





Table of Contents

INTRODUCTION.....	2
METHODOLOGY.....	2
DATA IDENTIFICATION AND COLLECTION.....	3
EMERGENCY RESPONSE RATES.....	3
RESPONSE RELIABILITY.....	3
RESPONSE EFFECTIVENESS	4
DATA ANALYSIS.....	6
EMERGENCY INCIDENT RATE	6
RESPONSE RELIABILITY.....	7
RESPONSE EFFECTIVENESS	11
BUDGET IMPLICATIONS AND IMPLEMENTATION.....	14
RESOURCE COSTS	14
TIMELINE FOR IMPLEMENTATION.....	16
CONCLUSION	18



INTRODUCTION

During the preparation of its Fiscal Year 2000 budget, the department prepared and presented its first Strategic Plan outlining the long term vision for department operations as well as the short-term or tactical goals required to accomplish this vision. An important component of this strategic plan was to outline the long-term capital needs (Master Plan) of the department to insure timely and regular replacement of rolling stock, and in subsequent years the replacement of major capital needs in department facilities.

Previous editions of the strategic plan however, addressed only the replacement of current resources (fleet and facilities) as if current levels of resources will be sufficient indefinitely. This is obviously not accurate and a flaw in the planning process. Given this planning flaw, the purpose of this document is to outline the resources necessary to sustain the level services currently enjoyed by the citizens of the Franklin as the community grows. A six-year planning cycle will be used coincidental with the time parameters of the capital improvement plan. We believe the planning assumptions projected herein must be addressed to assist decision makers in developing long-range fiscal decisions for the Town and to insure fire rescue services are maintained at a level necessary to maintain the quality of life in Franklin.

METHODOLOGY

The underlying premise of this report is that as the community grows, additional resources will be required to successfully meet the growing demands for services. Although it is often assumed that a direct relationship exists between population and necessary resources, this is usually anecdotal and therefore limited as a competent tool for predication. Further, the use of population data does not accurately reflect the impact of transient populations, which commute to, through or away from the community on a daily basis. Therefore, the focus of this report will be projections of emergency response rates. Emergency response rates typically display a fairly linear and mathematically valid relationship based upon previous experience. Although long-range response rates can be skewed by spikes of high incident years (out layers), the factors leading to these spikes are usually easily identified for mathematical adjustments.

Once the emergency response rates are projected the report will then identify the costs and timing necessary to maintain proper service levels. Capital costs will then be integrated with department's Capital Improvement Plan; costs which have direct impact on the operations and maintenance budget, will be reflected as a budget projection. This, combined with the capital improvement plan will provide decision makers a ability to plan for the future fiscal needs of safety services for the community and its citizens.



DATA IDENTIFICATION AND COLLECTION

Emergency Response Rates

Emergency Response Rates for the preceding 14 fiscal years are identified for evaluation. All historical data was obtained from the Annual Town Report of the Town of Franklin in the year referenced (Table 1).

Fiscal Year	Medical Emergencies	Fire Emergencies	Vehicle Crashes	Total Emergencies
1993	1,534	671	309	2,514
1994	1,398	748	222	2,368
1995	1,802	962	383	3,147
1996	1,820	897	336	3,053
1997	1,883	761	289	2,993
1998	1,853	805	235	2,893
1999	1,889	960	270	3,119
2000	1,862	1,183	193	3,238
2001	1,940	1,334	290	3,564
2002	1,828	1,172	335	3,335
2003	1,792	1,086	344	3,311
2004	1,856	1,068	295	3,219
2005	2,052	999	261	3,312
2006	2,231	1,185	271	3,686

Table 1

Response Reliability

Response reliability is defined as the percentage of time that all response resources within the system are available for emergency response. Since the department relies on cross-trained firefighter – paramedics to provide services, this analysis includes all incidents responded to by each station.

Source data for this information is the Massachusetts Fire Incident Reporting System for the Town of Franklin. The analysis of the information recorded revealed that singles station response averaged .6332 (37 minutes) hours per incident with two station responses averaging 1.23 hours



(74 minutes) per response. The average length of emergency response is then applied to the various types of emergencies the department responds to. This information is then applied to against the total number of staff hours available at each station (# available units x 1440 minutes per day x 365 days per year). The resultant figure then reflects the average amount of time that department resources are committed providing emergency services – which then leads to the amount of time available. The reliability figures for Fiscal Year 2005 are provided in Table 2.

