefighter and citizen safety. All of this serves as a vital component for the organization's commitment to continuous improvement.

ISO and Loveland Fire Rescue Authority

The basic objective of the Insurance Service Office, based on its own corporate information (ISO Fire Suppression Rating Schedule - FSRs), is to provide a tool for the insurance industry to measure quantitatively the major elements of a city's fire suppression system. The FSRs examines the municipal fire suppression capability relative to three classifications graded according to their relative importance: fire department, water supply and fire alarm facilities.

Measurements of these three elements are then developed into a Public Protection Classification (PPC) number on a relative scale from 1 to 10 with a "10" representing less than the minimum recognized protection and a "1" being the highest or best level of protection recognized. A PPC is an important number used by the insurance industry to determine fire insurance premiums for both commercial and residential property. Generally, citizens can expect to pay lower property insurance premiums when their city or fire district achieves an improved or lower PPC. It should

be noted that not all insurance companies use the ISO information as their sole source for determining premium rates for property insurance.

The ISO rating schedule has been mistakenly used throughout the years as a device for measuring the fire department's effectiveness or a community's fire defenses. In other words, simply categorizing departments qualitatively based on a given PPC is an incorrect concept. Because a fire department receives a PPC of 1 does not imply that it is one of the best fire departments in the country. This error in categorizing was tragically proven out in 2007 after a commercial fire in Charleston, South Carolina took the lives of nine firefighters; Charleston had an ISO PPC of 1.

Confusion still exists, especially among non-fire service municipal leaders, as to the value to a modern community having an ISO rating inspection. In addition, many fire chiefs are not informed about the impact of ISO ratings and how they are grouped together in the insurance industry for insurance rate assessment. Many fire chiefs still will judge their department on the ISO scale of 1-10 and will spend significant resources and finances to lower the grade without analytically weighing the financial savings for the citizens against the cost impacts of implementation.

It is important for municipal administrators to understand the recognized limitations of the FSRs. The grading schedule is a fire insurance rating tool and is not intended to analyze all aspects of a comprehensive fire protection and emergency response operation. The grading schedule does not directly address such topics as fire prevention; education; code implementation and enforcement; fire investigation proficiency; and proficiency in strategic, tactical, and task level operations.

An important question to answer in light of this information can be, "Is there any real advantage to an ISO evaluation process for LFRA?" The evaluation process of ISO is an important element in establishing insurance rates.

The quality of a city's fire protection has a direct impact on the local economy based on the insurance rates paid by the citizens. For this reason, the ISO rating schedule should be an important consideration for fire chiefs and public leaders but not as a stand-alone dimension.

Loveland Fire and Rescue and the Loveland Rural Fire Protection District had their last ISO review in 2008. At that time the City was rated as a PPC "4" with the surrounding Loveland Rural Fire Protection District (District) rated at a "5." The District would have been rated at a PPC of "7", but there were internal rating requirements within ISO that limited the downgrade to only one PPC number. The question for the leadership and policy makers within LFRA is: "How far should we go and how much in the way of resources and finances should be invested to maintain or improve the PPC ratings given by ISO?"

Initial evaluation of the impact of maintaining the current status or dealing with a downgrade in PPC to either the City of Loveland or the District indicated that a minimum impact to the citizens would be seen unless a PPC downgrade to a level of "7" were to occur. Also, it was determined that it would be highly unlikely that the City's PPC would downgrade at all in any future evaluation by ISO, unless standards and requirements changed significantly. In addition, the entire LFRA's PPC (for the City and District) could improve if the elements of the Model One Basic Plan were implemented. The effects of the Fire Authority and the ability of the District to use areas where City of Loveland water can be accessed should also improve the District's

overall rating, particularly in the category of Water Supply, which was a significant area of concern in the last evaluation.

However, the impacts studied from the last ISO reclassification were done in 2009; situations can and probably will change with ISO's rating schedule and their methods for evaluation in the future. ISO's evaluation of the Department is important and should be given due regard, especially if the chance for a reduction in the PPC for the City or District could take place. The Department and its leadership should stay informed of the changes in the future related to ISO evaluations and requirements and stay educated on what improvements the Department can make that will help maintain or even improve the PPC given to LFRA. The Department should maintain a philosophy that embraces the current ISO PPC ratings as a measurement of quantitative assessment and do all that is reasonable to maintain the current ratings. Questions and conflicts concerning the ISO schedule's effectiveness and its impacts on communities and their fire departments are a long-standing issue; they are not likely to go away during the lifespan of this strategic plan. Fire departments all across the county, including LFRA, have inherently been influenced by ISO standards and ratings partly because of a lack of any other comparison standards. That viewpoint has recently (within the last 15 years) begun to change with the advent of fire department accreditation. This next section examines fire department accreditation and considers what benefits could be derived for LFRA by participating in an accreditation process.

Fire Department Accreditation and LFRA

Many fire departments and emergency service agencies have looked for alternatives for evaluation of performance and capabilities beyond what has been provided by ISO. One method that has emerged within the last 15 years has been fire department or fire service accreditation, offered through a national or international accrediting agency. Many departments have chosen this method of accreditation for their department's analysis for a variety of reasons; some have pursued accreditation to address the shortcomings of the ISO evaluation. This section will describe the accreditation process, how it is being used, and some of the perceived benefits and liabilities associated with accreditation.

Accreditation has been defined as a process by which an association or agency evaluates and recognizes a program of study or an institution as meeting certain predetermined standards. According to the Commission on Fire Accreditation International (CFAI), it applies only to institutions or agencies and their programs of study or their provided services.

The concept of accreditation is not unique to the fire service, nor is it a new or unique concept for evaluation purposes of emergency service operations. Police, EMS, and even dispatch centers have all used accreditation for evaluating and improving performance. Accreditation has also been an accepted practice in schools, colleges, and universities for years. Accreditation has been recognized as a useful tool in providing a means of self-evaluation and regulation, a way to promote a field or organization by raising professional and institutional standards, and an opportunity to improve public service and public safety. The City of Loveland has for many years used the accreditation process for the Police Department and for the Communication Dispatch Center. The fire department was the only emergency service provider for the City that was not connected to an accreditation process.

The CFAI program is a comprehensive self-assessment and evaluation model that enables fire and emergency service organizations to examine past, current, and future service levels and

performance and compare them to industry best practices. This process leads to improved service delivery by helping fire departments:

- Determine community risk and safety needs.
- Evaluate the performance of the department.
- Establish a method for achieving continuous organizational improvement.

The accreditation process for fire departments involves several different facets. First, an application is made to the accrediting agency. Once the applicant agency status has been verified, agreements and fees are processed; the applying agency has 18 months to complete the self-assessment phase of the process. The self-evaluation process uses a standard system that measures ten specific areas of performance or operations, such as governance and administration, goals and objectives, financial resources, programs, physical resources, human resources, training and competency, and external resources, just to name a few. Included in each of the ten categories for assessment are criteria that are a measure or an index on which a judgment or a decision related to performance can be based. The ten categories contain 46 criteria. In addition, 235 performance indicators define the desired level of ability to demonstrate performance of a particular task specified in the accreditation process.

Once the self-inspection is completed, reports from that review are sent to the accrediting agency for review. In the CFAI process for accreditation, a commission sends an assessment team made up of trained professionals for a site visit after the reports are submitted for review. The team conducts an on-site review of the agency's policies, procedures, plans, practices, and facilities; the team reviews proof of compliance for each category.

Once the self-inspection is completed and the proper reports filed, and with an acceptable review by the on-site team, accreditation is awarded to the agency. Accreditation status is granted for five years; annual reports are filed with the commission or accrediting agency that verify maintenance of the accreditation award is ongoing.

Using a recognized and certified accreditation process comes with advantages and disadvantages. One of the most important advantages is engaging in a cogent process that authentically measures an organization's abilities and performance and provides a viable means for managing information and continuous improvement. Other advantages include having current statistical information ready on demand, important knowledge gained about one's own organization, the ability to acquire a true understanding for other comparable organizations, and awareness of how one's own fire department measures up. Another advantage gleaned from an accreditation process is in the area of planning; tools are provided within the process to identify where an organization needs to improve and determine how it should be done.

Some disadvantages to the accreditation process can be found in the time involved in the self-evaluation process; it is very time consuming and labor intensive. Many departments shy away from accreditation because staffing is not available for the time needed for the various evaluations and reports that must be completed. Another disadvantage is that accreditation does not guarantee ongoing quality of performance; this depends on the individual agency's commitment for follow through. Other disadvantages for some agencies are the cost and ongoing fees associated with accreditation.

When compared with other means for assessment, the accreditation process seems to be the most comprehensive, accurate, and reliable method for evaluation for fire service agencies. More evaluation and research should be conducted by the LFRA staff to determine the feasibility and

uses for adopting accreditation. At the time of this writing, Poudre Fire Authority (PFA) the fire service agency to the north of Loveland, is in the process of preparing for an accreditation self-evaluation and review. This process should be carefully viewed by LFRA, with the intention to learn as much as possible from the PFA experience. LFRA can use that information to help determine the future use and application of an accreditation process for the organization.

Performance Measurement Planning Assumptions

Performance Measurements Planning Assumptions 1 - LFRA is committed to using a standardized measurement of performance objectives that will be referred to as *Service Level Indicators*.

Performance Measurements Planning Assumption 2 - The service level indicators will use a combination of some past ICMA/CPMC dimensions and other dimensions that are selected based on desired measurable indicators.

Performance Measurements Planning Assumption 3 - The service level indicators will be matched to specific Department goals and objectives listed within the 2012 Strategic Plan.

Performance Measurements Planning Assumption 4 - Most of the service level indicators will be charted, graphed, and used in LFRA's Annual Report and made available to the various governing bodies. These service level indicators are measurements used for organizational evaluation and continuous improvement.

Performance Measurements Planning Assumption 5 - The ISO PPC numbers and rating scale are valuable indicators for LFRA. The organization desires to maintain or improve upon the current PPC for both the City of Loveland and the Loveland Rural Fire Protection District.

Performance Measurements Planning Assumption 6 - LFRA is interested in Department accreditation and will evaluate it further during the performance period of the 2012 Strategic Plan. Cost effectiveness of accreditation and feasibility will be key areas of focus in the evaluation.

COMMUNICATION

History and Current Situation

As organizations grow, internal and external communication becomes more difficult and challenging. The fire service, and more specifically LFRA, has experienced these same challenges. The difficulties in effectively communicating have been realized by both the internal customer (LFRA employees) and the external customer (citizens in the Loveland community). LFRA has chosen to address this issue by identifying specific communication problems and presenting some viable solutions within this strategic plan.

As LFRA grows in the next 8 to 10 year-timeline covered by this strategic plan, additional challenges for effective communication will arise. Already the organization has embedded areas of concern that include:

- Employees working on three different shifts that utilize a 24-hour work cycle.
- A large response area (194 square miles) with spread-out fire stations and facilities.
- A part-time paid and reserve workforce that have varied and inconsistent work cycles.
- Three governance bodies (City Council, Rural District Board, and Fire Authority Board) that require accurate and often rapid and succinct communication.

- A varied and often difficult-to-reach customer base (the citizens that we respond to for emergency care and service).
- A culture with a history of a reluctance to talk about its accomplishments ("tooting one's own horn").

These are just some of the facts and current situation themes for the fire service and LFRA that make communication a difficult and often frustrating process. Technology, which should help resolve some of the communication issues, has also contributed to many of the communication problems. The reliance upon email and other electronic communication has helped in some areas, but has also de-personalized communication and has, in many cases, institutionalized a false sense that effective communication is taking place, when in fact it is not.

The Current LFRA Model

LFRA currently uses a number of internal and external communication strategies. The organization has invested well in information and communication technologies (ICTs) and personnel as part of the City of Loveland's organizational plan for IT and has the infrastructure in place to create an effective communication system within the organization. Yet problems do exist. The anecdotal evaluations conducted in the past suggest that the organization has placed a major emphasis on technology and systems, yet not enough emphasis on follow-up in the area of procedures and training of its personnel in how to effectively communicate, particularly when using information and communication technologies. The problems that appear within LFRA are not unique to the fire service. What is unique about LFRA is its willingness to evaluate itself and take the necessary steps for improvement; this has been a foundation for success in the most progressive fire service organizations and is part of the organizational improvement for LFRA's future.

The communication methods listed below are used by LFRA and are similar to those used by many fire service organizations:

- E-mail communication
- Phone calls and some conference calls
- Face-to face meetings, including officer's meetings
- Some written paper communication
- Utilization of the Public Information Officer position and public press releases
- Website communication
- Training
- Staff communication (in person) related to vision, mission, and future plans
- City staff and management communication as part of the entire City workforce
- After Action Reviews for emergency calls
- Surveys from citizens related to the overall service provided by the organization.

Some of these communication methods are working well; others may not be. It is unclear whether or not the Department has ever engaged in an organizational communication audit to bring more objectivity to the communications problem and to develop a systematic plan for improvement.

One area where some objective public communication has existed is within the City of Loveland's annual Quality of Life Survey, which covers a broad range of topics including public safety, utility services, leisure services, transportation, and more. The City of Loveland has

conducted a Quality of Life Survey annually since 2004. The exception to this occurred in 2007 when a more in-depth survey was administered by an independent outside agency in accordance with City Council's desire to conduct a broader and more detailed analysis of community opinion and trends. This data and information about City services is available to the public and used by City departments in more of a comparative, year-by-year analysis for how each department performed compared to previous years. While this information is good and certainly serves a purpose for LFRA, serious weaknesses in this data exist.

A major weakness in the data is that the surveyed group is comprised only of City of Loveland residents. Over 25% of LFRA's citizens live in the Rural Fire Protection District and most are not represented in these surveys. Another weakness in this information and data is that those surveyed may or may not have ever received service from LFRA. Thus their input on how the organization is doing related to citizen service could be based on something other than personal experience. As stated earlier, this information and data that is gleaned has merit and is useful to the organization. It is important to know how the community feels about the organization in general; however, more specific and relevant data is needed.

Future Needs and Trends

As LFRA grows, the need for better and more effective communication with both internal and external customers will also grow. A need for improvement can be found in LFRA's current communications model, and it should be addressed as part of the 2012 Strategic Plan. An overall goal of this portion of the plan should be to improve communication between the organization, its citizens, and the Department members by keeping them informed in a timely and effective manner.

Beyond this goal, LFRA should begin a process for a comprehensive communication audit among Department members in order to objectively assess the overall internal communication process. This audit would help identify weaknesses and areas of improvement from which a plan can be developed with specific goals, objectives, and timelines for said improvements.

From the external perspective, a review could identify what feedback is needed from our citizens and suggest methods for receiving such feedback. LFRA should observe methods used by other regional and national fire service agencies to effectively gather cogent data and feedback from citizens about their level of satisfaction with fire/rescue-related services.

Communications Planning Assumptions

Communications Planning Assumption 1 - Fire service organizations, including LFRA, have significant communication challenges for effectively communicating with their employees and with the citizens they serve.

Communications Planning Assumption 2 - Current methods for communication within the organization are working, but a comprehensive communication audit should be developed and engaged within the organization to objectively assess the current situation for what is working well, what areas need to be improved, and some ideas for making said improvements.

Communications Planning Assumption 3 - LFRA needs better, more relevant, and direct service level assessments for the external customers (citizens) it serves. It also needs to find an effective emergency services communication survey.

