

Franklin Fire Department Strategic Plan Fiscal Year 2011



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Franklin Fire Department

Budget FY 2011

Table of Contents

Section	Description	Page
I	Executive Summary.	1
II	Town's Mission Statement.....	3
III	Department Mission Statement.....	3
IV	Organizational Structure.....	4
V	Operational Objectives.	5
VI	Accomplishments Fiscal Year 2009.....	6
VII	Tactical Goals Fiscal Year 2010.....	9
VIII	Budget Information	11
	A. Operating Budget Summary.....	11
	B. Personnel Allocation.....	12
	C. Capital Improvement Program.....	13
	D. Operations and Maintenance Budget.....	16
IX	Strategic Planning Items	23
X	Estimated Operating Budgets thru Fiscal Year 2014	25
Appendix A	Long Range Resource Plan.....	27
Appendix B	Response Information - Fiscal Year 2008.....	45



Franklin Fire Department

Budget FY 2011

I. Executive Summary

In typical years, the budget plan of the Franklin Fire Department is intended to outline the department's direction both fiscally and operationally over the next fiscal year. Our proposed tactical or short-range goals, combined with our strategic or long-range goals are intended to develop an organization and system that provides state-of-the-art, quality services to the departments' employees and the citizens they serve. This is not a typical year. This year, the short-term budget plan cannot reasonably support the performance objectives of the department.

The department's operating budget for Fiscal Year 2010 was reduced by \$ 275,000 or 6.6% from the approved budget of Fiscal Year 2009. As you know, the department received a Federal Stimulus grant of \$ 135,000 in early 2010. Without this funding, we would not have been able to achieve our performance objectives in Fiscal Year 2010. This Fiscal Year provides no reasonable expectation of positive change, with a reduced budget scenario which is approximately \$ 250,000 less than necessary to maintain the level of services enjoyed by the community in Fiscal Year 2008. In net terms the department has reduced the number of fulltime employees by 5; 3 line firefighter paramedics and 2 administrative staff.

Within this context, our employees continue to be the chief reason for maintaining our current level of success and level of services we provide our citizens. They continue to work tirelessly to protect life and property within Franklin. In addition to their on-duty responses, our employees commit countless hours in continuing education and training targeted to maintain and improve upon their emergency skills. In addition, this year marks an important milestone in our employee's commitment to providing quality services to the community. Our employees have participated in an internal strategic planning initiative, providing input and direction into the future direction of the service needs of the department. Additionally, they continue to press forward in attempt to provide the highest level of service to the community based upon advancement in the fire-rescue field and advancements in technology. These efforts have yielded significant and broad insight into the requirements necessary to maintain and improve upon the services we provide to the citizens of Franklin. Items brought forward have been incorporated into the tactical, strategic and capital planning initiatives contained herein.

This year the department is seeking to address a total of 8 tactical goals. These goals involve addressing major policy decisions which are driven by our current level of fiscal support and range from evaluating alternative transport for citizens seeking non-emergent transport to regional team concept for various rescue disciplines. You will note that several tactical goals type sought to address the needs of the department to match the challenges of our growing community have been moved from the Tactical section of our budget report to the Strategic section of the report. We believe this is both significant and important regression in the overall development of the Town's life safety organization. Organizations which do not or cannot plan for future service needs are typically damaged by them. In terms of fire-rescue services we believe this is unacceptable.



Franklin Fire Department

Budget FY 2011





II. Mission Statement of the Town of Franklin

It is the mission of the Town of Franklin's governmental entities to provide all of its citizens with the greatest possible spectrum of basic services, directed at publicly expressed community needs, at the least possible costs. This includes providing the children of our community with the ability to attain a higher plane of achievement within the school system, the less fortunate a variety of assistance and support programs, the elderly with services directed to meet their ever increasing leisure and health needs, and the public as a whole with a high degree of services from infrastructure support to recreational possibilities. As a corollary strategy to provide excellent services, the adequate maintenance of existing facilities must also be accomplished on a priority basis. All of this must be concluded within the scope of affordability in order not to burden our taxpayers beyond their capacity to pay.