Station	Response Reliability			
	Incidents	Average Hours	Percent Committed	Percent Available
West Central Street	2,183	2,186	24.95%	75.05%
King Street	1,380	1,364	15.57%	84.43%
System Totals*	3,563	3,550	40.52%	59.48%

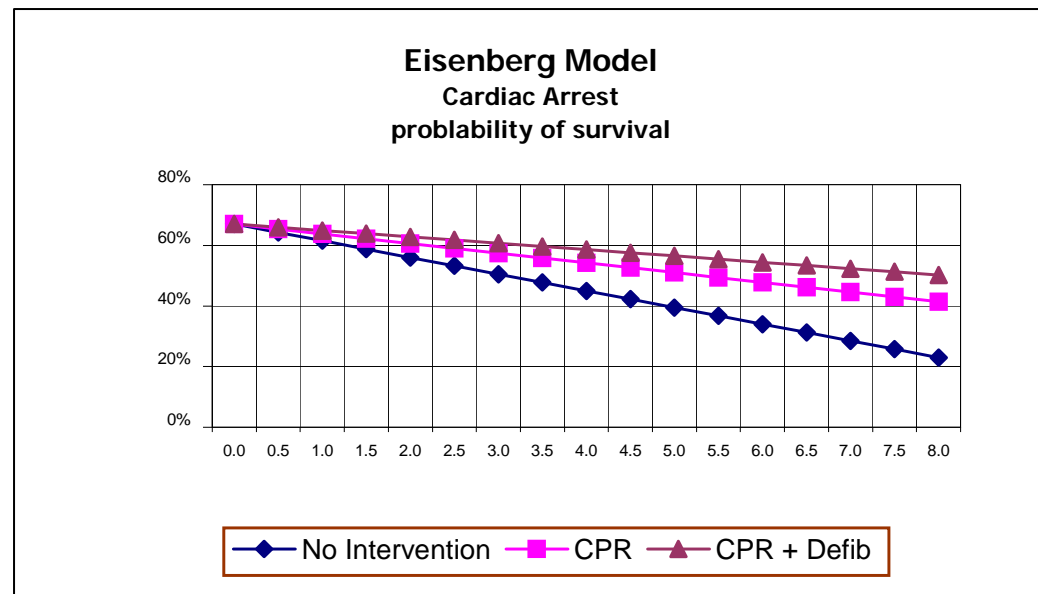
* Includes incidents where both stations responded.

Table 2

Response Effectiveness

The concept of response effectiveness is defined as the ability of the department to amass sufficient vehicles and personnel in a timely fashion, to manage any given emergency incident. In terms of both emergency medical and fire response, effective on-time response is nationally recognized as eight minutes. For emergency medical services (EMS) response, this measurement is in response to our most life threatening condition – sudden cardiac arrest. Studies show that competent response by advanced life support personnel within 8 minutes of the onset of cardiac arrest will yield a 50% probability of survival (Figure 1).

Figure 1





Franklin Fire Department

Master Plan FY 2008 thru 2013

Effective response to fire emergencies is compared to the risks associated with the type of occupancy and measure against a condition known as flashover. Flashover is a state where all combustibles within the area of fire origin reach its ignition temperature simultaneously. Once flashover is reached, fire spreads rapidly, high temperatures are reached (1,500° F.) and human survival is impossible. Accordingly certain occupancies are at higher risks from fire than others. Fire risks are classified in three categories (Low, Moderate or High) depending upon the potential loss of life, socio-economical impact to the community and fire suppression criteria. After establishing this criterion, a grid was overlaid upon a map of the Town with the characteristics of the underlying occupancies recorded. Response time for low hazard occupancies include 6 minutes for the first arriving apparatus and 8 minutes for all responding vehicles. Moderate hazards require a response of 5 minutes first due unit, 7 minutes additional responding vehicles. High hazard occupancies dictate a response of 4 minutes first-in apparatus and 6 minute all response vehicles. In total, the department can respond from our existing station locations within established time parameters to 72.5% of the community (Table 3).