IX. FIRE PROTECTION AND EMERGENCY SERVICES - GOALS, STRATEGIES, & SERVICE LEVEL INDICATORS

In the previous section of the strategic plan "Performance Measurements and Standards and Communications," the focus was placed on the history and current methods of use for performance measurements. In this section, the next step in that process is reviewed, which involves establishing an overall guiding principle or "prime directive" along with three specific goals and their associated strategies. These will establish the Department's overall strategy for achieving the prime directive. This section also includes a more comprehensive list of specific measurable metrics to complement the core service level indicators that will be used. In addition, a pared down version of the service level indicators is listed as the "Significant Seven," which will be used as part of the City of Loveland's performance measurements as requested by the City Manager.

The concept of SMART objectives is also integrated into this portion of the plan. Those SMART objectives descriptors are Specific, Measurable, Achievable, Realistic, and Timely. This section of the strategic plan establishes the goals, strategies, and service level indicators for the Fire Authority for the next several years (2012-2020). The intent is that these dimensions and indicators will also serve as the framework for the annual report to the political leaders and will function as a true and accurate method of measuring the organization's overall performance.

THE ORGANIZATIONAL PRIME DIRECTIVE

Most fire service organizations have at their core a mission or vision statement that establishes, at least in concept, what the organization stands for and is committed to. Loveland Fire Rescue Authority is no exception. The organization's mission statement is:

Through commitment, compassion and courage, the mission of the Loveland Fire Rescue Authority (LFRA) is to protect life and property.

From the management side of the continuum of operations, the "prime directive" adapts this mission statement so it connects to the organization's goals, strategies, and service level indicators. That prime directive is:

To protect life and property in a safe and effective manner...

This prime directive will serve as the guiding principle for the organization from a planning and management perspective and serve as a touchstone or guidepost that will serve to maintain organizational focus and direction.

GOALS AND STRATEGIES

This section of the plan contains the organization's goals, strategies, and related service level indicators. These will be used as an overall planning and measuring instrument to assist the Fire Authority board members, management team, and staff members in monitoring and measuring the organization's progress. The seven performance measurements (Significant Seven) will also be used by the City of Loveland as part of the overall performance management dimensions used by the City Manager. As with all goals, objectives, and performance measurements, these may change over time based on changes within the community, the Fire Authority, or the fire service as a whole. Periodic updates and reviews are essential.

Three goals in this portion of the plan address in detail what is established overall within the prime directive. The three goals and their primary strategies are listed below:

1. Deploy an effective emergency response to minimize damage and loss.
 - a. Deploy appropriate incident-specific resources (right people with the right equipment).
 - b. Execute a skilled response (being effective on the scene; doing the right things at the right time).
2. Minimize and mitigate the risks of an emergency occurrence in the community.
 - a. Adopt and reinforce fire codes that enhance safety in the built environment and assist with effective response in the case of an emergency.
 - b. Build and reinforce public awareness to reduce the probability of an incident.
 - c. Integrate a community-wide Emergency Preparedness Program for natural or man-made disasters.
3. Deliver Cost Effective Services

These goals are mainly focused on delivering results associated with prevention, mitigation, and effective emergency response. Within each of the listed goals, specific strategies are included. The Suppression/Operations Division's primary focus is the response to emergencies to protect citizens and their property in a safe manner. The Community Safety Division (for the built environment and emergency management) focuses on preventing the need for an emergency response by ensuring that code adoption and enforcement continues. This division is also responsible for ongoing community-wide emergency preparedness. Administration is responsible for the development of strategic goals, tactical goals, and accountability for performance in alignment with those goals to achieve fiscally responsible resource allocation.

As indicated in other parts of this plan, the goals, strategies, and service level indicators should be evaluated periodically to ensure that they maintain relevancy, value, and validity throughout the duration of the plan. They should also be reviewed periodically to ensure that LFRA is measuring the correct dimensions for the performance evaluation of the organization. It is anticipated that LFRA will grow significantly in personnel, facilities, and responsibilities during the years of this plan. The community of Loveland will also grow and change in many ways during these same years. The goals, strategies, and service level indicators are all useable and useful for LFRA in 2012; periodic evaluation and assessment will ensure that they remain so in 2020.

Goals/Strategies:

1. Deploy an effective emergency response to minimize damage and loss.

Several components of the service delivery are important for ensuring that effective deployment occurs. It begins with the recruitment and retention of team members of high quality and integrity who have prepared themselves technically and tactically to meet LFRA standards, with a willingness to continue that development journey throughout their careers. Once that kind of individual has committed to the team, the organization's commitment to the individual is that we maintain a system with strategic, tactical, and task level operations for the safest conditions to protect citizen lives and property; that we train in a safe and realistic environment to enhance the transference of skills during an actual response; that we provide appropriate equipment in good operating condition to implement those tactical strategies safely; that we maintain excellent

partnerships with mutual and auto aid departments that result in consistent competencies for effective, coordinated responses to emergencies; and that we build excellent relationships with our partner response departments at the City of Loveland for excellent communication and cost effective resource dedication specific to the circumstances of each incident. A central command structure is also essential with representation from all responding organizations, where all members proficiently contribute to the appropriate support to responders in the field with effective coordination and dedication of resources specific to the needs of the incident.

- a. Deploy appropriate incident specific resources (right people with the right equipment).
 - o Personnel
 - Respond with three-person companies (3 person companies and 4 person Truck company 99% of the time).
 - Maintain effective recruiting through the three-tiered staffing plan (monitoring and addressing issues such as number of applicants for reserve positions; % of applicants from protected classes; % of firefighter hires from the part-time paid rank; time to fill a vacant position; hiring satisfaction survey results).
 - Maintain mutual/auto aid agreements (monitoring the effectiveness of agreements and performance - time in hours it took to backfill stations; % of calls where mutual/auto aid is called for direct incident response versus backfill, with associated number of and hours of coverage; times and hours associated LFRA responding outside service area).
 - Develop standards of performance for emergency response based on incident type (1st due with three-person company within 5 minutes 59 seconds of receiving call 90% of the time; 14 firefighters within 9 minutes on scene in an urban response area 90% of the time).
 - o Equipment
 - Standardize apparatus design (percentage of fleet with standard design)
 - Establish and maintain protocols for dispatching assignment of the most effective apparatus (monitor for the percentage of calls with the right equipment dispatched, meaning the BC didn't have to call in suggested alternative).
 - Ensure equipment-replacement schedule/inventory management is followed based on capital replacement planning (% apparatus replaced according to the replacement criteria; appropriate revenue in the replacement fund for replacement; % of asset value charged for maintenance; % fleet covered by amortization in equipment replacement; average annual maintenance for apparatus compared to neighboring departments).

- b. Implement a skilled response (effectiveness on scene; doing the right things at the right time).
 - Maintain appropriate fitness levels (monitor risk tiers: high, medium, low- % staff at each tier; % of staff members with improved ratings).
 - Ensure qualified personnel and promotion of skills development in the following areas:
 - Certifications
 - Demonstrated competencies—Blue Card, Quarterly CQT, evolutions, Hazmat
 - Mutual/Auto Aid Training (% of training outside the Department)
 - Regional leadership in professional development
 - Qualified instructors for fire academies
 - Strategic leadership on FRFC board
 - Truck Academy development
 - Blue Card Program development, conference host, etc.
 - Governance model/partnerships
 - Maintain and monitor service level indicators (sometimes referred to as performance measures) that the Department will use to demonstrate that the deployment has been effective, including:
 - Property value of saved/lost for residential, commercial/industrial, wildland
 - Percentage Hazmat incidents contained without injury
 - Injuries (to firefighters - frequency and severity; to citizens – frequency); injuries on emergency response; nonemergency injuries broken down between training and other)
 - Number of accidents while driving Code 3
 - % of fires that escalate to flashovers
 - % of time the fire was confined to the room of origin
 - % of wildland fires contained in the first 12 hour period; number of wildland fires where the command is transitioned to Larimer County within 12 hour period
 - Response time along four dimensions: call to tone out; turnout time (tone to time leave station); "go" time (drive time); and arrival/action.

2. Minimize and mitigate the risks of an emergency occurrence in the community.

An emergency can be very traumatic for citizens and the community. It is important that the Department implement strategies that reduce the probability that an emergency will occur both related to structures (residential, commercial, industrial, or agricultural structures) and the surrounding conditions (hazardous chemical storage, vegetation, geographic features, etc.). It is also important that as a community we are prepared should a man-made or natural emergency occur.

- a. Adopt and reinforce fire codes that enhance safety in the built environment and assist with effective response in the case of an emergency.
 - Develop an inspection and fire safety program that targets small businesses (500 workers or less).
 - Ensure that all Educational ("E"), Institutional ("I") and Hazardous ("H") occupancy types are inspected as required.
 - Ensure that all "Hazard" occupancies receive and meet annual permit requirements.
 - Measure and monitor inspection data (as needed) for the following dimensions:
 - % of businesses inspected by occupancy type
 - % of inspections where a violation was identified by occupancy type
 - Average time for resolution of the violation by occupancy type
 - % of violations resolved with voluntary compliance by occupancy type
 - % of businesses with "hazard" occupancies
 - Total number of employees and total value of property businesses with hazard occupancies.
 - Ensure that all applicable fire codes are adopted and enforced in conjunction with applicable building codes, monitoring the following inspection data (as needed):
 - Fire inspections conducted
 - % re-inspected
 - Plans/hours reviewed by residential, commercial, industrial
 - % of plan reviews completed by target date as established by the City of Loveland policies.

- b. Build and reinforce public awareness to reduce the probability of an incident.
 - Maintain a collaborative working relationship with the Colorado Safe Kids Coalition and area hospitals to promote child safety with the car seat installation program and bicycle safety campaign.
 - Measure and monitor the following dimensions (as needed):
 - Number of car seat installations
 - % of car seat inspections where corrections were needed
 - Maintain trained personnel to provide counseling sessions for Juvenile Fire Setters, measuring and monitoring the following dimensions (as needed):
 - Number of sessions/hours
 - Average time per session in hours
 - % of sessions reported as helpful by juvenile and juvenile's guardian
 - Conduct effective fire investigations, measuring and monitoring the following dimensions (as needed):
 - # of fire investigations conducted
 - % of cases cleared
 - Average time for investigation (start to court filing)

- c. Integrate a community-wide Emergency Preparedness Program for natural or man-made disasters.
 - o Ensure that all Continuity of Operations Plans (COOP) for each city department are reviewed and updated annually.
 - Measure and monitor the % of plans updated.
 - o Ensure that all political leaders are trained on emergency contingency plans annually, measuring and monitoring the following dimensions (as needed):
 - % of elected officials trained
 - % that rated training needful or important
 - o Ensure that the Local Emergency Operations Plan (LEOP) and the Hazard Mitigation Plan are reviewed and adopted by all appropriate governing bodies.
 - o Provide annual disaster drills that include all appropriate levels of government that meet federal mandated guidelines, measuring and monitoring the following dimensions (as needed):
 - Participants and number of partner organizations involved
 - % of participants that rated the drill as effective.
 - o Ensure effective Emergency Operations Center operations, measuring and monitoring the following dimensions (as needed):
 - On-going training to all senior city staff members on the operation of the Emergency Operations Center (EOC) functions (% of management team completing training)
 - Number of EOC activations at various levels (partial, full)
 - % of other city and outside organizations that participated in EOC operations and the de-brief.
 - % of participants that rated the activation as effective or excellent

3. Deliver Cost Effective Services

The goals and strategies listed above must be achieved within a fiscally responsible environment. The sources of funding from the partner organizations that contribute to the Loveland Fire Rescue Authority are property taxes and sales taxes from the citizens that we serve. The Department takes great pride in delivering services in the most cost effective manner possible and managing the organization's resources in the most frugal manner. Leveraging local dollars through the collaboration with other agencies in the area and seeking out additional funding sources is the overall intent of this third goal. It is our aim to accomplish all of this by providing focused service delivery through strategic direction and holding tactical decision-makers accountable for alignment with the goals and strategies outlined in this document. It is important that the citizens served by LFRA feel confident that their fire department responds to the emergency needs of the community in a responsible and cost effective manner. Finally, one of the identified community values of the City Manager was "fiscal conservatism"; this plan will incorporate that value.

- The measures that will help to demonstrate fiscal conservatism over time include:
 - % of cost recovery for permitting
 - Partner Contribution Assessments based on call volume, response time on calls, asset value
 - Cost recovery on deployments outside the City
 - FTEs per 1,000
 - Cost per capita
 - Citizen satisfaction.

Significant Seven Performance Measurements for LFRA - (City of Loveland)

1. **RESPONSE TIMES**: Measures made in the Urban Response Area
 - First arriving engine (fully staffed at three) for all emergencies
 - Balance of 14 firefighters arriving on scene for structure fires
2. **COSTS PER CAPITA**: Operational costs comparison
 - Costs per capita within FRFC departments and Rocky Mountain region departments
3. **FIRE LOSS PER CAPITA**: Total fire loss comparison
 - Total fire loss per capita within FRFC departments and Rocky Mountain region departments
4. **PROPERTY VALUE SAVED VS LOSS**: Saved/loss comparison relationship
 - Measured in both residential and commercial occupancies
5. **FIRES CONFINED TO ROOM OF ORIGIN**: Measuring flashover ratio
 - % of time that fire was confined to room or area of origin, interceding before flashover
6. **NUMBER OF BUSINESSES INSPECTED/ FIRE COMPANY SAFETY VISITS**:
Efforts for prevention/CSD
 - % and number of businesses inspected by the Community Safety Division and % and number of business receiving a safety visit by a fire company
 - Measurement of the number of times personnel are in a business for enforcement and safety intervention within the community
7. **CUSTOMER (CITIZEN) SATISFACTION**: Public perception measurements
 - Overall community performance survey as part of the City of Loveland
 - Citizens and businesses actually receiving LFRA services.

| Goal: Deploy an effective emergency response to minimize damage and loss. | | | | | |
|---|--|--------|------|------|------|
| | | Target | 2012 | 2013 | 2014 |
| Strategy: Deploy Appropriate Incident-Specific Resources | | | | | |
| <i>Tactics:</i> | <i>Respond with 3-person Engine Companies and 4-person Truck and Squad Companies</i> | 99% | | | |
| | <i>Maintain Effective Recruiting in a Three-Tiered Staffing Plan, monitoring issues such as:</i> <ul style="list-style-type: none"> • Number of applicants for reserve positions • % applicants from protected classes • % firefighters hired from the part-time ranks • Average time to fill a vacant position • Hiring satisfaction survey results | | | | |
| | <i>Maintain Effective Auto and Mutual Aid Agreements</i> <ul style="list-style-type: none"> • Number of times called by other organizations • Average hours per incident to backfill stations • % of calls for direct response (vs backfill stations) • Number of times LFRA called outside our area • Average hours per incident outside our area | | | | |
| | <i>Timely Incident Response</i> <ul style="list-style-type: none"> • % of time the 1st due with 3-person company arrived within 5 min 59 seconds • % of time 14 people responded in the Urban Response Area within 9 minutes | 90% | | | |
| | <i>Standardize Apparatus Design</i> <ul style="list-style-type: none"> • % of fleet with standard design | | | | |
| | <i>Establish & Maintain Protocols for Effective Dispatch of Equipment</i> <ul style="list-style-type: none"> • Monitor for % of time the BC did and did not have to change the assignment of equipment | | | | |
| | <i>Base Equipment Schedule/Inventory Management on capital replacement planning:</i> <ul style="list-style-type: none"> • % of apparatus replaced consistent with replacement criteria • Appropriate revenue in replacement fund • Average % asset value spent on maintenance • % of fleet covered by amortization in equipment replacement fund • Average % difference between LFRA cost of annual fleet maintenance compared to other regional fire departments | | | | |