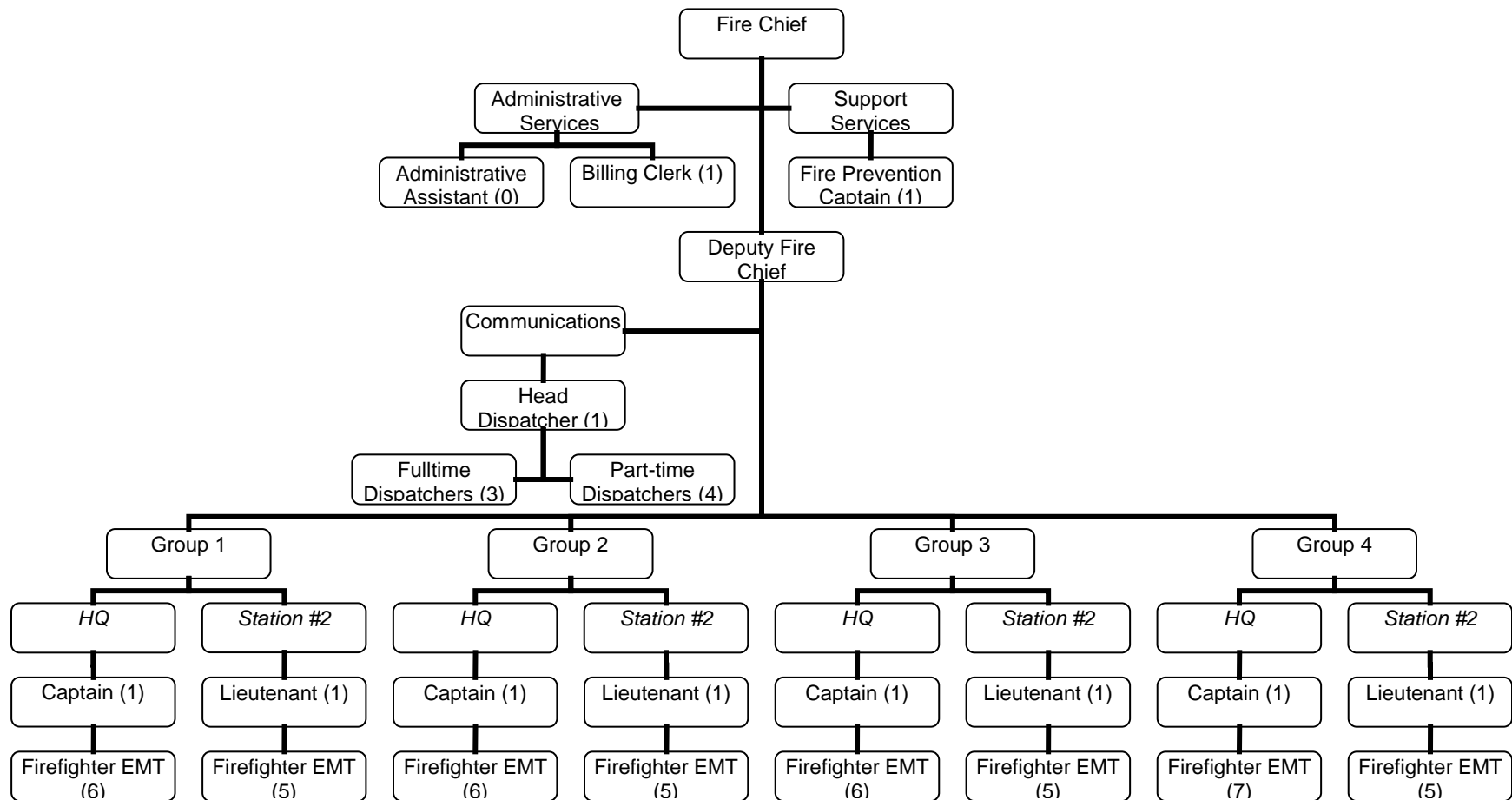
III. Mission Statement of the Town of Franklin Fire Department

The mission of the Franklin Fire Department is to ...

- Have a positive impact in the lives of citizens and visitors of Franklin in their time of crisis by providing compassionate, contemporary, community driven services.
- Safeguard human life from the perils of fire, sudden illness, injury or other emergency medical condition, natural and man-made disasters as well as preserve the environment and property from ensuing destruction.
- Be responsible for a safe, productive and pleasant work environment for our employees, and provide them opportunities to gain new skills and advance their personal career goals.