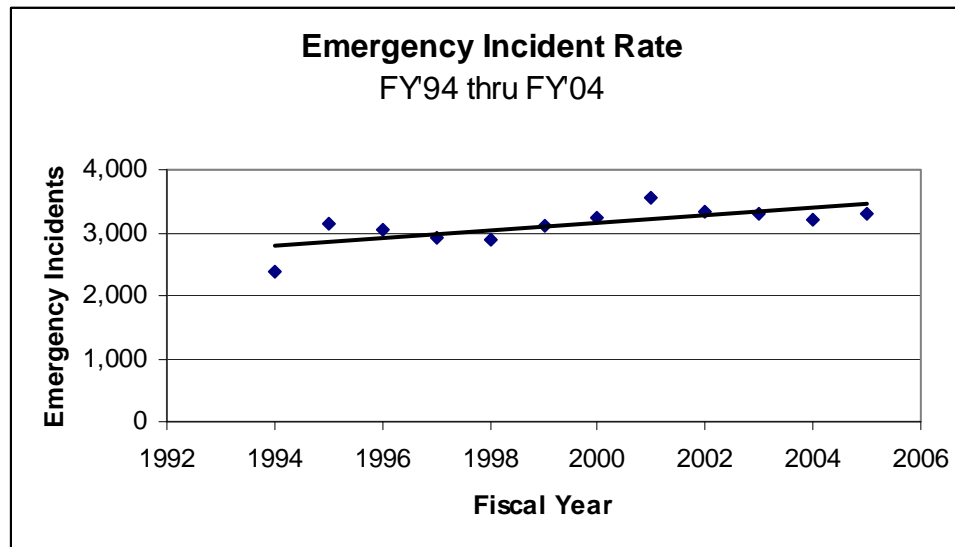
ON-TIME EFFECTIVENESS BY FIRE DEMAND ZONE															
Deployment from West Central and King Street Stations															
High FDZ				Medium FDZ				Low FDZ				System Wide			
Total	Served On Time	Not Served	% Served	Total	Served On Time	Not Served	% Served	Total	Served On Time	Not Served	% Served	Total	Served On Time	Not Served	% Served
21	15	6	71.4%	9	5	4	55.6%	141	104	37	73.8%	171	124	47	72.5%
FOUR-MINUTE TRAVEL TIME BY FIRE DEMAND ZONE															
Deployment from West Central and King Street Station															
High FDZ				Medium FDZ				Low FDZ				System Wide			
Total	Served w/in 4 min.	Not served w/in 4 min.	% Served	Total	Served w/in 4 min.	Not served w/in 4 min.	% Served	Total	Served w/in 4 min.	Not served w/in 4 min.	% Served	Total	Served w/in 4 min.	Not served w/in 4 min.	% Served
21	15	6	71.4%	9	5	4	55.6%	141	57	84	40.4%	171	77	94	45.0%

Table 3



DATA ANALYSIS

Emergency Incident Rate



Having identified the response data as the basis of our evaluation, the first task is to accurately process this data to project the future needs of the department. The mathematical calculation chosen for this projection is linear regression. This calculation was chosen due to its ease of use in projecting future incident rates (independent variable) based upon specific years (dependent variable). Further, regression calculations also provide coefficients, which allow us to determine the predicative power of the data set as well as its statistical significance. A scatter graph of the data from Table 1 (Figure 2) reveals an incident rate which inclines steadily (average 3.6% per annum) over time.

Figure 2

Mathematically, the regression statistics of this data set are:

Regression Statistics	
Multiple R	0.9983945
R Square	0.9967915
Adjusted R Square	-1.1
Standard Error	190.01155
Observations	11
Multiple R	0.9983945

Table 4



Of primary significance in this set of statistics is "R Square". This figure reflects the correlation between the dependent and independent variables, with the results range from 0 to 1. The nearer the R Square is to 1 the more closely the variables and the better predictive power of the data set to accurately predict future occurrences. In this instance the correlation is 99%. Additionally, it should be noted that the data indicates that the probability of obtaining differences as large as those observed within the data group is statistically significant.

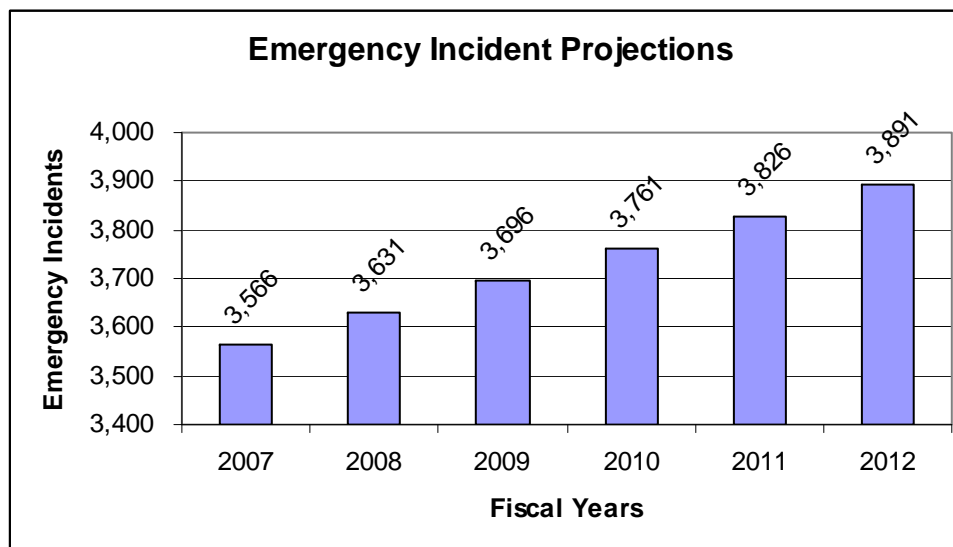


Figure 3

Therefore using the regression model from the FY'94 through FY'05 response data, we can reasonably predict a steady growth approaching 4,000 emergencies in 2012 (Figure 3).