Gold = Significant Seven Performance Measures for LFRA

| | | Target | 2012 | 2013 | 2014 |
|---|--|--------|------|------|------|
| Strategy: Implement a Skilled Response | | | | | |
| <i>Tactics:</i> | <i>Maintain Fitness of Responders & Monitor:</i> <ul style="list-style-type: none"> • % of staff at high risk • % of staff at medium risk • % of staff at low risk • % of staff with improved ratings | | | | |
| | <i>Ensure Qualified Personnel/Promotion of Skills Development in the following areas:</i> <ul style="list-style-type: none"> • Certifications/demonstrated competencies • % of participants in training from auto/mutual aid organizations • Regional leadership in professional development (report initiatives) | | | | |
| | <i>Demonstrate Effective Deployment</i> <ul style="list-style-type: none"> • Property value saved/lost: residential, commercial/industrial, wildland • Fire loss per capita | | | | |
| | <ul style="list-style-type: none"> • % of hazmat incidents contained without injury • Frequency & severity of firefighter injuries (emergent & non-emergent injuries, identified as training or other. • # of accidents occurring while driving Code 3 • % of fires that escalate to flashovers | | | | |
| | <ul style="list-style-type: none"> • % of time the fire was confined to the room of origin | | | | |
| | <ul style="list-style-type: none"> • % of wildland fires contained in the first 12 hrs • Response time specifics: average call to tone out • Response time specifics: average turnout time (tone to leave the station) • Response time specifics: average Go time (drive time) • Response time specifics: average arrival/action time | | | | |

| Goal: Minimize and Mitigate the Risks of an Emergency Occurrence in the Community. | | | | | |
|--|---|--------|------|------|------|
| | | Target | 2012 | 2013 | 2014 |
| Strategy: Adopt and reinforce fire codes that enhance safety in the built environment and assist with effective response in the case of an emergency. | | | | | |
| <i>Tactics:</i> | <i>Develop an inspection & fire safety program that targets small businesses (500 employees or less)</i> | | | | |
| | <ul style="list-style-type: none"> Number of businesses that received a safety inspection by a fire company Number of small businesses inspected % of small businesses inspected | | | | |
| | <i>Ensure that all "Educational", "Institutional," and "Hazard" occupancies receive and meet annual permit requirements.</i> | | | | |
| | <i>Measure and monitor inspection data (as needed) for the following dimensions:</i> | | | | |
| | <ul style="list-style-type: none"> % of businesses with "Hazard" occupancies % of businesses inspected by occupancy types Number of times fire personnel are in a business for enforcement or safety intervention | | | | |
| | <ul style="list-style-type: none"> % of inspections where a violation was identified by occupancy type Average time resolution of the violation by occupancy type % of violations resolved voluntarily Total number of employees & total value of property in "hazard" occupancy businesses | | | | |
| | <i>Ensure that all applicable fire codes are adopted and enforced in conjunction with applicable building codes, monitoring the following inspection data (as needed):</i> | | | | |
| | <ul style="list-style-type: none"> Number of fire inspections conducted % of re-inspections Average hours per plan review - residential Average hours per plan review - commercial/industrial % of plan reviews completed by target date | | | | |
| Strategy: Build and Reinforce Public Awareness to Reduce the Probability of an Incident | | | | | |
| <i>Tactics:</i> | <i>Maintain a collaborative working relationship with the Colorado Safe Kids Coalition and area hospitals to promote child safety with the Car Seat Installation program</i> | | | | |
| | <i>Measure & monitor the following dimensions as needed:</i> | | | | |
| | <ul style="list-style-type: none"> Number of car seat installations % of car seat installations where corrections were needed | | | | |

| | | Target | 2012 | 2013 | 2014 |
|---|--|--------|------|------|------|
| | <p><i>Maintain trained personnel to provide counseling session for Juvenile Fire Setters, measuring & monitoring the following dimensions:</i></p> <ul style="list-style-type: none"> • Number of sessions/hours • Average time per session in hours • % of sessions viewed as helpful by juvenile's guardian | | | | |
| | <p><i>Conduct effective fire investigations, measuring & monitoring the following dimensions as needed:</i></p> | | | | |
| | <ul style="list-style-type: none"> • Number of fire investigations conducted | | | | |
| | <ul style="list-style-type: none"> • % of cases cleared | | | | |
| | <ul style="list-style-type: none"> • Average time for investigations (start to court filing) | | | | |
| <p>Strategy: Integrate a Community-wide Emergency Preparedness Program for Natural or Man-made Disasters</p> | | | | | |
| <i>Tactics:</i> | <p><i>Ensure that all Continuity of Operations Plans for each City department are reviewed and updated annually</i></p> <ul style="list-style-type: none"> • Measure & monitor % of plans updated | | | | |
| | <p><i>Ensure that all political leaders are trained on emergency contingency plans annually measuring by:</i></p> <ul style="list-style-type: none"> • % of elected officials trained • % that rated the training as needful or important | | | | |
| | <p><i>Ensure that the Local Emergency Operations Plan and the Hazard Mitigation Plan are reviewed and adopted by all appropriate governing bodies.</i></p> | | | | |
| | <p><i>Provide annual disaster drills that include all appropriate levels of government and meet federal mandated guidelines, measuring & monitoring the following dimensions as needed:</i></p> <ul style="list-style-type: none"> • % of partner organizations involved in drills • % of participants that rated the drill as effective | | | | |
| | <p><i>Ensure effective Emergency Operations Center operations, measuring & monitoring the following dimensions as needed:</i></p> <ul style="list-style-type: none"> • Number of senior management team trainings • % of management team completed training • Number of EOC activations at various levels • % of other city & outside organizations that participated in activation de-briefing • % of participants that rated the activation as effective or excellent | | | | |
| | | | | | |

| Goal: Deliver Cost Effective Services | | | | | |
|--|--|--------|------|------|------|
| | | Target | 2012 | 2013 | 2014 |
| Strategy: Ensure that the Citizens Receive Consistent Services for the Tax Dollar | | | | | |
| | <ul style="list-style-type: none"> • % of cost recovery for permitting • Annual partner contribution assessments | | | | |
| | <ul style="list-style-type: none"> • % of cost recovery on deployments outside of services area (not mutual/auto aid) • FTEs per 1000 | | | | |
| | <ul style="list-style-type: none"> • Cost per capita • % of citizens satisfied with performance in the City of Loveland community survey • Of citizens who have received LFRA services, % satisfied with performance. | | | | |

X. RECOMMENDATIONS/IMPLEMENTATION

This section of the strategic plan focuses on recommendations for implementation. The section is broken out into two distinct segments. The first segment is identified as "Strategic Plan Priorities" for LFRA; the second segment is identified as "Other Organizational Needs." Both of these segments focus on the operational period of the plan (2012-2020) with a few exceptions. The categorization for implementation of the plan priorities is based primarily on the elements listed in the Model One Basic Services Expansion Plan (see Section VI). Within the listed plan priorities, there are four subcategories:

- High Priority
- Intermediate Priority
- Future Priority
- Additional Priorities/Needs

High Priorities: Elements in either Phase 1 or Phase 2 of the plan (2012-2015) that relate to the addition of needed personnel or high priority capital items.

Intermediate Priorities: Elements in Phase 3 of the plan (2016-2017) that relate to the addition of needed personnel or intermediate priority capital items.

Future Priorities: Elements in Phase 4 of the plan (2018-2020) that relate to the addition of needed personnel or future priority capital items.

Additional Priorities/Needs: These are additional capital and personnel priorities that have no timeline set for their completion of implementation and no funding stream identified.

In the accompanying chart (Figure 10-1) the three highest levels of priorities are color coded with each element listed in the appropriate phase of the plan. With just a few exceptions the levels of priorities are linked to the phases of implementation.

Beyond the first three levels of priorities in the first segment, several other system needs are listed. The elements continued in this next segment are listed in the proposed order of priority, with no recommended timeline for any of these elements. Another distinction for this section and the needs listed is in their funding. The first three priority levels listed in the first segment of this section have identified funding streams and are a part of the future budget for LFRA; they will be funded by the revenue allocation formula for the City of Loveland and the Loveland Rural Fire Protection District. The additional priority level and the other system needs elements could be described as "unfunded priorities" for the organization. These elements will have to be funded by alternate sources such as grants or additional funding sources.

As with each section of this strategic plan, the recommendations must always be evaluated and re-evaluated over the operational timelines for the plan. Changes could occur in the prioritization of some of the elements based on changes from the stated planning assumptions. In addition, funding streams could change over time and alternate funding such as grant money could become available favoring the funding of one departmental need over another.

Model One Basic Services Expansion Plan

| | COST | 2012/ 13 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|---|---------------------|-------------|------|------|------|------|------|------|
| PHASE 1 2012-2013 | | | | | | | | |
| Add 6 FT Firefighters for Engine 6 & Truck 6 | \$ 426,777* | | | | | | | |
| Add funding for part-time paid F/F program | \$ 70,420* | | | | | | | |
| Add Public Safety Administrative Director position | \$ 130,000* | | | | | | | |
| Add 1 Lieutenant position to CSD | \$ 106,140* | | | | | | | |
| TOTAL Increase for O&M for Phase 1 | \$ 733,337 | | | | | | | |
| Expand Station 6 | \$ 930,000 | | | | | | | |
| Purchase new fire engine | \$ 483,000 | | | | | | | |
| TOTAL Capital \$ for Phase 1 | \$1,413,000 | | | | | | | |
| PHASE 2 2014-2015 | | | | | | | | |
| Add 6 FT positions for new Heavy Rescue Squad 2 (3 Lieutenants and 3 Engineers) | \$ 694,389* | | | | | | | |
| TOTAL Increase for O&M for Phase 2 | \$ 694,389 | | | | | | | |
| Construct new Station 2 | \$2,900,000** | | | | | | | |
| Purchase new Heavy Rescue Squad | \$ 500,000 | | | | | | | |
| Replace Aerial Tower | \$1,200,000 | | | | | | | |
| Refurbish 2000 Smeal Aerial Ladder for Reserve Truck | \$ 475,000 | | | | | | | |
| TOTAL Capital \$ for Phase 2 | \$5,075,000 | | | | | | | |
| PHASE 3 2016-2017 | | | | | | | | |
| Add 9 FT position for new Station 10 (3 Lt., 3 Eng., 3 FF) | \$ 980,434* | | | | | | | |
| Add 1 Administrative (secretarial) position | \$ 54,450* | | | | | | | |
| TOTAL Increase for O&M for Phase 3 | \$ 1,034,884 | | | | | | | |
| Build new Station 10 | \$2,299,000** | | | | | | | |
| Replace fire engine | \$ 530,000 | | | | | | | |
| Refurbish Water Tender 1 | \$ 237,000 | | | | | | | |
| TOTAL Capital \$ for Phase 1 | \$ 3,066,000 | | | | | | | |
| PHASE 4 2018-2020 | | | | | | | | |
| Add 3 FT firefighters for coverage/rover positions | \$ 262,308* | | | | | | | |
| TOTAL Increase for O&M for Phase 4 | \$ 262,308 | | | | | | | |
| Refurbish Water Tender 5 | \$ 357,000 | | | | | | | |
| Replace Front Line engine (2020) | \$ 597,388 | | | | | | | |
| TOTAL Capital \$ for Phase 4 | \$ 954,388 | | | | | | | |

*All O & M costs include a 3.5% annual inflationary increase ** These estimates were provided by City of Loveland Facilities in early 2011; they will need to be re-evaluated in the coming years based on the construction trends and costs per square foot.

High Priority
 Intermediate Priority
 Future Priority

STRATEGIC PLAN PRIORITIES

High Priorities Phase 1

New Fire Engine: A new fire engine will be built and delivered in 2012 as part of the City of Loveland's Capital Expansion Plan. This engine is part of the long-term replacement plan and is scheduled to be assigned to Fire Station 6. Capital costs are estimated at \$483,000.

Expansion for Fire Station 6: Expanding Fire Station 6 to accommodate two fully staffed crews (an Engine and Truck company) addresses the need to enhance fire/rescue services in the eastern portion of the LFRA's response area. Construction to expand Station 6 will begin in mid-2012. The expansion will be approximately 3000 square feet of new space with some remodeling of existing space. Total cost estimates are expected to be \$930,000.

Add Six Full-Time Firefighters for Engine 6 / Truck 6: Six full-time firefighters are to be hired in 2013. These six firefighters will increase the minimum staffing levels on Engine 6 and Truck 6 to three firefighters per apparatus on both of these fire companies for all three shifts. Engine 6 and Truck 6 have been the final two pieces of apparatus that have allowed a minimum staffing level of two. Annual full-cost budgeting estimates for the additional personnel are \$426,777 beginning in 2013.

Additional Funding for Part-Time Paid Firefighter Program: Additional funding for this program is expected to add six more part-time paid firefighters in 2013 to the 12 current positions. These positions will serve to address many important staffing areas including minimum shift staffing. Cost estimates are \$70,420 annually, beginning in 2013.

Add Public Safety Administrative Director Position: In 2012 Loveland Fire Rescue Authority came into existence. Clear administrative and financial needs were identified in the creation of the authority. This position came on line at the end of 2011 with the Fire Authority assuming responsibility for funding beginning in 2013. Annual full-costs budgeting estimates are \$130,000 beginning in 2013.

Add Lieutenant for Community Safety Division (CSD): In 2009 the Fire Prevention Bureau (now CSD) lost half of its staff due to a city-wide effort to reduce staff and spending. Several fire prevention-related services were reduced during these times of budget reduction and reorganization. This Lieutenant's position is intended to restore some of the personnel to the CSD for prevention related functions and provide the necessary staffing for improving inspection services. Estimated full-cost budgeting expenses are \$106,140 annually beginning in 2013.

High Priorities Phase 2

Construction of New Fire Station 2: The construction of a new Fire Station 2 will address the service level needs for an additional fire engine company to cover the northwest area and provide an adequate facility to expand to a heavy rescue company for the northern and western parts of LFRA's response area. Both of these needs were identified as deficiencies in the Insurance Services Office (ISO) 2008 Department evaluation. The option of moving the current Station 2 by building a new facility with two fire companies was the chosen option over expanding the current station to accommodate multiple fire companies and building a single fire station in the northwest. This option (relocating Station 2) is expected to result in a savings of 1.5 million dollars in capital expenses and 1 million dollars a year in operations and maintenance expenses.

Capital costs for this expansion are estimated at \$2,900,000 at 2013 dollars and will be funded by City Capital Expansion Fees (CEFs).

New Heavy Rescue Squad: The heavy rescue squad performs a number of fire-rescue services; most of these have to do with support operations for engine companies (forcible entry, search and rescue, laddering, ventilation, controlling utilities, and salvage and overhaul). In addition, these companies typically perform many of the more technical and specialized rescue functions (high angle, water rescue, trench rescue, and others). In the 2008 ISO evaluation, ISO recommended the addition of a service company (heavy rescue company) for the north and west portions of the fire response area. Currently, LFRA has one engine company operating out of Station 2 performing the functions of both an engine company and a rescue company. Capital will be required for the purchase of a heavy rescue squad vehicle for these support and technical rescue functions. The estimated capital cost for this vehicle is \$500,000, not counting equipment; it will be paid for by City CEFs and will be ordered in 2013.

Add Six Full-Time Positions for New Heavy Rescue Squad 2: (3 Lieutenants and 3 Engineers) This priority addresses the personnel for staffing the new heavy rescue squad. This expenditure includes a Lieutenant and Engineer for each of the three shifts, which would account for two of the three positions needed for each shift to fully staff this additional fire company. The third firefighter for the heavy rescue squad will come from the existing shift Fire Inspection Technician (FIT) position that is currently assigned to the engine company operating out of Fire Station 2. Estimated full cost budgeting expenses for these six positions are \$694,389 annually beginning in 2014.