IV. Organizational Chart





V. Operational Objectives

The operational objectives the department uses to measure its success in meeting our mission are:

- A. Initiating advanced life support to patients within 8 minutes of receiving the telephone call at our communications center.
- B. To access, extricate, treat and transport and transport trauma patients to a level one trauma medical facility within one hour of the occurrence of the injury.
- C. Interrupt the progression of fires in structures within 8 minutes of open flame ignition.
- D. Maintain overall emergency response readiness above 70%.
- E. Provide safety and survival skills for all school students in grade K through 5 consistent with the Student Awareness Fire Education (SAFE) initiative of the Commonwealth.
- F. Provide educational opportunities for department members to insure optimal performance and safety.
- G. To develop and maintain "best practice" to insure personnel and citizen safety.
- H. Insure fire safety through timely, consistent code compliance services to all external customers.
- I. Provide all department services in a manner that satisfies the needs of our customers.

Attainment of Operational Objectives during Fiscal Year 2009.

- A. The department arrived at 91% of all medical emergencies within 8:00 minutes of initial receipt of call.
- B. The department's transport times for trauma patients were not readily available at the time of this report.
- C. The department arrived at 81% of all building fires within 8:00 minutes of initial receipt of call.
- D. The department's overall emergency response readiness was 84% in Fiscal Year 2009.
- E. The department's SAFE educators provided education to approximately 5,040 individuals through various venues.
- F. The department continued to support in-house education opportunities in fire and EMS topics.
- G. The department continued to maintain programs, staffing and equipment consistent with industry best practices
- H. There were not fires reported in occupancies which were inspected by the fire department in FY'09.



VI. Accomplishments Fiscal Year 2010

The achievements of objectives outlined in our Fiscal Year 2010 Strategic Plan will be substantially completed at the end of the Fiscal Year. All of the 13 tactical goals outline within the 2010 Strategic Plan has been addressed. Additionally we have listed the status of a number of goals began within the Fiscal Year 2009 period that were carried over for completion within Fiscal Year 2010. As you will note, a substantial number of goals were not attained due to the net 6.6% reduction in department funding from Fiscal Year 2009ugh some will not be completed due to the mid year budget cuts. The completion and progress of the objectives outlined below are the collective efforts of the entire organization and are a tribute to a great group of people serving a great community!

1. **Decrease the supervisory span of control for day-to-day routine and emergency operations. *NOT FUNDED***
2. **Improve the department's ability to provide code compliance services. *NOT FUNDED***
3. **Increase administrative support for department operations. *NOT FUNDED***
4. **Study the efficiency and effectiveness of changing current staffing from patterns from 7 at Headquarters and 5 at Station #2, to 6 at each fire station.**

This objective is subject to the collective bargaining process and is awaiting the completion of our on-going negotiations with the Firefighters Union.

5. **Investigate the feasibility of increasing on-duty paramedic staffing from 3 minimum to 4 minimum.**

This objective is subject to the collective bargaining process and is awaiting the completion of our on-going negotiations with the Firefighters Union.

6. **Continue to enhance department training and continuing education through the following: *GOAL NOT FUNDED***
7. **Increase the number of personnel certified as CPR instructors to enhance our ability to provide public CPR education. *GOAL NOT FUNDED***
8. **Reconstitute the Department's Honor Guard for deployment at ceremonial events. *GOAL NOT FEASIBLE IN LIGHT OF DEPARTMENT FUNDING.***
9. **Provide and educational library at each fire station.**

We are holding this goal until the end of the fiscal year to assess adequate funding for other department operations and functions.



Franklin Fire Department

Budget FY 2011

10. Develop comprehensive hazardous materials plan to insure proper resources to incidents on the highway and fixed facilities.

We have developed and implemented a specific Response Strategy or "Run Card" for hazardous materials response within the Town. Additionally, we now have the support of a regional foam trailer, housed in Plainville, which can respond in the event the Town experiences an incident involving a flammable liquid that requires large amount of firefighting foam.

11. Upgrade the self contained breathing apparatus brackets on Engines #1 and #4

We are holding this goal until the end of the fiscal year to assess adequate funding for other department operations and functions.

12. Develop and implement a comprehensive search and rescue plan for the State Forest Area.

We are currently partnering with the local Eagle Scout programs in a effort to provide better trail markings and GPS markings to allow for more rapid and efficient response to emergencies within the State Forest.