Response Reliability

The increase in emergency response will have a direct impact on the availability of emergency responders to provide services to the citizens of Franklin. Table 2, indicates the department's present response reliability is at nearly 60% (59.48%) and is related to the number of staff-hours committed to emergency response. Having identified the trend of increasing service demands, it becomes important to predict the affect rising incident rates have on response reliability. It is intuitive that as emergency rates (outputs) increase in frequency the reliability of the response system will decline. For the remainder of this report it is assumed that staff-hours spent in emergency services and the distribution of responses will remain relatively static. This seems to be a reasonable assumption in the absence of a substantial change in building construction or



Franklin Fire Department

Master Plan FY 2008 thru 2013

occupancy type. This assumption, combined with the increases projected on the department's emergency response rate will have a gradual negative effect on the department's ability to maintain a reasonable level of response reliability for the citizens of Franklin. Figure #4 reflects the incremental decrease in response reliability over the next several years.

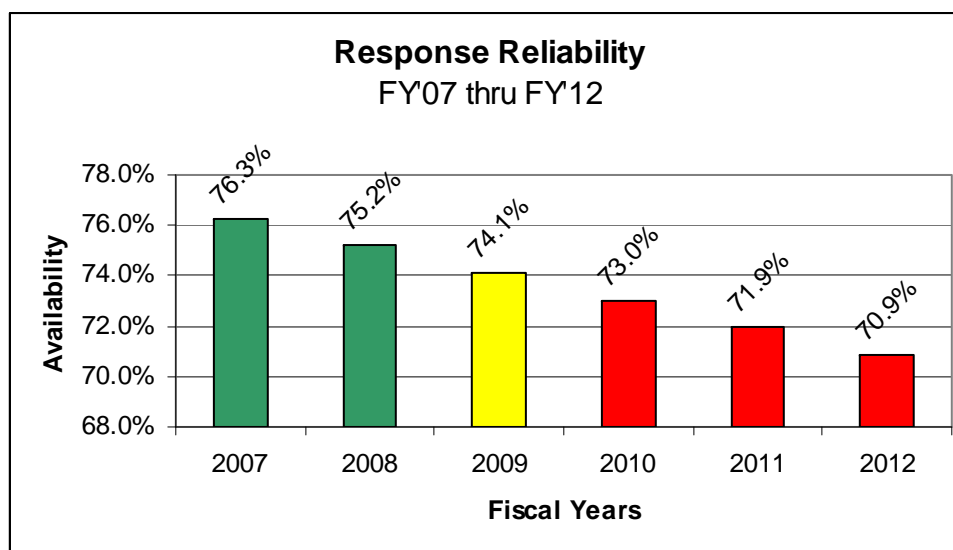


Figure 4

National standards indicate that emergency response systems should insure emergency resources available for response between 70 and 80 percent of time. Response reliability numbers between 60% and 70% are indicative of emergency systems in a state of crisis and unable to provide reliable emergency services. (Note: With the influx of personnel provided to the department in Fiscal Year 2006, the department's response reliability is projected to reach 80%.) With the anticipated increase in the projected incident rate, response reliability is projected to gradually decrease over the period until it reaches the crisis point in Fiscal Year 2012. Consequently, for planning purposes, we believe a response reliability figure of 75% should be used as a trigger point for adding resources (inputs) to the system. Accordingly (see Figure 4) this trigger is projected to be surpassed in Fiscal Year 2009, at which time additional resources should be added to the system (personnel & vehicle). The impact of these additional resources would then increase the available resources which, in turn would yield improved response reliability. Factoring this additional staffing will increase response reliability to slightly over 78% (Figure 5).