Aerial Tower Replacement: The current aerial truck operated by LFRA is a 2000 Smeal 100 foot ladder. The target for replacement as set in the City of Loveland's Capital Plan is for 2014. History has shown that after ten years of line service, apparatus repair and maintenance costs rise significantly. A 14-year replacement plan for aerial apparatus, plus an additional 4-5 years in reserve status (20 years total service time) has been the targeted model within the Department. Replacement of the current aerial ladder with an aerial tower apparatus will provide LFRA with more tactical capability and offer greater life safety abilities to firefighters and civilians alike. Capital costs for the aerial tower replacement are estimated at 1.2 million dollars in 2014.

Medium Priorities Phase 2

Refurbish 2000' Smeal Aerial Ladder for Reserve Truck: Apparatus refurbishment can make sense in certain circumstances as a financially and operationally sound strategy. The 2000 Smeal aerial ladder seems to fit this strategy. Although the cab and chassis of the Smeal ladder truck are worn and in need of mechanical repair or replacement, the aerial ladder, outriggers, and compartments are all in good shape. The strategy of providing a new cab and chassis and reusing the other operational components makes sense for this piece of apparatus. After refurbishment, the 2000 Smeal will then become a reserve apparatus and be used as the reserve aerial truck for system recalls and for greater alarm incidents. Currently a 1995 General Telesqurt apparatus is functioning in this capacity and will have reached the end of its life span for service in 2015. This refurbishment option is a very cost-effective way to gain many more years of service from some of the more expensive pieces of fire apparatus (like aerials) and has been used successfully by many fire departments. The capital cost estimate for this refurbishment of the aerial ladder is \$475,000 and will be funded from the City's capital expansion plan in 2015.

Medium Priorities Phase 3

Construction of New West Fire Station 10: Another identified area of deficiency in services is the far west side of LFRA's response area. This new fire station will significantly improve response times in the Urban Response Area (URA) and in the west area of the entire fire district. The station is proposed as a single fire company house for one engine company. Capital costs are estimated at \$2,299,000 at 2013 dollars and will likely be funded jointly by City CEFs and Rural District capital dollars. Construction is expected in 2016-2017.

Add Nine Full-Time Positions for New Station 10: (3 Lieutenants, 3 Engineers, 3 Firefighters): These are the full-time positions needed to staff the new engine company for Station 10 at the minimum staffing level of three per fire company on all three shifts. Estimated full cost budgeting expenses for these nine positions are \$980,434 annually beginning in 2016-2017.

Add One Administrative Support (secretarial) Position: This administrative position is intended for the Suppression Division. The Suppression Division has operated without an administrative support (secretarial) position since 2011. It is anticipated that as a result of organizational growth, this position will be needed. Annual full-cost budgeting expenses for this position, beginning in 2016, are estimated to be \$54,450.

Fire Engine Replacement: A new fire engine is needed for replacement or to add to the fleet for coverage of the new station's response area. This engine will feature a standard design engine and is anticipated to cost \$530,000, which is planned as part of the City's capital replacement plan in 2016.

Refurbish Water Tender 1: Water tenders are used nearly exclusively in the Rural Fire District where fire hydrants are sparse or non-existent. This piece of apparatus is another example of when refurbishment with a new cab, chassis, and reused operational components makes sense. Capital expenses for this refurbishment will be paid for by the Rural District at an estimated cost of \$237,000 in 2016.

Future Priorities Phase 4

Add 3 Full-Time Firefighters for Coverage/Rover Positions: Coverage and rover positions are utilized within the three-tiered staffing model when vacancies occur due to firefighters' vacations, sick leave, administrative leave, or any other type of absenteeism. In 2012 LFRA utilized three rovers per shift. With additional staffing and a predictable increase in paid time off based on an older workforce, four rovers per shift will be needed by 2019. This priority accounts for the hiring of three firefighter-level positions to act as rovers, one per shift. Estimated full cost budgeting expenses for these three positions are \$262,308 annually beginning in 2019.

Refurbish Water Tender Five: Water tenders are used nearly exclusively in the Rural Fire District where fire hydrants are sparse or non-existent. Water Tender Five is another piece of apparatus for which refurbishment with a new cab, chassis, and reused operational components makes sense. Capital expenses for this refurbishment will be paid for by the Rural District at an estimated cost of \$357,000 in 2018. Costs for this water tender are somewhat higher because it is a four-wheel drive tender.

Replace Front Line Engine (2020): A new fire engine is needed for replacement or to add to the fleet for coverage of the response area. This engine is expected to be another standard design engine and is anticipated to cost \$597,388. This engine is planned for at the end of this strategic

plan's operational period in 2020. Funding is anticipated to come from the joint capital replacement fund provided by the agreed-upon revenue allocation formula in the Fire Authority's Intergovernmental Agreement (IGA).

Additional Priorities/ Needs

Type 6 Wildland Engine: A Type 6 engine can also be described as a brush truck or brush patrol unit. LFRA operates four-wheel drive flat-bed Type 6 apparatus with small pump units (50 g.p.m. minimum) and a water tank (150 gallons minimum), a hose reel, extra wildland hose, and equipment storage. These units are suitable for off-road use and very effective for grass fires and use in the Wildland Urban Interface (WUI) area. Currently LFRA operates with two of these units and has an immediate need for one additional unit in the event one of the other Type 6 units is on deployment or out of service for mechanical reasons. These units have never been placed on the City's large capital apparatus replacement plan; the Rural District has purchased both Type 6 units currently in service. Capital costs for a new Type 6 engine are around \$109,000.

Reserve Coordinator / Recruitment Retention Officer: With the use of the three-tiered staffing workforce program and a dependency on reserves and part-time paid firefighters for staffing, this position is critical for the success and continuance of the program. The Recruitment/Retention Officer position will ensure that high quality reserves will enter LFRA and the best of these will transition into part-time and full-time positions. This position will also ensure that logistical needs of the reserves and part-time paid firefighters are met, increasing the chance that these firefighters will stay with LFRA for longer periods of time. LFRA proposes to fill this position with an on-line officer in a developmental/rotational position with full-cost budgeting expenses estimated to be \$106,140 at 2013 dollars.

ARFF Program Manager and Stand-By Coverage: LFRA is responsible for maintaining a trained cadre of firefighters for Aircraft Rescue and Firefighting services (ARFF) and stand-by coverage for certain flights in and out of the Fort Collins-Loveland Airport. Currently the program and stand-by coverage are managed by on-shift firefighters. The result is that one LFRA engine is taken out of service 25-30 times per month for two to four hours at a time. This workload and removal of an engine company commits needed fire-rescue resources and eliminates their service to the remainder of the system during stand-by coverage. One way to address this need is the addition of a certified Driver-Operator/Acting Lieutenant to manage the ARFF program and perform stand-by coverage during the week (Monday-Friday). This added position would be developmental and rotational with full-cost budgeting estimates at \$80,600.

Additional Training Firefighter: Currently the training division is managed by one Battalion Chief and three on-shift training Captains. An additional firefighter is needed to assist with training exercises, building and tearing down props, and general labor at the training center. Presently these functions are done by on-shift firefighters and when possible, a reserve is assigned to the training division to assist. This added position would be developmental and rotational with full-cost budgeting estimates at \$71,129 annually. An alternate means to address this position could be accomplished by using part-time firefighters.

Additional Plans Review Inspector for Community Safety Division: In 2009 the Fire Prevention Bureau (now CSD) for LFR had five full-time inspectors including two Plans Review Specialists. In 2012 the numbers have been reduced to three full-time Inspectors and one part-time Plans Review Specialist. An additional Inspector and Plans Review Specialist will be

needed. This position would likely be a civilian position with full-cost budgeting estimates at \$62,400 annually.

OTHER ORGANIZATIONAL NEEDS

Type 3 Wildland Urban Interface (WUI) Engine: A Type 3 wildland engine is larger in size and capacity than a Type 6, yet it has similar off-road capacities and is expected to be able to traverse nearly the same type of terrain. A Type 3 is usually equipped to pump two or three 1½-inch handlines in order to perform structure protection as well as wildfire attack. Minimum capacities for water flow are 150 gpm, and water tank size is 500 gallons minimum. The need for a Type 3 in the LFRA system has been demonstrated by past experience from fires in the WUI area (Reservoir Road Fire for example) and for predictions and planning assumptions for additional structures in Loveland's WUI. Estimated capital costs for a Type 3 WUI engine run from \$275,000 - \$300,000, not including equipment. It is expected that grant funding will be the primary means for financing the costs of this apparatus.

Purchasing Land for Future SE Fire Station: As indicated earlier in the plan (see Section III Basic Planning Assumptions), there will likely be a need for an additional fire station in the southeast area of LFRA's district. This expansion is currently listed as part of the "Phase 2 Planning" (2021-2030). However, a more rapid expansion of the Hwy 402 corridor, a large increase in commercial development in that area, or an overall increase in the Loveland Community population beyond the expectation of normal expansion could expedite the need for this station. Purchasing the land for this station in the operational period of this strategic plan (2012-2020) makes sense from several perspectives: land availability and costs are two of the primary reasons. Land acquisition for this station, based on response profile and need, appears to be in the area of Hwy 402 and South Boise Avenue and should be 2-3 acres in size. Capital cost estimates are difficult to predict at this time, but should be expected to range from \$50,000-\$75,000 per acre.

Training Facility Enhancements and Expansion: The current training facility is adequate for the size of the organization and use of the facility. Wear and tear on some of the more utilized props (the burn building being the most notable) will need to be factored in for major repair and replacement. Other large capital needs should include an expansion of or new apparatus and equipment storage areas and the development of a new garden apartment training prop. The garden apartment prop will allow firefighters to train in more realistic circumstances (reality-based training) and practice firefighting operations in one of the most common buildings found in the Loveland community. Capital cost estimates for these enhancements and expansions are very difficult to estimate; however, a target should be set for a minimum amount to be set aside annually for these capital improvements.

Technology Improvements and Fiber Optic: Only a portion of the LFRA network of stations and facilities are served by high-speed Internet and fiber optic services. The infrastructure needs for these types of improvements are cost prohibitive for a fire department-only solution. Cost sharing and problem solving for enhanced technology is an over-arching City need, and technology operation and maintenance should be developed over the course of this plan. In addition a long-range capital plan should be developed for LFRA's technology needs. A clear cost for these needs and services is unavailable at the time of this writing.

Appendix A: PLANNING ASSUMPTIONS

Planning assumptions have been used throughout the strategic plan. Basic Planning Assumptions were a part of Section III, and more specific areas for planning assumptions were included in several other areas. In this portion of the appendix, a complete list of all of the planning assumptions has been listed for the convenience of the reader and plan managers.

Basic Planning Assumptions for Loveland Fire Rescue Authority for Phase 1 and Phase 2

Phase 1 will include organizational strategic goals and objectives with costs identified

Phase 1 Planning Assumptions

1. ***Service Levels Provided*** - Current and future service levels are expected to be maintained or improved, with the noted exceptions listed for new stations and service areas.
2. ***Population Expansion*** - Projections for expansion will assume a flat growth rate for the years 2011-2013 and project an approximate 2.5% growth per year from 2014-2020. This would calculate into a population of approximately 99,936 in 2020 for the Fire Authority service area or response area.
3. ***Station/Fire Company Expansion*** - Projections for replacement or addition of new service fire stations and staffing would include:
 - a. *Adding 6 FT positions for minimum staffing for Engine 6 & Truck 6*
 - b. *Adding 1 heavy rescue company to Station 2 – (6 FT positions)*
 - c. *Adding 1 new engine company to the west area of District (9 Positions)*
 - d. *Adding 3 FT positions for coverage or fill-in positions*

These projections would include building a new fire station in the northwest portion of the district to replace the current Station 2 and building a new fire station in the west part of the district (Hwy 34 and County Road 27 area). Projections for fire company expansion would be a target for minimum fire company staffing at three firefighters per company and a targeted goal of .94 to .95 firefighters per 1000 population.

4. ***Workforce Staffing Methods*** - Projections for this phase would include the utilization of the three-tiered system of reserves, part-time paid, and full-time paid firefighters. The expectation would include assigning of reserves on an as-needed basis for accomplishing the criteria for minimum hours worked (currently 36 hours/month). It is expected that part-time paid firefighters would be assigned shifts as part of the daily minimum staffing criteria for no more than 15% of the paid workforce or no more than three on-duty fire companies utilizing a part-time firefighter for minimum staffing criteria.
5. ***Additional Non-Uniformed FTEs*** - Projections for workforce expansion should include a minimum of a Public Safety Administrative Director (to help administrate the Fire Authority and work with Loveland PD), one additional Administrative Assistant, and one Technical Specialist or Inspection Services Manager in the Community Safety Division.
6. ***Selection of Model One Basic Services Plan*** - Model One Basic Services Plan is to be the plan of choice for future planning assumptions.

Phase 2 (2021-2030) will include planning expectations without identified funding streams.

These planning assumptions are expected to be very general and based on a historical and projected forecast of anticipated Authority needs during this timeframe.

Phase 2 Planning Assumptions

1. **Organizational Planning Goals/Expectations** - Projections for this next phase (2021-2030) should include *consideration* for:
 - a. *Re-staffing of the airport station (Station 4) for area coverage and addressing expanded airport operations and/or expansion in the commercial business park or commercial area around the airport. This will be reviewed on an "as needed basis" within the City of Loveland and the Rural District's planning, and periodically with the Airport Director and the Director of Public Works to ensure proper service level needs are maintained.*
 - b. *Adding one fire station to the south/southeast corridor, projected in the area of South St. Louis and Hwy 402*
 - c. *Expanding for an additional truck/ heavy rescue company*
 - d. *Expanding for a paid staff position for Big Thompson Canyon station (40 hour training and response position)*
 - e. *Increasing minimum staffing from three firefighters per fire company to four.*
2. **Workforce Staffing Analysis** - Projections in Phase 2 should include a comprehensive analysis of the three-tiered workforce plan with recommendations for revisions or changes. This would include a workforce staffing and needs analysis of the Big Thompson Canyon area of the district.

Specific Planning Assumptions from Applicable Sections - Listed by Subject

Planning Assumptions for Staffing and Deployment

Staffing and Deployment Planning Assumption 1 - Fire companies (those working on engine and truck companies) for LFRA are to be staffed at three personnel minimum with a target for deployment for structure fires at 14 firefighting personnel, meeting the intent of NFPA 1710.

Staffing and Deployment Planning Assumption 2 - The three-tiered staffing model, made up of reserves, part-time paid, and full-time paid firefighters, is the workforce staffing model that will be used by LFRA throughout the years of operation of this strategic plan (2012-2020).

Staffing and Deployment Planning Assumption 3 - Numerous organizational advantages exist with the utilization of the three-tiered staffing model, including significant annual cost savings for LFRA.

Staffing and Deployment Planning Assumption 4 - A need exists for a full-time Recruitment, Retention, and Logistics Officer if the three-tiered staffing model is to be operated at a level of efficiency and dependability.

Staffing and Deployment Planning Assumption 5 - The three-tiered staffing model has two major concerns that can impact its future use: overuse of the part-time paid firefighters and their lack of

overall firefighting experience. The feasibility for using the three-tiered staffing model in the future must be considered for future planning.

Staffing and Deployment Planning Assumption 6 - Periodic, ongoing evaluations for the efficiency and effectiveness of the three-tiered staffing model are needed. In addition, there is a need for a future, more comprehensive, workforce-staffing analysis to determine the best and most effective future staffing model for LFRA.

Staffing and Deployment Planning Assumption 7 - All future staffing levels within every division of LFRA are based on normal forecasted expansion of population and businesses or industrial complexes within the Fire Authority's response area.

Planning Assumptions for the EMS System

EMS Planning Assumption 1 - The current model for the EMS system within the LFRA district, which includes BLS services and support functions provided by LFRA and ALS services and transport provided by TVEMS, provides high quality levels of citizen service and a high level of EMS patient care.