13. Implement the Fire Department's portion of the Town's Capital Improvement Plan. Specifically incorporating the following items in the anticipated purchased and placed into service.

In Fiscal Year 2009, the department received funding for the purchase (hardware and software) and implementation of electronic patient care reports. This include project has been completed with the transition to electronic reporting being effected at or about 1 January 2010. Additionally, the department replaced 10 sets of firefighter protective clothing.

The items approved within the Department's FY'10 Capital Improvement requests include:

- 2 – Staff vehicles
- 10 sets of protective clothing
- Cardiac Defibrillators
- Various radio infrastructure updates.

All items are currently in progress of completion. Completion date is anticipated by the close of the second quarter of Fiscal Year 2011.

Items completed but carried over from Fiscal Year 2009

1. Develop and implement a Pre-Incident Data collections system for use by emergency personnel.

With the implementation of electronic patient care reports (see Item 13 above), the department was able to utilize existing, contemporary laptop computers to complete this goal. With the assistance of the Town's IT Department we will be implementing the last phase of the project where laptop computers are linked to the department's computer server for the retrieval of building data while in the field. It is anticipated that the technical aspects of the program will be completed by the end of Fiscal Year 2010.



Franklin Fire Department

Budget FY 2011

2. Complete a risk assessment and possible program development for a Technical Rescue Program.

A risk assessment has been complete in accordance with the Technical Rescue disciplines as outlined by the National Fire Protection Association. The purpose of this assessment was to identify the training and programmatic requirements needed by the department to adequately respond to the various risks found within the Town. Accordingly, the below table outlines each Technical Rescue Category and the commensurate program/training needed by the department.

Technical Rescue Discipline	Training
No Technical Rescue Categories at this Level	Technician Level Training
Confined Space Search and Rescue Trench and Excavation Search and Rescue Surface Water Rescue Rope Rescue Vehicle and Machinery Search and Rescue Ice Rescue	Operations Level Training
Structural Collapse Dive Rescue Wilderness Search and Rescue	Awareness Level Training
Swift Water Rescue Surf Rescue Mine and Tunnel Cave	No Risks in Community





VII. Tactical Goals – Fiscal Year 2011

1. Maintain sufficient daily shift staffing to adequately achieve performance objectives

In the presence of FY'09's budget reductions, it was impossible to maintain the level of services previously enjoyed by the community. With the receipt of a Federal Stimulus Grant at the beginning of calendar year 2010, the department was able to maintain a minimum daily staff of 10 personnel, which in turn, allowed for staffing and deployment of 2 fire engines and 2 ambulances.

The funding as approved within the Town Administrator's recommendation will not sustain a minimum daily staffing of 10 but rather 9, personnel on duty. This will result, at times, with the department only able to staff 1 ambulance and rely upon ambulances from other communities to respond to Franklin when the staffed ambulance is committed.

We hope that available funds from our 2010 Federal Stimulus Grant may extend into FY'11 to reduce the times the second ambulance is unstaffed.

2. Develop and implement various safety policies and procedures resulting from the department's 2009 Health and Safety Audit.

During Fiscal Year 2009, the department completed an audit of department operations to the requirements of NFPA 1500, Standard on Fire Department Safety and Health Programs. This audit yielded various gaps in policy and practice which will be resolved over the next several fiscal years.

3. Evaluate the feasibility to licensing first response fire engine as Class V Rescue vehicles to insure higher availability of Advanced Life Support.

In the presence of reduced daily staffing, it becomes incumbent to outfit other responding vehicles with sufficient advanced life support equipment and supplies to attempt to reduce the overall effect on patient care and patient outcome. Therefore we will evaluate the fiscal feasibility to license our staffed fire engines as Class V Rescue vehicles as outlined by the Department of Public Health, then seek necessary funding through the Capital Improvement Plan.

4. Partner with other agencies within Norfolk County in the development of a Regional Technical Rescue – Dive Team

A Technical Rescue Risk Assessment completed at the end of Fiscal Year 2009 revealed the Town collectively contains Technical Rescue Risks that would necessitate the development of a Technical Rescue Team. However there are certain specific hazards that may require a Technician Level Response. As a result, the department will partner with other fire-rescue agencies within Norfolk County to develop a regional Technical Rescue Team. Once developed, the department may need to bolster certain technical rescue service deliveries in order to provide a seamless level of service with the Regional Team.