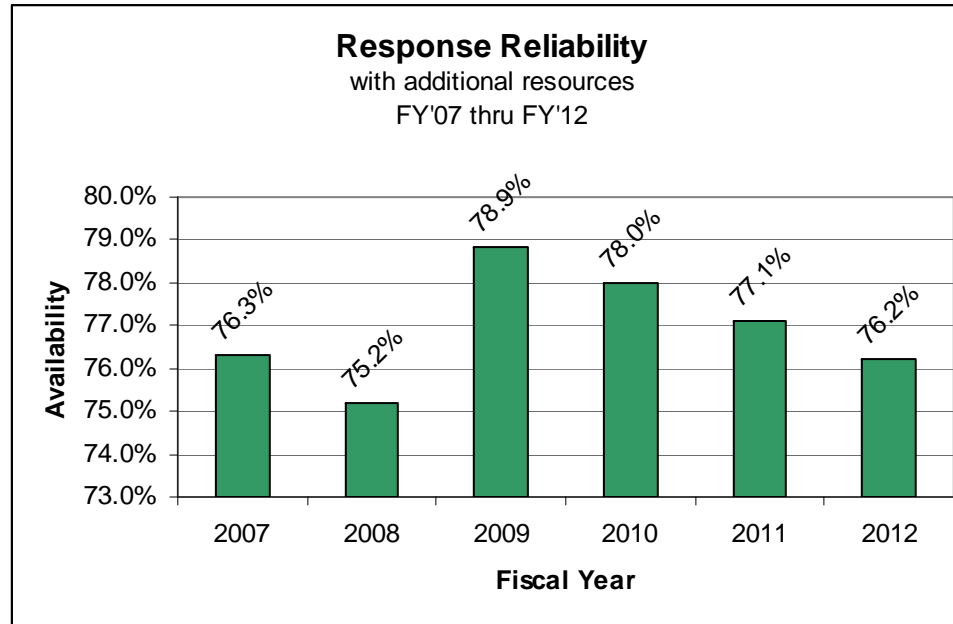


Figure 5

With the addition of previous and anticipated growth in the number of on-duty companies (response units) the department also needs to address the existing command or managerial staff to capably meet both emergency and non-emergency supervisory needs. In assessing the number or size of the supervisory staff needed we need to evaluate the managerial notion of Span of Control. Quite simply, Span of Control is the management concept that one person can only effectively control a limited number of subordinates. As a hierarchal organization grows, more intermediary layers must be created to keep this span of control within reasonable bounds. Nationally recognized management standards indicate a managerial span of control for emergency operation should be between 3 to 7 subordinates. While the optimal number of **individual subordinate** workers is recognized as 5 (five workers for each supervisor - for a ratio of workers to supervisors of 5:1) fire service and military models reveal that one supervisor, in emergency or adverse conditions should oversee no more than three operational **groups** for a ratio of 3:1 (3 working groups for each supervisor).

Presently, the department operates with one shift supervisor (rank of Captain) operating from Headquarters (West Central Street). This position is responsible for the proper operation and overall supervision of all on-duty resources at both fire stations. Additionally, there is a station supervisor or working foreman (rank of Lieutenant) who is responsible for the staff and equipment on-duty at Station #2 (King Street).



Franklin Fire Department

Master Plan FY 2008 thru 2013

At our current authorized levels of staffing, when at minimum staffing levels, the shift supervisor is responsible for the Lieutenant at Station #2 as well as four subordinates at Headquarters for a total of five **individual subordinates** (5:1 ratio). The number of **individual subordinates** supervised can grow to 7 (7:1 ratio) when at maximum staffing (no absences). Further, when at minimum staffing, the shift supervisor is responsible for the Lieutenant operating at Station #2 (two operating groups) and the two operating groups from Headquarters for a total of three operating units (3:1 ratio). With the projected addition of one operating unit as outlined herein will increase shift staffing from 12 personnel to 16 personnel; with the number of **operating groups** increasing from 4 to 5 at minimum staffing and from 5 to 6 at maximum staffing.

Given our current and projected ratios of personnel and operating unit to supervisor we believe it is necessary to insert an additional layer of supervision to provide safe and adequate supervision for department operations. To accomplish this, we propose an incremental approach. In the short term (Fiscal Year 2008) we proposed to place a Lieutenant at Headquarters, with the long term goal of re titling the position of Shift Supervisor from Captain to Battalion Chief. In practical terms the need for supervisory enhancement will allow us to have a working foreman at each station as well as providing a shift supervisor (Captain then eventually Battalion Chief) to supervise all shift activities and several administrative activities. This will allow the department to reduce our operating unit ratio of from the present 4 or 3:1 to 3 or 2:1 as well as reducing the subordinate to supervisor ratio to a more acceptable 4 or 3:1.

In the short term we plan to maintain the shift supervisor at the rank of Shift Captain. However with the anticipated need of one additional operating unit towards the end of this planning cycle, the title of Shift Captain is proposed to be enhanced to that of Battalion Chief. This enhancement is necessary due to the growth in the number of Lieutenants (foremen) to be supervised. Additionally, we propose to retain the rank of Captain in the form of Station Captain (one for each station) to establish administrative accountability for station operations (e.g. fleet and facility maintenance) for better overall accountability and enhance the scalar chain of command.

In practical terms this supervisory enhancement will place a working foreman at each station – consolidate administrative overview at each station and free our Shift Supervisors from the constraints of riding on an assigned fire apparatus and place them into a staff car. Although this latter point may appear minor – it is not. The change will provide for better overall supervision and coordination of both emergency and non emergency operations. Freeing the Shift Supervisor from a fire engine will enable them to respond in advance of other vehicles to better assess emergencies and coordinate initial deployment of resources. This need is magnified in the presence of increased multiple simultaneous emergencies. Using this model, the department will begin requesting funding to affect this enhancement in Fiscal Year 2008.

In addition to the need of additional personnel to provide direct services to the citizens of Franklin, the department must also consider various staff positions necessary to properly and safely support front-line personnel. Typically these positions include various support positions such as Training and Safety and non-emergent services such as Public Education, Code Compliance and Inspectional Services.