EMS Planning Assumption 2 - The response model that is currently in place, with the noted targets for performance of a BLS unit on scene within 5 minutes and 59 seconds from the time of dispatch and an ALS transport unit on the scene within 9 minutes, 90% of the time within the urban response area is appropriate as a target for performance goals.

EMS Planning Assumption 3 - Relevant performance measurements need to be monitored, measured, and reviewed at least annually for adherence to specific standards of performance.

EMS Planning Assumption 4 - A collaborative process between LFRA and TVEMS for strategic and operational planning is necessary for the continuance of high quality EMS in the LFRA district.

EMS Planning Assumption 5- A commitment for continuous improvement in the EMS system within the LFRA district will include Basic Life Support Services, Advanced Life Support Services, Emergency Medical Dispatching, and Public Medical Awareness and Training including activation of the EMS system and citizen CPR training.

Planning Assumptions for Wildland

Wildland Planning Assumption 1- Future trends suggest that the WUI problem is likely to grow to a much higher level during the time of this plan, including more people and more structures within the WUI zone.

Wildland Planning Assumption 2 - The current model of fire protection and mitigation for wildland fire operations will likely not be adequate for the future. More resources and funding will need to be invested to keep up with the anticipated future needs.

Wildland Planning Assumption 3- Current federal and possibly state resources, upon which we currently depend, will likely be reduced, and in some cases eliminated in the future.

Wildland Planning Assumption 4 - Development of even stronger operational partnerships and regional cooperative relationships will be needed to offset the loss of federal and state resources in order to maintain an adequate and reliable emergency response. Local Incident Management

Teams (IMTs) should be evaluated and developed for future operations in the region of Northern Colorado, including areas within the LFRA response district.

Wildland Planning Assumption 5 - Funding streams for wildland fire apparatus such as Type 3 and Type 6 Engines need to be identified and included in long-term planning for the Fire Authority.

Wildland Planning Assumption 6 - If voluntary programs such as those outlined in points 1 and 2 (above) are successful, many of the problems listed in this section of the plan could be adequately addressed. Actions' trigger points and tracking of data should be identified and implemented into the long-range future plans.

Planning Assumptions for Special Operations

Special Operations Planning Assumption 1 - The current model for SOT is adequate for the current call load and community demand for services in this area.

Special Operations Planning Assumption 2 - Future growth in the community and region surrounding LFRA's response area will likely place much more demand on the services of the Department's SOT.

Special Operations Planning Assumption 3 - Additional funding will likely be needed to account for additional training and equipment for SOT processes. Alternate funding streams, including grants and other more reliable streams, will need to be investigated to address the needs created by growth and expansion.

Special Operations Planning Assumption 4 - The addition of Heavy Rescue 2 in the northwest portion of the LFRA response area will greatly improve the day-to-day operations for SOT and other specialized operations.

Special Operations Planning Assumption 5 - A regional approach to the problem of enhanced services needed for SOT is perhaps the most viable and best option for maintaining and improving overall specialized operations service levels within the LFRA response area. More concentration for the development of a regional team for specialized operations should be investigated within the time parameters set forth by this plan.

Special Operations Planning Assumptions 6 - The linkage to the state's FEMA USAR Team, Colorado Task Force I, is a viable option and enhancement to the local and regional team approach for special operations. Work should be done within the timeframe of this plan to investigate and incorporate the best linkage to this resource. State USAR Team membership may be an option, but at the least, a seamless process for request for service, dispatch, response, and deployment should be developed for the local and/or regional specialized operations team.

Planning Assumptions for Training

Training Planning Assumption 1- The current training plan and staffing model is mostly adequate for the internal training needs of the organization, based on current staffing levels and call loads.

Training Planning Assumption 2 - There is an immediate need for an additional full-time 40-hour firefighter within the training division to help with the more basic level training work.

Training Planning Assumption 3 - Several training division assessments are needed to evaluate the division's future staffing and financial needs. This analysis and the findings, along with recommended countermeasures, should be a part of this strategic plan.

Training Planning Assumption 4 - A comprehensive long-term analysis for how the training efforts will be carried out in the future using the Centralized, Decentralized and Ad-Hoc training delivery methods should be carried out and included in this and future strategic plans for LFRA.

Planning Assumptions for Safety

Safety Planning Assumption 1 - LFRA currently has a good safety culture and a commitment to firefighter and citizen safety.

Safety Planning Assumption 2 - Current safety deficiencies do exist in the organization and efforts will be required to address those deficiencies.

Safety Planning Assumption 3 - There will be a cost to staying committed to enhanced firefighter and citizen safety. Currently, several unfunded priorities that have a direct impact on firefighter and citizen safety exist within the Department. A plan to address these unfunded priorities should be developed and made a part of this strategic plan.

Safety Planning Assumption 4 - Safety planning needs to be a part of this strategic plan and other plans that follow.

Planning Assumptions for the Community Safety Division (CSD)

CSD Planning Assumption 1- LFRA needs to develop a future inspection program based on education and collaboration, targeting small businesses and involving line or suppression personnel as well as CSD staff.

CSD Planning Assumption 2 - Specific occupancies within the community will require specialized training and knowledge, skills, and abilities (KSAs).

CSD Planning Assumption 3 - Maintenance of trained personnel for the juvenile fire setters program and car seat installation program has a direct and needed life-safety impact.

CSD Planning Assumption 4 - The enhancement of training and outreach for emergency management and EOC operations is integral to a total overall community outreach safety plan.

CSD Planning Assumption 5 - LFRA's role in plans review and building review processes are critical to ensure a strong fire-rescue perspective in the review process and a more effective community safety impact in the built environment.

CSD Planning Assumption 6 - The overall review process is an evolving process that will change, improve, and transform over time.

CSD Planning Assumption 7 - Enhancements in the area of public education will be needed in the future, targeting "at-risk" citizens or areas within the community.

CSD Planning Assumption 8 - Public information and media outreach to the community are vital parts of the emergency response protocol that, in part, belongs to LFRA through the CSD; efforts for continuous improvement are a part of future planning.

CSD Planning Assumption 9 – Other developing areas such as hydraulic fracturing will require greater involvement and resources from CSD.

Planning Assumptions for Performance Measurements

Performance Measurements Planning Assumptions 1 - LFRA is committed to using a standardized measurement of performance objectives that will be referred to as *Service Level Indicators*.

Performance Measurements Planning Assumption 2 - The service level indicators used will use a combination of some past ICMA/CPMC dimensions and other dimensions that are selected based on desired measurable indicators.

Performance Measurements Planning Assumption 3 - The service level indicators will be matched to specific Authority goals and objectives listed within the 2012 Strategic Plan.

Performance Measurements Planning Assumption 4 - Most of the service level indicators will be charted, graphed, and used in LFRA's Annual Report, made available to the various governing bodies. These service level indicators are measurements used for organizational evaluation and continuous improvement.

Performance Measurements Planning Assumption 5 - The ISO PPC numbers and rating scale are valuable indicators for LFRA. The organization desires to maintain or improve upon the current PPC for both the City of Loveland and the Loveland Rural Fire Protection District.

Performance Measurements Planning Assumption 6 - Department accreditation is of interest to LFRA and will be evaluated further during the performance period of the 2012 Strategic Plan. Cost effectiveness of accreditation and feasibility will be key areas of focus in the evaluation.

Planning Assumptions for Communications

Communications Planning Assumption 1- Fire service organizations, including LFRA, have significant communication challenges for effectively communicating with their employees and with the citizens they serve.

Communications Planning Assumption 2 - Current methods for communication within the organization are working, but a comprehensive communication audit should be developed and engaged within the organization to objectively assess the current situation for what is working well, what areas need to be improved, and some ideas for making said improvements.

Communications Planning Assumption 3 - LFRA needs better, more relevant, and direct service level assessments for the external customers (citizens) it serves. It also needs to find an effective emergency services communication survey.

Appendix B: STATISTICAL DATA



Loveland Fire and Rescue
Statistical Data for
Northern Colorado/Southern Wyoming
Comparison Departments

2011 Data

Executive Summary

Research completed by the Fire Authority Review Committee clearly suggests that Loveland Fire and Rescue is underfunded and understaffed by nearly 30% when matched to its comparison departments in the region. Statistical data has been compiled in this brief report to give a more detailed view utilizing standard performance measurement data recognized throughout the industry.

Comparison data was reviewed from six other similar sized departments within the region*. Five of these departments are in Northern Colorado and one is in Southern Wyoming. All of these comparison departments provide similar emergency response profiles with relatively common citizen demographics. All of these departments are joint members and partners within the Front Range Fire Consortium (FRFC). Three of these departments are city fire departments with no rural responsibilities, one is a city department that contracts with a rural area on one side of their boundary line, one is a fire protection district, one is a fire authority, and one (LFR) is a city fire department contracting to the rural fire district that surrounds the entire city.

The list of the comparison departments include (in alphabetical order):

- Boulder Fire Department
- Cheyenne Fire Department
- Greeley Fire Department
- Longmont Fire Department
- Loveland Fire and Rescue
- Mountain View Fire Protection District
- Poudre Fire Authority (Fort Collins)

Critical comparison dimensions in this report include:

- Operating Budget
- Number of Uniformed Personnel
- Population Served
- Costs Per Capita for Services
- Size of Area in Square Miles
- Number of Fire Stations
- Number of Firefighters per 1000 Population

* **Note:** Additional lists of fire protection districts in Northern Colorado are compared for differing variables and the current mill levy rate.

2011 Financial Comparisons for Northern Colorado Fire Departments*

This comparison will look at three critical factors within each department:

1. Assessed valuation (which shows the ability of the area/district to pay)
2. The current mill levy (which shows what citizens in the area/district are actually paying)
3. A comparison using the mean (average) calculations and utilizing the weighted average.

| <u>Department</u> | <u>Assessed Value</u> | <u>Mill Levy</u> |
|------------------------|-----------------------|------------------|
| Loveland RFPD | \$232,073,285 | 5.808 |
| Poudre Valley RFPD | \$412,624,503 | 10.500 |
| Windsor-Severance FPD | \$385,880,370 | 7.194 |
| Johnstown FPD | \$152,995,990 | 9.524 |
| Berthoud FPD | \$128,603,054 | 15.274 |
| Mountain View FPD | \$363,146,835 | 11.747 |
| Boulder Rural FPD | \$204,526,050 | 11.747 |
| Fredrick-Firestone FPD | \$291,445,680 | 12.526 |
| Fort Lupton FPD | \$226,838,180 | 8.465 |

*Latest data indicates Windsor-Severance at 7.19 going to approx 8 mills in 2011 (source Windsor Now- On Line)

| | | | | |
|-----------------|-------------------|----------|---|--------------------------|
| Mill Levy Data: | Average/Mean | 92.785/9 | = | 10.309 average mill levy |
| | Weighted Average* | 71.703/7 | = | 10.243 weighted average |

*Weighted average drops the low (5.808) and the high (15.274) and averages the remaining seven numbers

*Source: Colorado Department of Local Affairs (DOLA) On Line: Property Tax Entities by County, Nov. 17, 2009

Mill Levy Rates for Northern Colorado Fire Departments

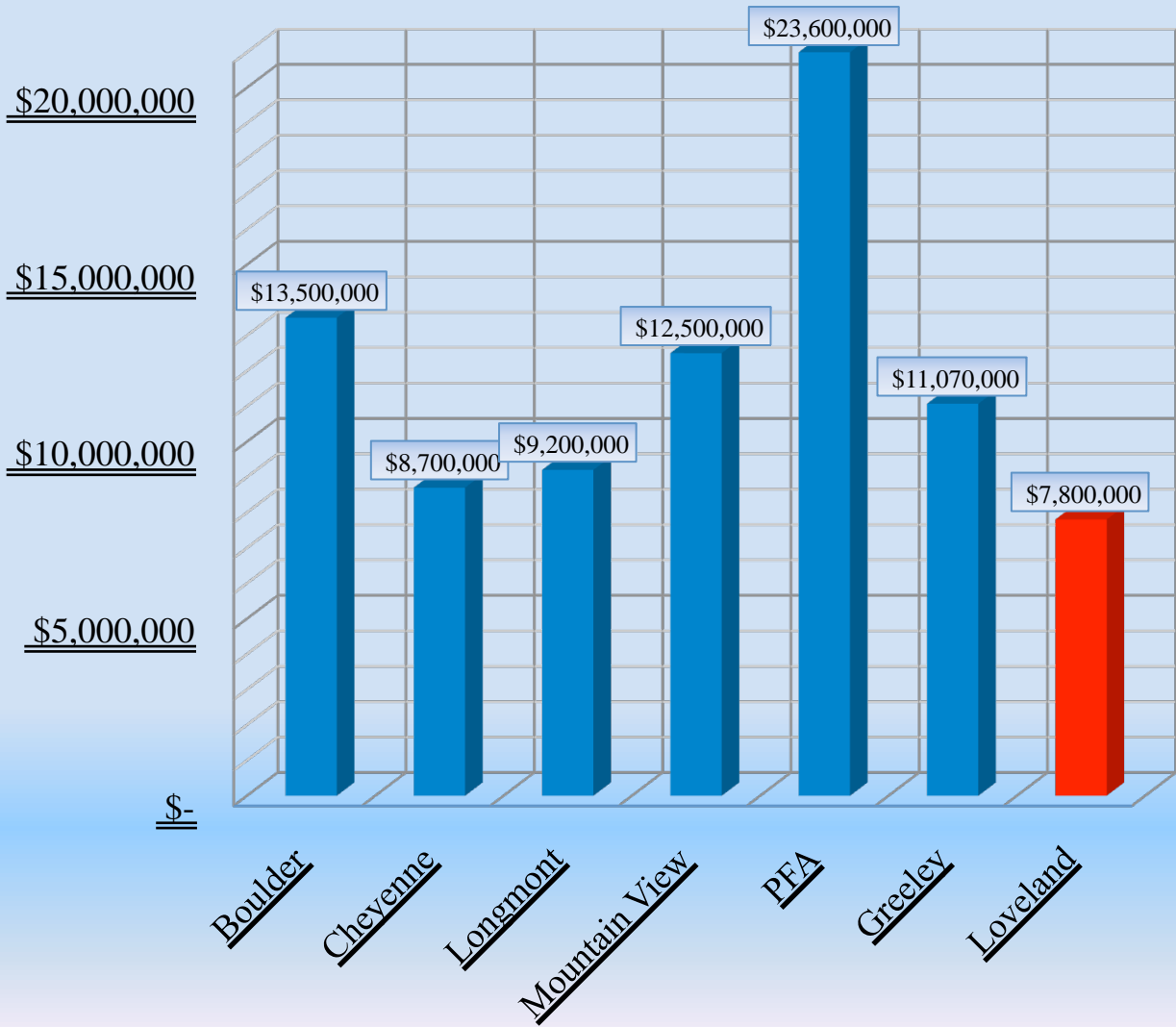
The list below is a sampling of the mill levy collected by departments in the Northern Colorado area, and where available, the approximate size of the population served. The source for this data, unless otherwise specified, is from a public Internet site listing mill levy rates for special districts, including fire protection districts. An effort was made to highlight the departments surrounding Loveland Rural Fire Protection District (LRFPD) and those in close proximity. All of the departments surrounding LRFPD to the north, east, and south are fire protection districts and they are italicized in the list below.