Franklin Fire Department

Budget FY 2011

5. Investigate the purchase of “Combi –Tool” extrication devices for each first response fire engine.

The department will investigate the utility of purchasing an extrication device known as a “Combi-Tool” for all staffed vehicles.

6. Evaluate current EMS transport policies to eliminate the transport of non-emergent patients to insure greater availability for emergent patients.

As the availability of staffed ambulance declines, it becomes important to insure that scarce resources are available when necessary. This year we will conduct an evaluation on the regulatory and customer service implications of developing policies intended to eliminate the transport of non-emergent patients to hospitals.

7. Upgrade high angle rescue equipment carried on department vehicles.

In response to the department’s 2009 Health and Safety audit we need to upgrade and maintain existing rope and adjunct rescue devices in accordance with national consensus standards.

8. Implement the Fire Department’s portion of the Town’s Capital Improvement Plan. Specifically incorporating the following items in the anticipated purchased and placed into service.

This year, the department is scheduled to continue the replacement of various pieces of equipment and the following fleet items:

- Ambulance
- Fire Engine
- Staff Car





Franklin Fire Department

Budget FY 2011

VIII. Budget Information

A. Summary of Operations & Maintenance Budget

<i>FUNCTION</i>	<i>Public Safety</i>	<i>DEPARTMENT:</i>	<i>Fire Department</i>		<i>DEPT. NO.:</i>	<i>220</i>	<i>FY: 2011</i>
Account #	Title/Description	FY'09 Approved	FY'09 Expended	FY'10 Approved	FY'11 Level Service	FY'11 Requested	FY'11 Reduced Service
(001)	Total Personnel Services	\$ 4,048,156	\$ 3,864,581	\$ 3,776,600	\$ 3,821,003	\$ 4,116,539	\$ 3,867,939
(002)	Total Expenses	\$ 368,867	\$ 307,275	\$ 365,423	\$ 21,690	\$ 337,875	\$ 336,475
(004)	Total Capital Improvements	-	-	-	-	-	-
	Total Operating Budget	\$ 4,417,023	\$ 4,171,856	\$ 4,142,022	\$ 4,142,693	\$ 4,454,414	\$ 4,204,414
	Variance from FY'10 Approved				\$ 253	\$ 311,974	\$ 61,974
	Percent variance from FY'10 Approved				0.0%	7.5%	1.5%



Franklin Fire Department

Budget FY 2011

B. Personnel Allocation

Title/Description	FY'07 Approved	FY'08 Approved	FY'09 Approved	FY'10 Approved	FY'11 Level Service	FY'11 Requested	FY'11 Reduced Service
Chief Fire Officers	2	2	2	2	2	2	2
Uniformed Personnel	49	49	49	47	47	47	46
Total Uniformed Personnel	51	51	51	49	49	49	48
Civilian Staff Personnel	3	3	2	1	0	0	0
Dispatch Personnel - Fulltime	4	4	4	4	4	4	4
Total Civilian Personnel	7	7	6	5	4	4	4
Full time Personnel	58	58	57	54	53	53	52
Uniformed Personnel - Pt-time	0	0	0	0	0	0	0
Dispatch Personnel - Part-time	4	4	4	4	4	4	4
Civilian Staff Personnel	0	0	0	0	1	1	1
Part time Personnel	4	4	4	4	5	5	5
Total Personnel	62	62	61	58	58	58	57



Franklin Fire Department

Budget FY 2011

C. Capital Improvement Program

Year Purchased	Item Description	Replace Cycle	2011	2012	2013	2014	2015	2016
Fire Attack Vehicles (15 Year Rotation)								
2007	Pumper (Engine 1)	2022						
2005	Rehab Unit	As needed						
1995	Pumper (Engine 2)	2010						
1997	Pumper (Engine 3)	2012	500,000					
2000	Rescue-Pumper (Engine 4)	2015					500,000	
2008	Aerial Tower	2023						
Forest Fire Vehicles (15 Year Rotation)								
2004	Brush fire 4x4	2019						
2004	Brush fire 4x4	2019						
Emergency Medical Vehicles (6 Year Rotation)								
2006	Rescue Ambulance (Rescue 2)	2012	260,000					
2009	Rescue Ambulance (Rescue 3)	2015					260,000	
2007	Rescue Ambulance (Rescue 1)	2013			260,000			
Support & Staff Vehicles (10 Year Rotation)								
1997	Station Car (C4)	2006						
1997	Pick-up Truck	2017						
1997	Fire Prevention C6	Rotation						
1999	Fire Chief Car (C1)	2009	35,000					
1999	Deputy Chief Car (C2)	2008						
2006	Shift Commander Car (C3)	2015						
2006	All-terrain Vehicle	2016						
2008	Rescue Boat							
<i>Vehicle Replacement Requests</i>			\$795,000	\$450,000	\$260,000	\$ -	\$710,000	\$ -