In the case of Code Compliance and Inspectional Services, the department has reduced its capacity to perform these services due to fiscal constraints over the past several fiscal years. In recent years, the reduction of these positions has meant reduced inspectional services and increases in timeliness of plans reviews and code interpretations. Consequently, these positions should be replaced as soon as possible and



Franklin Fire Department

Master Plan FY 2008 thru 2013

have been requested in operating budget requests in Fiscal Years 2006 and 2007. This position continues to be a priority item in terms of preventative measures intended to enhance the safety of citizens and fire fighting personnel. Further, additional workloads presently being placed upon the department by recent legislation (e.g. night club sprinkler law, Carbon Monoxide detection, etc) are further taxing existing staff capacity resulting in reduced level of services to the community.

Public Education services are currently provided by on a stipend or part-time basis by existing department employees. Unlike emergency services, the need for public education increases directly with the increase of the Town's population. Further demands are made of public educators as the vulnerable populations (school aged children and senior citizens) continue to swell. Therefore, the Town must plan to add a Public Educator to provide information and direct education regarding CPR, first aid and fire safety and survival skills. The focus to this position will be to act as a Resource Officer to the Public School System as well as providing revenue generating potential in educating private industry in fire and safety curricula.

Training and safety are also provided on a stipend or part-time basis. Presently the department is required to manage over 3,800 hours of mandated training for existing employees. Further, the growing emphasis on Homeland Protection, requirements for employee safety and protection are anticipated to grow rapidly in the next several years. Consequently, the department must plan on adding a staff member dedicated to supervising safety and training prior to expanding its employee base as projected in FY'09

Lastly department growth will require additional administrative staff to properly support the business and organizational needs of the department. The department lost a half-time administrative assistant during the first round of budget reductions in FY'01. This position has also been requested for replacement in Fiscal Years 2006 and 2007 operating budget. Further, as the non-emergency staff ranks increase there will be additional demands for administrative and secretarial support. As a result, the plan should anticipate one additional administrative assistant to support Fire Prevention, Safety and Training activities.

Response Effectiveness



Franklin Fire Department

Master Plan FY 2008 thru 2013

A review of the Town present zoning map and the department's current service demand zone mapping reveals the department response effectiveness present rests at 72% - meaning from our present fire station locations, emergency resources can respond to 72% of the Town in an on-time fashion. At time of this report, the Town is presently replacing the current Headquarters facility and considering altering the traffic pattern at our West Central Street facility to accommodate two-way traffic flow. This is a positive change and intuitively, should have a positive influence in our ability to reach additional aspects of the community

ON-TIME EFFECTIVENESS BY SERVICE DEMAND ZONE															
High SDZ				Medium SDZ				Low SDZ				System Wide			
Total	Served On Time	Not Served	% Served	Total	Served On Time	Not Served	% Served	Total	Served On Time	Not Served	% Served	Total	Served On Time	Not Served	% Served
21	15	6	71.4%	9	5	4	55.6%	141	104	37	73.8%	171	124	47	72.5%
FOUR MINUTE TRAVEL TIME BY SERVICE DEMAND ZONE															
High SDZ				Medium SDZ				Low SDZ				System Wide			
Total	Served On Time	Not Served	% Served	Total	Served On Time	Not Served	% Served	Total	Served On Time	Not Served	% Served	Total	Served On Time	Not Served	% Served
21	15	6	71.4%	9	5	4	55.6%	141	57	84	40.4%	171	77	94	45.0%

Table 5

Over the years, the Town has completed various studies intended to evaluate the effectiveness of the department's capacity to respond and provide effective levels of service. These studies point to a three station deployment system with stations located at the present sites as well as a site somewhere in the northern part of the community. In terms of how a future north fire station would ultimately impact the department's overall response (or on-time) effectiveness is extremely difficult to speculate since it would be related to the specific parcel(s) of land under consideration. Further no national standards presently exist for the benchmark of overall response effectiveness for emergency services. In light of this absence of national consensus standard, we believe the decision to add to the number of fire station facilities should be tied to the on-time response of emergency units as evaluated on an annual basis. This anecdotal analysis can serve as a measure to indicate when the department begins to experience calls for emergency services in those areas which do not presently enjoy close proximity to existing fire stations. When calls for service in these underserved areas escalate, they will have a negative impact on our current on-time response benchmark (arrival within 8 minutes, to 90% of emergency responses). At this point serious consideration must be given to establishing additional station facilities. From an analytical perspective, the projection of this data to anticipate a potential time trigger is presently difficult and is an action item to be calculated for future master planning documents.

Notwithstanding the foregoing, without a wide ranging change in the Town's land use (zoning) the department should continue to enjoy the response effectiveness as outlined herein. As described with Table 6 however, most of the communities' risks lie in low-density residential property. Large rezoning efforts which changes zoning to non-residential uses may have a negative impact on response effectiveness and should be evaluated during the decision making process for rezoning.