| DEPARTMENT | MILL LEVY | POPULATION |
|---|--|---|
| <i>Berthoud Fire Protection District</i> | 15.274 | 17,500 |
| Boulder Rural Fire Protection District | 11.747 | 18,000 |
| Brighton Fire Protection District | 11.795 | N/A |
| Fredrick-Firestone Fire District | 13.36 | 18,500 |
| <i>Johnstown Fire Protection District</i> | 9.486 | 8,500 |
| Mountainview Fire Protection District | 11.747 | 50,000 |
| <i>Poudre Valley Rural Fire Protection District</i> | 10.50 | 55,000 |
| Wellington Fire Protection District | 12.222 | 15,000 |
| <i>Windsor-Severance Fire Protection District</i> | 7.904 | 28,000 |
| <hr/> | | |
| TOTAL NINE COMPARISON DISTRICTS | <u>11.559</u> (AVG. MILL LEVY) | <u>26,312</u> (AVG. POPULATION) |
| Loveland Rural Fire Protection District | 5.808 | 23,000 |

Front Range Fire Consortium (FRFC) Comparison Department Data

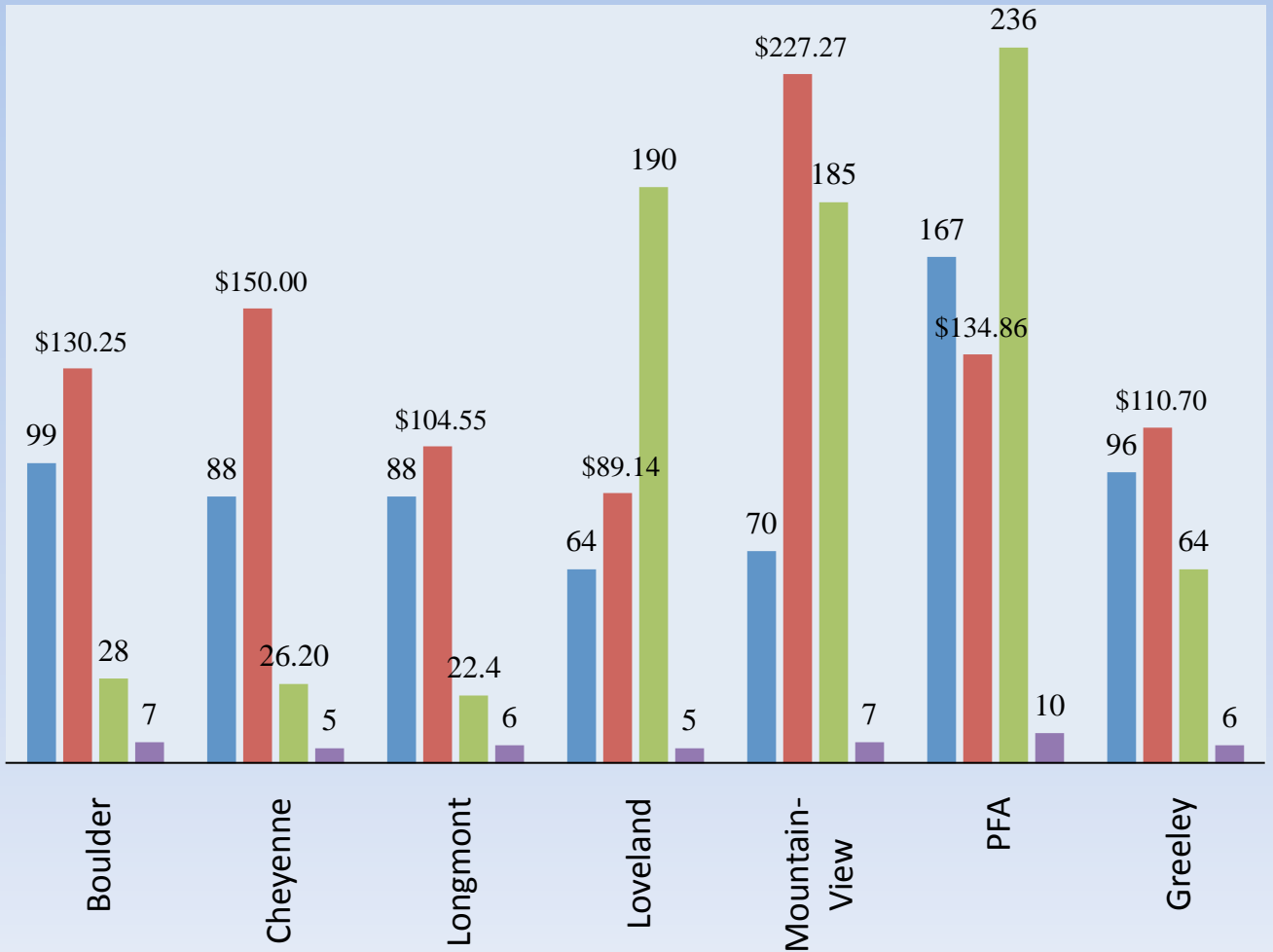
| City or Department | Operating Budget | Number of Uniformed Personnel | Population Served | Cost Per Capita | Size of Area by Square Miles | Number of Fire Stations | Number of Firefighters per 1,000 Population |
|-------------------------|---------------------|-------------------------------|-------------------|-----------------|------------------------------|-------------------------|---|
| Boulder | \$13,500,000 | 99 | 103,650 | \$130.25 | 28 | 7 | 0.96 |
| Cheyenne | \$8,700,000 | 88 | 58,000 | \$150.00 | 26.2 | 5 | 1.52 |
| Longmont | \$9,200,000 | 88 | 88,000 | \$104.55 | 22.4 | 6 | 1.00 |
| Mountain View | \$12,500,000 | 70 | 55,000 | \$227.27 | 185 | 7 | 1.27 |
| Poudre Fire Authority | \$23,600,000 | 166 | 175,000 | \$134.86 | 236 | 10 | 0.95 |
| Greeley | \$11,070,000 | 96 | 100,000 | \$110.70 | 64 | 6 | 0.96 |
| Loveland | \$ 7,800,000 | 64 | 87,500 | \$89.14 | 190 | 5 | 0.73 |
| TOTALS | \$86,370,000 | 672 | 667,150 | \$946.76 | 751.6 | 46 | 7.39 |
| | | | | | | | |
| Mean/Average | \$12,338,571 | 96 | 95,307 | \$135.25 | 107.5 | 7 | 1.06 |
| Weighted Average | \$10,994,000 | 88 | 87,430 | \$126.07 | 98.64 | 6 | 1.03 |
| | | | | | | | |
| Source of data is FRFC | | | | | | | |
| | | | | | | | |

2011 Operating Budgets without large capital items

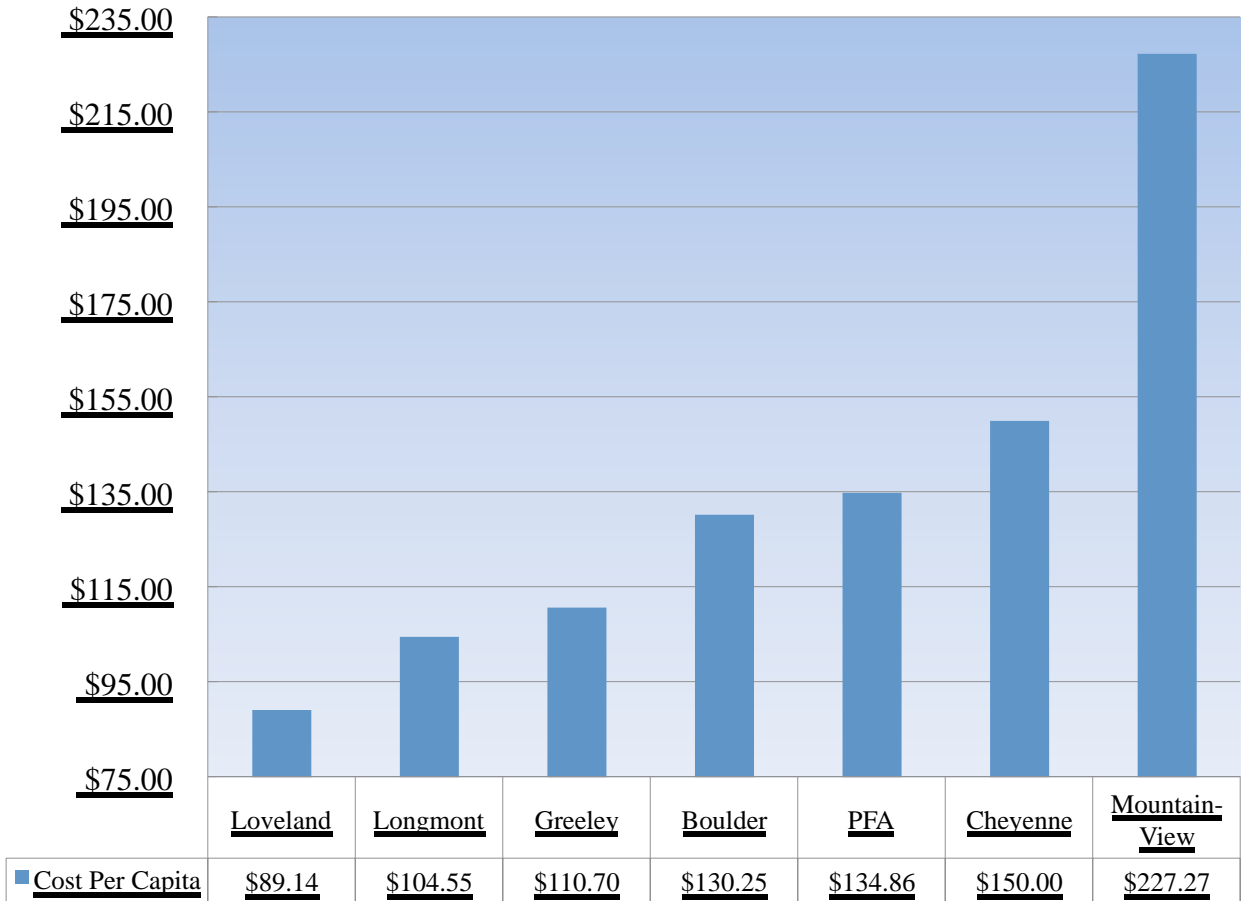


2011 Statistical Comparisons

■ Number of Uniformed Personnel ■ Cost Per Capita
■ Size of Area by Square Miles ■ Number of Fire Stations



2011 Cost Per Capita



Present Comparisons 2011

| | Operating Budget | # of Uniform Personnel | Population Served | Cost Per Capita | Size of Area | # of Fire Stations | # of F/Fs per 1000 pop. |
|-------------------------------|------------------|------------------------|-------------------|-----------------|---------------------------|--------------------|-------------------------|
| Average | \$10,994,000 | 88 | 87,430 | \$126.07 | 108 Sq. Miles | 6 | 1.03 |
| LFR | \$7,800,000 | 64 | 87,500 | \$89.14 | 190 | 5 | 0.73 |
| Difference In % + or - | (-29%) | (-27%) | Even | (-29%) | + Nearly 2 times the size | (-17%) | (-29%) |

Future Comparisons 2016 (Impacts from Implementation of Model One)

| | Operating Budget | # of Uniform Personnel | Population Served | Cost Per Capita | Size of Area | # of Fire Stations | # of F/Fs per 1000 pop. |
|-------------------------------|------------------|------------------------|-------------------|-----------------|-----------------------|--------------------|-------------------------|
| Average | \$13,057,421 | 104 | 98,000 | \$133.34 | 108 Sq. Miles | 6 | 1.06 |
| LFR | \$10,851,468 | 85 | 94,000 | \$115.44 | 190 | 6 | 0.90 |
| Difference In % + or - | (-17%) | (-18%) | (-4%) | (-13%) | + Nearly 2 times size | Even | (-15%) |

This chart shows a comparison between Loveland Fire and Rescue within the identified dimensions (from page B-5) and the mean/weighted averages. It also shows a comparison between the same dimensions in the future (2016 after the proposed expansions) and the mean/weighted averages from that same year. In each dimension for comparison, the lower number between mean and weighted average was utilized. Expansion numbers for the mean/weighted average was calculated on a 3.5% expansion per year, except for population increases, which were increased at a rate of 2% per year. This chart will provide a view of the impact of the implementation of Model One Basic Services Plan.

Appendix C: BIG THOMPSON CANYON AND LFRA

With the establishment of Loveland Rescue Fire Authority (LFRA), the decision for inclusion of the Big Thompson Canyon Volunteer Fire Department (BTCVFD) as part of LFRA was processed. This appendix item addresses the issues surrounding the history, process for inclusion, and the present and future status of the BTCVFD.

History

The BTCVFD was a separate fire department from the Loveland Fire and Rescue Department prior to the creation of the Fire Authority. BTCVFD had its own Fire Department ID number (FDID), had its own staff and chain of command, and managed its own training and operations. The Department was a part of the Loveland Rural Fire Protection District and was funded separately from the contributions made from the Rural District to the City of Loveland for the contract for fire protection services.

Process

When the decision was made to move forward with the establishment of the Fire Authority, discussions were also taking place within the Rural District Board and the Fire Chief about the inclusion of the BTCVFD as part of the Fire Authority. The decision was made to have the Fire Chief and his staff provide as much information as possible to the BTCVFD members related to the Fire Authority, advantages and disadvantages for inclusion, and other information. Once the members of the BTCVFD felt that they had enough information to proceed, their fire chief would make a recommendation to the Rural District Board representing the desire of the Canyon Department on the issues of inclusion. During the latter part of 2011, the BTCVFD Chief recommended to the Rural District Board the Department's desire to be a part of the newly created LFRA.

Present and Future Status

With the inclusion of the BTCVFD into LFRA very few changes, organizationally or operationally, are being made. Perhaps the biggest change is that some of the autonomy for the Canyon Department has been removed by adding the BTCVFD chief's position into the Fire Authority organizational chart at the division chief level. This places the Canyon Chief under the authority of the Fire Chief for LFRA. However, BTCVFD will still maintain a great deal of its autonomy for the present and near future. The Canyon Department will continue with the Department's own standards and certification requirements, funding for the BTCVFD will continue to be provided separately by the Rural District, and BTCVFD will continue to have its own officers and chain of command. As with all of the many changes and provisions outlined in the LFRA 2012 Strategic Plan, inclusion of BTCVFD as part of the Fire Authority will be a work in progress and will require periodic evaluation for operational success. It is also possible that the staff and firefighters within the BTCVFD will change in the future and they themselves may want to review the provisions within the IGA that establish the inclusions of the BTCVFD as part of LFRA. Any decision to change the status of the BTCVFD within the Fire Authority will ultimately be made by the Loveland Rural Fire Protection District Board of Directors.

Appendix D: INTERGOVERNMENTAL AGREEMENT (IGA)
ESTABLISHING THE FIRE AUTHORITY

**INTERGOVERNMENTAL AGREEMENT
FOR THE ESTABLISHMENT AND OPERATION OF THE LOVELAND FIRE RESCUE
AUTHORITY AS A SEPARATE GOVERNMENTAL ENTITY**

THIS INTERGOVERNMENTAL AGREEMENT is entered into this ____ day of _____, 2011, by and between the **CITY OF LOVELAND**, a Colorado home rule municipality, ("City") and the **LOVELAND RURAL FIRE PROTECTION DISTRICT**, a Colorado Special District, ("District"). The City and the District shall be jointly referred to as the "Parties" and individually as "Party."