Franklin Fire Department

Budget FY 2011

D. Non Fleet Capital

Item Information			Fiscal Year					
Purchased	Item Description	Replace	2011	2012	2013	2014	2015	2016
1999	Copy Machine - STA 2	7 Years						
2005	Self Contained Breathing Apparatus	10 Years					300,000	
2003	Thermal Imaging Camera	6 Years						
2007	Copy Machine - HQ	7 Years				7,000		
2000	Auto Extrication Device - Sta #2	10 Years						
2006	Auto Extrication Device - HQ	10 Years						30,000
2001	Alarm Transceiver	12 Years			40,000			
2002	Breathing Air Compressor	15 Years						
2003	Cardiac Defibrillator	5 Years					75,000	
N/A	Computer Technology	N/A	50,000	5,000	5,000	5,000		
N/A	Non disposable Medical Equipment	N/A	5,000	5,000	5,000	5,000		
2008	Base Station Radio	15 Years						
1998	Radio Comparator	10 Years						
1996	Radio Repeaters	15 Years	35,750					
N/A	Mobile Digital Radio Conversation							
2006	Portable Radios	7 Years			200,000			
2004	Radio Pagers	7 Years						
2008	MCI Trailer							
	Station Fixtures & Furnishings							
	Miscellaneous Equipment		15,000					
2003	Fire fighting Protective Clothing	5 Years	18,000	18,000	18,000			



Franklin Fire Department

Budget FY 2011

	Station #2 Upgrades		75,000		500,000			
	Traffic Pre Emption Devices		21,000	21,000	21,000	21,000	21,000	21,000
Non-Fleet Capital Equipment			219,750	59,000	789,000	38,000	396,000	51,000





Franklin Fire Department

Budget FY 2011



Operating Budget

FUNCTION: *Public Safety* **DEPARTMENT:** *Fire Department*

Account #	Title/Description	FY'09 Approved	FY'09 Expended	220	FY'11 Level Funded	FY'11 Level Service	FY: 2011
				FY'10 Approved			FY'11 Reduced Service Level
001	Personal Services						
511010	Department Head:	110,828	110,247	110,828	114,595	114,595	114,595
	Funds for the salary of the Fire Chief.						
511260	Fire fighters:	2,437,090	2,320,005	2,388,543	2,421,294	2,471,926	2,421,294
	Funds in this account are used to compensate all uniformed career personnel in the emergency services and non-emergency services to include Captain, Lieutenants, and Medic Fire fighters. The requested amount includes step increases for junior personnel as required by the collective bargaining agreement. There is also a modest increase due to an increase in the number of pay periods (+0.2) beyond FY'10.						
511280	Civilian Personnel	224,841	248,994	186,004	219,486	219,486	219,486
	The funds in this account are used to compensate Uniformed Dispatch and Clerical Personnel in accordance with their collective bargaining agreement. - Dispatchers = \$ 191,476 - Clerical Support = \$ 28,010 The majority of the of the increase reflected is to reflect the manner payroll accounts are processed \$ 22,600). There is a commensurate decrease in line 513160 Civilian Overtime. The remaining increase is due to contractual increases.						
511520	Administrative Personnel:	95,069	116,807	95,069	98,301	98,301	98,301
	This account funds the salaries of the department's Deputy Fire Chief.						
513120	Scheduled Overtime:	55,878	75,431	40,226	40,226	69,700	40,226
	Funds are used to maintain shift staffing when personnel use personal days in accordance with the Collective Bargaining agreement.						-
513140	Non Scheduled Overtime (Fire Callback):	75,000	67,225	75,000	75,000	80,625	80,625
	Funds in this account are used to compensate personnel responding off-duty to provide coverage during large-scale emergencies or when the department receives several simultaneous emergencies. The amount requested is typically the average amount expended over the last several fiscal years.						
513150	On Call/Standby (Ambulance Callback):	20,000	19,824	20,000	20,600	37,088	20,600
	These funds are needed to compensate off-duty personnel who respond to augment on-duty staffing when multiple, simultaneous ambulance calls (44%) are received. The increase usually requested is based upon the trends developed over the past fiscal year. This year however we require an upward adjustment based upon our experience of callback needs during full staffing. The amount requested is required to compensate for the off-duty response for large-scale medical emergencies and trauma calls, as well as serious medical emergencies requiring more than 2 paramedics to manage.						
513160	Civilian Personnel Overtime	49,293	31,344	50,843	32,960	32,960	32,960
	Funds in this account are used to maintain adequate staffing levels when civilian dispatch personnel are absent on leave (sick, vacation, personnel time off). The decrease in this line has been done to reflect the payroll accounting system. There is a commensurate increase in line 511280 Civilian Personnel.						