Franklin Fire Department
Master Plan FY 2008 thru 2013



BUDGET IMPLICATIONS AND IMPLEMENTATION

Resource Costs

The basic work unit for the Franklin Fire Department is known as a company. Company's can consist of either - one supervisor, two firefighters and one fire engine (fire company), or two firefighter paramedics and a rescue (medical company), with either requiring appropriate space for living accommodations and vehicle garaging. For the remainder of this report, it will be assumed that all company additions will be in the form of a fire company. This assumption is made because fire companies are more resources intensive and therefore produce the most conservative cost scenario.

Because of the department's rotating work schedule, the department must maintain a minimum of 4 employees for each authorized position. In order to compensate for vacation, sick and other forms of leave, in a cost effective manner the department should maintain 5 employees per authorized position. Although the 5 employees per position is a policy decision which has not been adopted we will utilize this concept for planning purposes. Therefore, based upon this personnel demand, personnel costs for each company is as outlined below.

Item	Quantity	Unit Costs*	Total
Lieutenant - ¹	5	7,949	\$39,745
Firefighter – Paramedic	15	44,615	\$669,223
Fringe Benefits	15	32% of base	226,870
Uniforms	15	1,400	21,000
Protective Clothing	15	2,000	30,000
Total Personnel Costs			\$986,837

* Note all costs in terms of FY'07 dollar amounts.

1 – Based upon differential between top step firefighter and Lieutenant
Table 6

This newly constituted operating group will also require fleet assets (vehicles) to complete their mission. In terms of fire apparatus, a standard fire engine costs \$ 435,000 in FY'07 dollars. This need will be in addition to the present fleet needs of the department. This new response unit may also have the potential to cross staff an ambulance. The fleet costs associated with this is relatively modest since it would require the addition of one ambulance. This could initially be accomplished by expanding the ambulance fleet size from three to four vehicles and executed by keeping a vehicle that would otherwise be traded-in during a regular replacement cycle.

As previously discussed, current and forecasted levels of emergency response units will facilitate a need for enhanced levels of supervision. In the short term (FY' 08) this will require hiring an additional four firefighter – paramedic positions then in turn promote four firefighter – paramedics



Franklin Fire Department

Master Plan FY 2008 thru 2013

to the position of Lieutenant. The hiring of additional personnel at this point is essential since without this addition promotions would detract from the number of firefighter paramedics available for service. Thus the annualized costs to effect the first phase of supervisory enhancements if \$ 239,383 (see Table 7).

Item	Quantity	Unit Cost *	Total
Lieutenant - ¹	4	7,949	\$31,796
Firefighter – Paramedic	4	42,762	\$171,048
Fringe Benefits	4	32% of base	54,735
Uniforms	4	1,400	5,600
Protective Clothing	4	2,000	8,000
			\$271,179

* Note all costs in terms of FY'07 dollar amounts.

1 – Based upon differential between top step firefighter and Lieutenant
Table 7

In terms of estimating costs for other changes anticipated for supervisory enhancement are, according to the department's collective bargaining agreement, based upon the top step firefighter-paramedic. The position of Lieutenant is compensated 15% more than a top step firefighter-paramedic – Captains are compensated 25% more than a top step firefighter-paramedic. Since we have no present salary structure we assume that the position of Battalion Chief would follow the existing salary structure and be 35% more than a top step firefighter – paramedic. In FY'07 dollars, this supervisory enhancement would be \$ 19,000. Further supervisory enhancements of incorporating the position of Station Captain will have a budgetary impact of \$ 9,300. Both supervisory enhancements should be timed coincidental (2009) to the hiring of the additional resources (company) to insure safe and adequate level of supervision.

Staff positions outlined herein should be ranked officer positions to insure proper assessment of authority, responsibility, accountability with compensation. The department presently employs the rank of Captain as its fire prevention officer. Therefore the positions of Fire Prevention Inspector and Public Educator are recommended to be at the Lieutenant level. A Captain's position is recommended for the position of Training and Safety Officer. It is important to mention that the promotion of these positions from within the department will require new personnel to replace them at the entry level. Otherwise promotions into staff positions would erode staffing available for emergency services. These costs are outlined below.



Franklin Fire Department

Master Plan FY 2008 thru 2013

Position	Salary Costs	Fringe Benefits	Annual Costs
Fire Inspector (Lieutenant)	\$60,938	\$19,500	\$80,438
Public Educator (Lieutenant)	\$60,938	\$19,500	\$80,438
Training and Safety Officer (Captain)	\$66,237	\$21,196	\$87,433
Administrative Assistant	\$26,809	\$8,579	\$35,387

Table 8

Timeline for Implementation

As indicated herein as well as identified in budget submission in previous fiscal years, the department has an acute need to replace fire prevention and administrative positions lost to previous budget reductions. Additionally the department and Town have grown to a sufficient size to warrant additional non-emergency positions to insure the quality of service and safety for employees and citizen alike. Consequently, this plan recommends that the Town considers replacing the Fire Inspector and Administrative Assistant positions as well as creating the positions of Public Educator and Training and Safety Officer at the beginning years of the plan (Fiscal Years 2009 and 2010).