WITNESSETH

WHEREAS, the District was formed in 1950; and

WHEREAS, since 1950, the District and the City, through the Loveland Fire and Rescue Department, have provided fire and emergency services to the District through a series of agreements between the Parties, the last being the Parties' Intergovernmental Agreement dated December 6, 2006 (the "2006 IGA"); and

WHEREAS, under the 2006 IGA and previous agreements between the Parties, the District has provided fire apparatus, equipment and supplies to the City for use by the Loveland Fire and Rescue Department to provide fire and emergency services both within the boundaries of the District and the City; and

WHEREAS, this relationship between the Parties has been mutually beneficial in providing quality fire and emergency services to persons and property within the Parties' respective jurisdictions; and

WHEREAS, the Parties have determined that it is in their best interests and that of their respective citizens, property owners, and visitors to form a separate governmental entity to be known as the Loveland Fire Rescue Authority to provide fire and emergency services within the Parties' respective jurisdictional limits beginning on January 1, 2012, as provided in this Agreement; and

WHEREAS, the City and the District each have the legal authority to enter into this Agreement pursuant to C.R.S. § 29-1-203(1) since each is lawfully authorized to provide fire and emergency services within their respective jurisdictions and, therefore, the Parties have the legal authority under C.R.S. § 29-1-203(4) to establish in this Agreement the Loveland Fire Rescue Authority as a separate governmental entity.

**NOW, THEREFORE, IN CONSIDERATION OF THE MUTUAL COVENANTS
CONTAINED HEREIN, AND OTHER GOOD AND VALUABLE CONSIDERATION,**

**THE RECEIPT AND SUFFICIENCY OF WHICH ARE HEREBY ACKNOWLEDGED,
THE PARTIES AGREE AS FOLLOWS:**

ARTICLE I: CREATION AND GOVERNANCE OF THE AUTHORITY

Section 1.1 Creation of the Authority and Termination of the 2006 IGA

- (a) The City and the District by this Agreement and pursuant to C.R.S. § 29-1-203(4) hereby establish as a separate governmental entity the Loveland Fire Rescue Authority (the "Authority"). The Authority shall be a legal entity separate and distinct from the City and the District.
- (b) The City and the District agree that effective at 12:01 a.m. on January 1, 2012, the 2006 IGA shall terminate and this Agreement shall replace and supersede the 2006 IGA in all respects.

Section 1.2 Governing Board

The governing body of the Authority shall be a board of directors consisting of five (5) members (the "Board"). All of the legislative and administrative powers of the Authority shall be vested in the Board except as otherwise provided in this Agreement. The Loveland City Council (the "City Council") shall appoint three (3) members and the District's board shall appoint two (2) members to the Board. The City Council shall appoint two (2) members of the City Council and the City Manager. In lieu of the City Manager, the City Council may appoint another City employee. The District's board shall appoint two (2) members of the District's board. In the event that any member is no longer an elected or appointed official of either of the Parties, that appointed member shall no longer be a member of the Board, and the member's seat on the Board shall be vacant. All vacancies on the Board shall be filled by the governing body of the appointing Party.

Section 1.3 Quorum

A quorum for the transaction of business at all meetings of the Board shall be three (3) members provided that one of the members is a District member.

Section 1.4 Meetings of the Board

- (a) Regular meetings. The Board shall hold regular monthly meetings at a time and place fixed by resolution of the Board.
- (b) Special meetings. The Board may conduct special meetings when necessary. Special meetings shall be called as provided in the By-laws adopted by the Board. At a minimum, special meetings shall be preceded by twenty-four (24) hours prior written notice to all members of the Board. A special meeting of the Board may be called by the chairperson of the Board or upon the request of two Board members.

- (c) Colorado Open Meetings Law and Open Records Act. The Board shall be subject to the terms and provisions of the Colorado Open Meetings Law, C.R.S. Section 24-6-401 et seq., and of the Colorado Open Records Act, C.R.S. Section 24-72-200.1 et seq.

Section 1.5 By-laws and Policies

The Board shall adopt By-laws and/or any necessary policies governing the responsibilities and duties of the Board consistent with the terms and conditions of the Agreement. The By-laws and any amendments thereto shall be approved by the City Council and the District's board before going into effect.

Section 1.6 Voting

Each member of the Board shall have one vote. The affirmative vote of a majority of the Board members present and constituting a quorum shall be required for any action of the Board.

Section 1.7 Actions Requiring a Vote of More Than a Majority of the Board

The following actions shall require an affirmative vote of at least four members of the Board:

- (a) The location of any new fire station; and
- (b) The approval of the Authority's annual budget.

Section 1.8 Officers

The Board shall elect a chairperson and vice chairperson from its members, and shall appoint a secretary who may, but need not, be a member of the Board. Said officers shall perform the duties customary for said offices including the following:

- (a) the chairperson shall sign all contracts on behalf of the Authority, except contracts or agreements that may be signed by the Fire Chief as authorized by the Board and shall perform such other duties as may be imposed by the Board;
- (b) the vice chairperson shall perform all of the chairperson's duties in the absence of the chairperson;
- (c) the secretary shall attest to all contracts signed on behalf of the Authority and perform such other duties as may be imposed by the Board.

Section 1.9 Powers of the Authority

The Authority shall have and may exercise all the powers of the City and/or the District regarding fire and emergency services to the full extent permitted by law. The Authority shall also have the following specific powers:

- (a) To make and enter into contracts;
- (b) To employ agents and employees;
- (c) To acquire, construct, manage, maintain, fund, plan and operate fire and emergency facilities, works, or improvements, or any interest therein;
- (d) To acquire, hold, lease (as lessor or lessee), sell, or otherwise dispose of any real or personal property utilized for the purposes of providing fire and emergency services or for related or accessory purposes;
- (e) To sue and be sued in its own name;
- (f) To fix, maintain, and revise fees, rates, and charges for functions, services or facilities provided by the Authority to the full extent permitted by law. All such fees, rates and charges shall be approved by the City Council and the District board prior to becoming effective;
- (g) To adopt policies respecting the exercise of its powers and the carrying out of its purpose consistent with the terms of this Agreement and the By-laws of the Authority;
- (h) To enter into mutual and automatic aid agreements with other fire and/or emergency service organizations including other special districts, municipalities, counties, and sheriff offices, which agreements must be first approved by the Parties' governing bodies;
- (i) To enter into lease purchase agreements for the acquisition of real and personal property;
- (j) To incur debts, liabilities or obligations provided that no such debts, liabilities or obligations shall constitute a debt, liability or obligation of either the City or the District;
- (k) To apply for, accept, receive and disburse gifts, grants, loans and any other aid from any governmental entity, political subdivision, other entity, or any person;
- (l) To invest any unexpended funds that are not required for the immediate operation of the Authority, as the Authority determines is advisable, in accordance with state law;

- (m) To administer and enforce the fire codes adopted by the City and the District;
- (n) To have and use a corporate seal; and
- (o) To exercise any and all other powers which are essential to the provisions of functions, services, or facilities by the Authority under this Agreement, any other Authority contract, or any applicable law.

The Authority shall not have the power of taxation or the power of eminent domain.

ARTICLE II: SERVICE AREA

The "Service Area" of the Authority shall be all lands and property within the jurisdictional boundaries of the City and the District.

ARTICLE III: ORGANIZATIONAL PROCEDURE

Section 3.1 Organization of the Authority

As soon as practicable after the date of this Agreement, the City and the District shall appoint the members of the Board as provided herein. As soon as practicable after appointment, the Board members shall schedule, notice and conduct an organizational meeting at which time the Board shall provide for its regular meetings, adopt By-laws, necessary policies, and elect officers.

Section 3.2 Delegation of Powers

The Parties each delegate to the Authority the power, duty and responsibility to provide fire and emergency services to each of the respective entities within the Service Area of the Authority including, without limitation, all fire suppression, prevention, emergency and rescue services, and related emergency management services. The Parties each agree, as more fully set forth in Article VI and VII of this Agreement, to provide personnel, fire stations, apparatus and equipment to the Authority. The Parties each agree to cooperate with the Authority in order to assist the Authority in carrying out its duties and responsibilities pursuant to the terms and conditions of this Agreement. The powers delegated to the Authority pursuant to this Agreement include any and all of the powers necessary or desirable to provided continued, efficient and economical fire protection, suppression, and emergency services to all persons and property within the Service Area.

Section 3.3 Personnel

The Authority may employ personnel necessary to carry out its powers, duties and responsibilities. Said employment shall be on the terms and conditions established by the Board.

ARTICLE IV: BUDGET AND AUDIT

Section 4.1 Annual Budget

The Board shall adopt an annual budget for maintenance and operation costs, capital costs, costs of services, and personnel costs, which shall include the costs related to the City's employees assigned under this Agreement. The Board shall submit the budget to the Parties' respective governing bodies for their approval. The Authority's proposed budget shall become effective only after approval by the Parties' respective governing bodies. Any supplemental appropriation by the Authority shall also be approved by the Parties' respective governing bodies before becoming effective. The Authority shall also comply with all applicable requirements of the Local Government Budget Law of Colorado.

Section 4.2 Accounts and Audits

The Authority shall provide for the keeping of accurate and correct books of account, showing in detail the capital costs, cost of services, and maintenance and operation costs of the Authority's facilities in accordance with all applicable laws and generally accepted accounting principles. Said books and records shall be open to inspection at all times during normal business hours by any authorized representative of the Parties. The Board shall provide for the auditing of all the Authority's books and accounts and other financial records pursuant to the applicable requirements of the Colorado Local Government Audit Law and the Colorado Local Government Uniform Accounting Law. The results of said audit shall be presented to the City and the District not later than thirty (30) days after acceptance by the Board.

ARTICLE V: FUNDING OF THE AUTHORITY

Section 5.1 Payment of Costs

Beginning on January 1, 2012, and monthly in advance thereafter for each calendar year during the term of this Agreement, the City and the District shall each pay to the Authority its respective allocated monthly share of all of the total estimated monthly costs and expenses of the Authority as set forth in its annual budget. The allocation is set forth on **Exhibit A** attached hereto and incorporated by reference.

Section 5.2 Budgeted Expenditures

The requirement for funding either the City's or the District's obligation pursuant to this Agreement is subject to each of the Parties' annual budgeting process. Nothing herein shall constitute a multiple fiscal year obligation pursuant to Article X, Section 20 of the Colorado Constitution, or any other constitutional or statutory requirement of the State of Colorado. Notwithstanding any other provisions of this Agreement, the City and/or the District's obligations under this Agreement are subject to annual appropriation by the Parties' respective governing bodies. The Parties shall each give prompt written notice to the other Party and the

Authority of an individual Party's failure to appropriate adequate monies to meet its annual obligations pursuant to the terms and conditions of this Agreement.

Section 5.3 Authority Revenues

The Authority shall be entitled to keep all revenues of the Authority derived from fees, gifts, grants, interest on invested funds, sale of assets of the Authority, and other miscellaneous revenues. All anticipated Authority revenues for each fiscal year shall be reflected in the Authority's annual budget. The Authority shall be entitled to use all of its revenues in furtherance of its responsibilities set forth herein in accordance with the Authority's approved budget and any approved supplementals to that budget.

Section 5.4 Authority Fund

The Parties agree that there shall be established an Authority Fund with the City to account for all financial transactions of the Authority in accordance with generally accepted accounting principles and any applicable state law.

ARTICLE VI: CITY'S RESPONSIBILITIES

Section 6.1 Lease of Real Property

The City hereby leases all of its existing fire stations and all of the portions of any City building and/or real property directly and currently used for fire and emergency services (collectively the "Real Property") to the Authority at no cost to the Authority. This lease of the Real Property shall be for an initial one-year period with automatic renewals for additional successive one-year periods subject to termination upon the termination of this Agreement. The District agrees that in the event this Agreement is terminated as provided in this Agreement, that this lease of the Real Property shall automatically terminate and the City shall be entitled to retake and retain sole and exclusive possession and control of all of the Real Property without the need for any judicial process to evict the Authority or the District from the Real Property or in any other manner to take exclusive possession and control of the Real Property from the Authority or the District.

Section 6.2 Lease of Personal Property

The City hereby leases all of its existing fire equipment and apparatus and other existing personal property directly used by it for fire and emergency services (collectively the "Personal Property") to the Authority at no cost to the Authority. This lease of the Personal Property shall be for an initial one-year period with automatic renewals for additional successive one-year periods subject to termination upon the termination of this Agreement. The District agrees that in the event this Agreement is terminated as provided in this Agreement, this lease of Personal Property shall automatically terminate and the City shall be entitled to retake and retain sole and exclusive possession and control of all of the Personal Property without the need for any judicial process to replevin the Personal Property from the Authority or the District or in any other

manner to take exclusive possession and control of the Personal Property from the Authority or the District.

Section 6.3 Fire Department Personnel

- (a) The City agrees to assign all personnel of the Loveland Fire and Rescue Department, including the Fire Chief, to the Authority for use by the Authority in the provisions of fire and emergency services within the Service Area under this Agreement. Said personnel shall remain employees of the City and shall remain subject to all of the City's and the Fire and Rescue Department's personnel policies, rules and regulations, now existing and as hereinafter amended or added, including but not limited to, job positions/descriptions, promotion and ranking systems; pay and benefits; employment status; and all other City personnel policies, rules and regulations.
- (b) The Parties agree that notwithstanding the assignment of the City's Loveland Fire and Rescue Department personnel to the Authority under this Agreement and notwithstanding any state law providing otherwise including, without limitation, C.R.S. § 29-5-108, any liability accruing to such personnel for their negligent or other tortious conduct occurring while assigned to the Authority under this Agreement shall continue to be the City's responsibility and obligation for providing a defense and indemnification in accordance with the Colorado Governmental Immunity Act, C.R.S. §24-10-101, *et seq.*
- (c) The Parties also agree that notwithstanding any state law to the contrary, and consistent with the provisions of C.R.S. §§ 29-5-109 and 29-5-110, if any City employee is injured, disabled, suffers an occupational disease, or dies while providing services to the Authority under this Agreement, that employee shall remain covered by and eligible for the workers' compensation and firefighters' pension benefits that the City employee would have otherwise been entitled to receive from the City if the injury, disability, occupational disease or death occurred without any assignment of that employee to the Authority under this Agreement.

Section 6.4 City Provision of Services

- (a) The City shall provide the services set forth on **Exhibit B** attached hereto and incorporated by reference to the Authority. These services shall be provided by the City for the cost as set forth on **Exhibit B**.
- (b) The Authority shall have the authority to obtain the services provided by the City to the Authority as listed in **Exhibit B** from third parties. The Authority shall give the City prior written notice of its intention to provide individual areas of service by third parties and not use City services. The notice shall be given before June 1 of any calendar year for any service to be terminated during the next calendar year.

ARTICLE VII: DISTRICT'S RESPONSIBILITIES

Section 7.1 Existing Equipment and Apparatus

The District hereby leases all of its fire equipment and apparatus (collectively the "Equipment") to the Authority at no cost to the Authority except the Equipment leased shall not include the fire equipment and apparatus now used by the Big Thompson Canyon Volunteer Fire Department (the "Canyon Department") which is described on **Exhibit C** attached hereto and incorporated by reference. This lease of the Equipment shall be for an initial one-year period with automatic renewals for additional successive one-year periods subject to termination upon the termination of this Agreement. The City agrees that in the event this Agreement is terminated as provided under this Agreement, that this lease of the Equipment shall automatically terminate and the District shall be entitled to retake and retain sole and exclusive possession and control of all of the Equipment without the need for any judicial process to replevin the Equipment from the Authority or the City or in any other manner to take exclusive possession and control of the Equipment from the Authority or the City.

Section 7.2 Mill Levy Election

The District shall seek voter approval in May of 2012 for a mill levy increase sufficient to fund the District's obligations pursuant to this Agreement.

ARTICLE VIII: BIG THOMPSON CANYON VOLUNTEER FIRE DEPARTMENT

The District shall continue to maintain and fund the Canyon Department. Set forth on **Exhibit C** attached hereto and incorporated by reference, is the organizational chart for the Authority which shows the Canyon Department Chief under the operational control of the City's Fire Chief. As provided in Section 7.1 above, **Exhibit C** also contains a list of the Canyon Department's apparatus and equipment that shall not be leased by the District to the Authority and shall be maintained by the District for use by the Canyon Department. The District shall continue to maintain the Big Thompson Canyon Volunteer Firefighters Pension Fund as a separate pension fund. The Authority and the City shall have no responsibility for funding of this pension fund or for funding any other costs related to the Canyon Department.

ARTICLE IX: TERMINATION

Section 9.1 Termination

Each of the Parties may terminate this Agreement by giving written notice to the other Party. Such notice shall be delivered to the other Party on or before January 1 of any year with the effective date of the termination of this Agreement being December 31 of said calendar year. Notwithstanding the foregoing, in the event the governing body of either of the Parties fails to appropriate in any year during the term of the Agreement its allocation payment required to be paid to the Authority under this Agreement, this Agreement shall terminate as of the date such

allocation payment not appropriated was due and payable. As provided in Section 5.2, the Party that has failed to appropriate the needed allocation payment shall give the other Party prompt written notice of such failure to appropriate.

Section 9.2 Disposition of Assets

Upon termination of this Agreement, the Real Property, the Personal Property and the Equipment shall be disposed of as provided above in Sections 6.1, 6.2 and 7.1. All other assets subsequently acquired by the Authority under this Agreement as the result of a special monetary contribution or direct conveyance received from one of the Parties, shall be returned to that contributing Party if said assets are still owned by the Authority. All remaining assets of the Authority, including any funds, shall be distributed to the Parties in proportion to the percent of allocation of funding of the Parties set forth on **Exhibit A**. The Parties understand and agree that said distribution shall be accomplished in a manner taking into consideration the service requirements for fire and emergency services within the respective jurisdictions of the individual Parties following termination of this Agreement.

ARTICLE X: CONSOLIDATED PENSION

The City and the District formed the Consolidated Firemen's Pension Fund of Loveland and Rural District (the "Consolidated Pension Fund") to meet the City's and the District's pension obligations to reserve firefighters. After January 1, 2012, the Authority shall be responsible for funding the City's and District's shares of the Consolidated Pension Fund. The Parties agree to consider appropriate amendments to the Consolidated Pension Fund Agreement to reflect the Authority's responsibility under this Article X.

ARTICLE XI: ANNEXATIONS OR EXCLUSIONS FROM THE DISTRICT

The District agrees not to annex property into the District without prior written approval of the City. The District shall not exclude property from the District without prior written approval of the City except for property located east of I-25 and south of County Road 18E which is annexed to the Town of Johnstown and included within the Johnstown Fire Protection District and properties located south of County Road 14 which are annexed to the Town of Berthoud and included within the Berthoud Fire Protection District.

ARTICLE XII: PINWOOD LAKE FIRE PROTECTION DISTRICT

The District currently is a party to an intergovernmental agreement with the Pinewood Lake Fire Protection District. That agreement provides for certain fire and emergency services to be provided by the District to the Pinewood Lake Fire Protection District for payment as set forth in said agreement. The Parties agree that the Authority shall be responsible for providing those services required under the intergovernmental agreement between the District and

Pinewood Lake Fire Protection District. However, the District shall continue to receive the payments it is paid under the said intergovernmental agreement.

ARTICLE XIII: INSURANCE

The Authority, the District, and the City shall each maintain the insurance coverages as set forth on **Exhibit D** attached hereto and incorporated by reference.

ARTICLE XIV: TRANSITION

The Parties understand and agree that this Agreement is for a transitional period of five (5) years during which the Parties shall continue to evaluate the benefits, effectiveness, governance and operational efficiency of the Authority (the "Transition Period"). During its first six (6) months of its existence, the Authority shall develop a strategic plan for the Transition Period, but the plan may extend beyond the Transition Period, which addresses the provision of services by the Authority to the Service Area. The strategic plan shall be reviewed and updated yearly so that the Authority shall have in place at a minimum a continual five (5) year planning period. The strategic plan shall be submitted to the governing bodies of the District and the City for their approval.

ARTICLE XV: TERM

The term of this Agreement shall be for a period of five (5) years beginning on January 1, 2012, through December 31, 2016, and thereafter shall automatically renew on January 1 of the following year unless terminated as provided in this Agreement.

ARTICLE XVI: APPROPRIATION

To the extent this Agreement constitutes a multiple fiscal year debt or financial obligation of the City and/or of the District, it shall be subject to annual appropriation pursuant to the City Charter Section 11-6, any applicable District rule or regulation, and Article X, Section 20 of the Colorado Constitution. Neither Party shall have any obligation to continue this Agreement in any fiscal year in which no such appropriation is made.

ARTICLE XVII: ANNUAL REPORT

The Authority shall provide an Annual Report to the District and the City on or before May 1 of each year reporting financial and operational activities of the Authority during the previous year. The Authority shall also provide any periodic reports to the District and the City which the Authority deems necessary and provide any information or reports requested by either or both of the Parties.

ARTICLE XVIII: MISCELLANEOUS PROVISIONS

Section 18.1 Notices

Any notice required hereunder shall be in writing and shall be deemed sufficient and properly given if delivered in person or sent by United States certified mail, postage prepaid and return receipt requested, to:

CITY: City of Loveland
Attention: City Manager
500 East 3rd Street
Loveland, CO 80537

DISTRICT: Loveland Rural Fire Protection District
Attention: President
1423 West 29th Street
Loveland, CO 80538

Section 18.2 Consent

Whenever any provision of this Agreement requires consent or approval of the Parties, the same shall not be unreasonably withheld.

Section 18.3 Construction

This Agreement shall be construed according to its fair meaning and as if it was prepared by both Parties and shall be deemed to be and contain the entire agreement between the Parties. There shall be deemed to be no other terms, conditions, promises, understandings, statements or representations, expressed or implied, concerning this Agreement, unless set forth in writing and signed by both of the Parties. Paragraph headings in this Agreement are for convenience of reference only and shall in no way define, limit or prescribe the scope or intent of any provision of this Agreement.

Section 18.4 Severability

In the event any provision of this Agreement is determined to be illegal or invalid for any reason, all other provisions of this Agreement shall remain in full force and effect unless and until otherwise determined. The illegality of any provision of this Agreement shall in no way affect the legality and enforceability of any other provision of this Agreement.

Section 18.5 Time of the Essence

Time shall be of the essence for each and every term and condition of this Agreement.

Section 18.6 Assignment and Delegation

The Parties shall neither assign any of their respective rights created nor delegate any of their respective duties imposed by this Agreement without the prior written consent of the other Party. Any such assignment of rights or delegation of duties without such prior written consent shall be deemed null and void.

Section 18.7 Governmental Immunity

Notwithstanding any other provision of this Agreement to the contrary, the Parties agree that no term or condition of this Agreement shall be construed or interpreted as a waiver, expressed or implied, of any of the Parties' immunities, rights, benefits, protections, limitations of liability, or any other provisions under the Colorado Governmental Immunity Act, C.R.S. § 24-10-101, *et seq.* or under any other law.

Section 18.8 Indemnification

The Parties agree that the Authority shall indemnify and hold harmless the City and/or the District, and its officers, insurers, volunteers, representatives, agents, employees, and other assigns from and against all claims, liability, damages, losses, expenses, and demands, including attorney's fees on account of injury, loss, or damage, including, without limitation, claims arising from bodily injury, personal injury, sickness, disease, death, property loss or damage, which arise out of the negligent act, omission, error, professional error, mistake, negligence, or other negligent fault of Authority, any subcontractor of Authority, or any officer, employee, representative, or agent of Authority, or which arise out of any workmen's compensation claim of any employee of Authority or of any employee of any subcontractor of Authority. In any and all claims against the City and/or the District or any of its officers, insurers, volunteers, representatives, agents, employees or assigns, by any employee for whose act any of them may be liable, the indemnification obligation under this Section shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Authority or any subcontractor under worker's compensation actions, disability benefit acts or other employee benefit acts. In the event it becomes necessary for the City and/or the District to bring any action to enforce any provision of this Indemnity or to recover any damages the City and/or District may incur as a result of the breach of this Indemnity, and the City and/or District prevails in such litigation, the Authority shall pay the City and/or District its reasonable attorney's fees as determined by the court.

Section 18.9 Third Party Beneficiary

This Agreement is made for the sole and exclusive benefit of the City, the District and the Authority, and is not made for the benefit of any third party.

Section 18.10 Governing Law and Venue

This Agreement shall be governed by the laws of the State of Colorado, and venue shall be in the District Court for the County of Larimer, State of Colorado. In addition, the Parties recognize the legal constraints imposed upon them by the constitutions, statutes, and regulations of the State of Colorado and of the United States, imposed upon the City by its Charter and Municipal Code, and imposed upon the District by its rules and regulations, and subject to such constraints, the Parties intend to carry out the terms and conditions of this Agreement. Notwithstanding any other provision of this Agreement to the contrary, in no event shall either of the Parties exercise any power or take any action which shall be prohibited by applicable law.

Section 18.11 Waiver

No waiver by either of the Parties of any of the terms and conditions of this Agreement shall be deemed to be or shall be construed as a waiver of any other term or condition, nor shall such a waiver of any breach of this Agreement be deemed to constitute a waiver of any subsequent breach of the same provision of this Agreement.

Section 18.12 Default and Remedy

Each and every term and condition of this Agreement shall be deemed to be a material element of the Agreement. In the event that either of the Parties shall fail to perform according to any term or condition of this Agreement, such Party may be declared in default by the other Party. In the event that a Party has been declared in default hereof, such defaulting Party shall be given written notice by the non-defaulting Party specifying such default and shall be allowed a period of ten (10) days in which to cure said default. In the event the default remains uncorrected within such notice period, the Party declaring the default's sole remedy shall be to terminate this Agreement and seek damages. The non-defaulting Party shall not be entitled to any right of specific performance or any other remedy at law or in equity.

Section 18.13 Successors

This Agreement shall be binding upon and shall inure to the benefit of the successors of the Parties.

This Agreement is entered into as of the date and year first above written.

CITY OF LOVELAND

By: _____
William D. Cahill, City Manager

ATTEST:

City Clerk

APPROVED AS TO FORM:

City Attorney

LOVELAND RURAL FIRE PROTECTION
DISTRICT

By: _____

ATTEST:

EXHIBIT A

The allocation of payment of the cost and expenses of the Authority are as follows:

| | |
|--|-----|
| City of Loveland | 82% |
| Loveland Rural Fire Protection District | 18% |

EXHIBIT B

2011 Indirect Costs for Fire Authority Model

| Cost to be Allocated | 2011 Original Adopted Budget | Basis of Allocation | | Calculation |
|---------------------------|------------------------------|--|--|-------------|
| City Manager's Office | 448,680 | 30% addressing council other 70% split evenly between 14 departments (70/14 depts.=5) | 5% of 70% | 15,704 |
| City Attorney | 848,010 | Estimated % of Time | 14 hours a month M.G. & J. D. or 168 hrs./4160=4% | 33,920 |
| Budget | 148,000 | % Fire of Total Budget excluding transfers | 4% | 5,920 |
| Accounting/Purchasing | 807,810 | % Fire of Total Budget excluding transfers | 4% | 32,312 |
| Human Resources | 1,004,320 | Number of benefited full and part-time fire department employees to total employees (does not include benefits allocation because that is directly charged to the depts..) | 61 of 692 or 8.8% | 88,380 |
| IT Programming & Networks | 1,151,630 | Estimated Time for Programmer (could be an unusual occurrence since there was a software installation in 2007) | 40% of K.S. | 36,493 |
| IT Support Services | 1,487,500 | Number of peripherals (laptops, printers, PCs) | 14 printers and 44 PCs out of total 915 in the city for 6% | 89,250 |
| Facilities | | Total square feet for all stations (includes cap replacement) | 59,710 sq. ft. at 5.45/sq. ft. | 325,420 |
| Dispatch | 1,612,270 | Call volume | 10% | 161,227 |
| | | Total Cost of Administrative Services to the Fire Department | | 788,626 |

\$7,837,730 Total 2011 Fire Department Budget including Capital indirect costs as a percentage of total Fire Department Budget w/Capital 10.1%

\$7,590,470 Total 2011 Fire Department Budget w/o Capital indirect costs As a percentage of total Fire Department Budget w/o Capital 10.4%

EXHIBIT C
(see following page)

**Fire Authority
Board/City Manager**

**Fire
Chief**

Fire Chaplin

**Big Thompson
Canyon Chief**

**Division Chief
Operations**

**Division Chief
Community
Safety**

B.T. Canyon
Volunteers

Training
BC

BC Shift
A

BC Shift
B

BC Shift
C

Training
Volunteer

Captain

Captain

Captain

5 Station
Lts.

5 Station
Lts.

5 Station.
Lts.

Sta. Engs.
/FFs

Sta. Engs.
/FFs

Sta. Engs.
/FFs

PT Paid
& Vol.
FF's

PT Paid
& Vol.
FF's

PT Paid
& Vol.
FF's

Business
Coordinator

Office
Sup. Spec.

Fire Photographer

Dep. Fire
Marshal

Dep. Fire
Marshal

Assistant
Emergency
Manager

Prev. Part-
time Plans
Reviewer

**Loveland Fire Rescue Authority
Organization Chart**

EXHIBIT D

The Authority, the District and the City (collectively the "Insureds" and individually "Insured") shall each provide and maintain the following insurance coverages during the term of this Agreement:

a. Comprehensive General Liability Insurance. Each Insured shall procure and keep in force during the duration of this Agreement a policy of comprehensive general liability insurance insuring the Insured and naming the other two Insureds as additional insureds against any liability for personal injury, bodily injury, or death with at least Two Million Dollars (\$2,000,000) each occurrence.

b. Comprehensive Automobile Liability Insurance. Each Insured shall procure and keep in force during the duration of this Agreement a policy of comprehensive automobile liability insurance insuring the Insured and naming the other two Insureds as additional insureds against any liability for personal injury, bodily injury, or death arising out of the use of motor vehicles and covering operations on or off the site of all motor vehicles controlled by the Insured which are used in connection with its operations under this Agreement, whether the motor vehicles are owned, non-owned, or hired, with a combined single limit of at least Two Million Dollars (\$2,000,000).

c. Terms of Insurance.

(i) Insurance required by this Agreement shall be with companies qualified to do business in the State of Colorado with a general policyholder's financial rating of not less than A+3A as set forth in the most current edition of "Best's Insurance Reports" and may provide for deductible amounts as the Insureds deem reasonable. No such policies shall be cancelable or subject to reduction in coverage limits or other modification except after thirty (30) days prior written notice to the other Insureds named as additional insureds. Each Insured shall identify whether the type of its coverage is "occurrence" or "claims made." If the type of coverage is "claims made," which at renewal changes to "occurrence," the Insured shall carry a six (6)-month tail. Each Insured shall not do or permit to be done anything that would invalidate their respective policies.

(ii) The policies described in subparagraphs a. and b. above shall be for the mutual and joint benefit and protection of the Insureds. Each of the Insured's policies shall provide that the other two Insureds named as additional insureds shall be entitled to recovery under said policies for any loss occasioned to it, its officers, employees, and agents by reason of negligence of the Insured, its officers, employees, agents, subcontractors, or business invitees. Such policies shall be written as primary policies not contributing to and not in excess of coverage each of the Insureds may carry.

(iii) The Insureds may each provide for the insurance coverages partially or wholly by means of a self-insurance pool.

d. Workers' Compensation and Other Insurance. During the term of this Agreement, each Insured shall procure and keep in force workers' compensation insurance and all other insurance required by any applicable law.

e. Evidence of Coverage. Each Insured shall furnish to the other two Insureds certificates of insurance policies evidencing the insurance coverage required by this Agreement.