The major emphasis of the resources needed in this planning cycle to provide additional response units before the department's response reliability declines to unacceptable levels. As indicated previously, response reliability is expected to reach approximately 70% (Figure 4) in Fiscal Year 2012. However, experience has shown that there are significant time challenges in trying to hire relatively large amounts of personnel. Among these challenges include the availability of a sufficient candidate pool in the Civil Service System, obtaining sufficient class space for recruit training at the Massachusetts Fire Academy, as well as the relative large financial impact created in any given fiscal year.

In light of these challenges, the plan anticipates a gradual ramp-up of personnel and fleet resources, beginning in Fiscal Year 2008 to be completed by the end of Fiscal Year 2012, hiring four new personnel in FY'08 and then 5 new personnel in Fiscal Years 2009, 2010 and 2012. The processes include promoting additional supervisory staff and making recommended supervisory enhancements at the end of the planning period (FY'13). Below (Table 9) is outlined the recommended sequence for the major action items for implementation during this planning cycle. New expenditure required to support the enhancements called for herein are outlined in Table 10.



Franklin Fire Department

Master Plan FY 2008 thru 2013

Fiscal Year	Action Recommended
2008	<ul style="list-style-type: none"> • Replace Fire Inspector • Replace Administrative Assistant • Hire 4 – new Firefighter – Paramedics • Promote 4 Lieutenants
2009	<ul style="list-style-type: none"> • Hire new Training & Safety Officer • Hire new Public Educator • Hire 5 new Firefighter – Paramedic positions
2010	<ul style="list-style-type: none"> • Hire 5 new Firefighter – Paramedic positions • Purchase new Fire Engine
2011	<ul style="list-style-type: none"> • Promote 4 new Lieutenant positions • Expand Ambulance fleet
2012	<ul style="list-style-type: none"> • Hire 5 new Firefighter – Paramedic positions
2013	<ul style="list-style-type: none"> • Re title Shift Supervisors from Captain to Battalion Chief • Re title 2 Lieutenant positions to Station Captain

Table 9

Item	Fiscal Year 2008	Fiscal Year 2009	Fiscal Year 2010	Fiscal Year 2011	Fiscal Year 2012	Fiscal Year 2013
Code Compliance Lieutenant	\$ 80,438	\$ 80,438	\$ 80,438	\$ 80,438	\$ 80,438	\$ 80,438
Administrative Assistant	35,387	35,387	35,387	35,387	35,387	35,387
Training & Safety Officer		87,433	87,433	87,433	87,433	87,433
Public Educator		80,438	80,438	80,438	80,438	80,438
Firefighter - Paramedics	239,383	533,841	828,300	828,300	1,122,758	1,122,758
Lieutenants	31,796	31,796	31,796	71,540	71,540	71,540
Battalion Chief - Station Captain						31,791
Impact to Operations Budget	\$ 387,005	\$ 849,335	\$ 1,143,793	\$ 1,183,537	\$ 1,477,995	\$ 1,509,787
Fire Engine			435,000			
Expansion of Ambulance Fleet				50,000		

Table 10



CONCLUSION

Based upon the department's historical data and future projections, the department can reasonably anticipate the need to acquire one additional company within this planning cycle. This additional level of support is required to insure the citizens of Franklin continue to enjoy a high level of emergency medical and fire services. These additions will require the hire a total of 15 employees by the end of the planning period in Fiscal Year 2013. With the growth in our work force will also drive the need to enhance present levels of supervision to insure safe levels in span of control required for day-to-day supervision. This will require and additional 4 new positions. Additionally, various staff and support position will be required over the planning cycle to provide adequate non-emergent services to the citizens of Franklin as well as insure proper support of emergency service personnel to meet their mission. It is recommended that positions lost through previous budget reductions be restored along with two other positions intended to meet the increasing needs for safety for citizens and uniformed personnel. Due to the relatively large number of employees, it is recommended that the Town build up to this level incrementally over a 5-fiscal year period beginning in Fiscal Year 2008.

The department's present capital improvement plan will require additions to accommodate increases in personnel. One additional fire engine and/or ambulance will be required to provide newly hired staff with sufficient equipment to provide services to the community. Growth presently projected in the northern part of the community will increase emergency response to that region – one where the department's on-time emergency response is marginal. As a result, increased responses to the north may ultimately erode the department's capacity to maintain acceptable on-time response and trigger the need to construct and additional fire sub station facility. Personnel presently anticipated within this plan may be sufficient to staff such a facility.