513170	Holiday Overtime This account is needed to provide funds to maintain adequate shift staffing for emergency operations for personnel using holiday leave as outlined in the collective bargaining agreement. The reduction is recommended based upon experience data over the past two fiscal years.	17,680	24,345	17,680	17,680	26,338	26,338
513210	Vacation Coverage Funds in this account are used to compensate for the coverage of Uniformed fire personnel using vacation leave in accordance with the collective bargaining agreement. The increased amount in Level Funded Scenario includes fund eliminated from Line 513260 Training.	160,160	152,429	72,191	128,191	215,000	157,665
513210	Illness Coverage These funds are used to maintain adequate shift staffing levels for emergency service operations when on-duty personnel are absent due to non job related illness or injury.	60,320	55,891	25,688	25,688	56,187	25,687
513225	Fire Safety Education Program These fund were historically provided in the form of a grant from the Commonwealth of Massachusetts and provides funding necessary to continue school based safety and survival training. This heightened level of funding combined with state funding will insure classroom access for all grades K-5.	17,680	14,900	17,680	15,500	15,500	15,500
513260	Training Coverage These funds are used to compensate off-duty personnel in the attendance of mandatory department training. This includes training necessary to maintain emergency medical services (Paramedic and EMT) certifications. Additionally funds are used to maintain The reductions in the Level Funded scenario eliminates the ability to assign on-duty personnel to training and remove them from active duty. The resultant saving are reflected in Line 513210 Vacation Coverage and will assist in maintaining shift staffing at 8.	136,793	109,158	118,500	62,250	118,250	64,831
514010	Shift Differential These funds are used to meet our obligations under the collective bargaining agreement with department dispatch personnel who receive premium pay for working 3PM to 11PM shift.	6,205	6,028	6,205	6,205	6,205	6,205
514030	Holiday Differential These funds are used to compensate personnel who work during state and national holidays in accordance with the collective bargaining agreement. - Uniformed Personnel = \$ 32,699 - Dispatch Personnel = \$ 3,851	48,766	31,715	43,071	36,550	36,550	36,550
514050	Education Incentives: These funds are used to compensate personnel who have attained college degrees in accordance with the collective bargaining agreement.	57,250	53,700	56,000	50,000	50,000	50,000
514060	Additional Assigned Duties: These funds are used to compensate personnel for temporarily working out of category (e.g. A fire fighter working in the capacity of acting Lieutenant)	5,408	3,906	5,570	5,570	5,570	5,570
514070	Other Additional Pay (EMT Bonus) These funds are used to compensate personnel for maintaining EMS certifications in accordance with the collective bargaining agreements.	279,715	262,261	271,019	285,407	292,959	285,407

514080 Sick Leave Incentive	-	7,000		7,000	7,000	7,000
These funds are used to compensate personnel who use limited amounts of sick time as outlined in the collective bargaining agreements and based upon experience data.						
514090 Stipends	15,000	13,500	15,000	15,000	15,000	15,000
Funds in this account compensate for specialty positions in accordance with our collective bargaining agreements.						
515010 Holiday Pay:	134,755	113,256	125,400	118,800	122,000	118,800
These funds are used to compensate personnel for holidays and in accordance with the collective bargaining agreement. The decrease is due to fewer personnel within the department- but offset by the hourly increase in the CBA - Uniformed Personnel = \$ 114,000 - Civilian Dispatch Personnel = \$ 4,000						
515040 Line of Duty Injury	10,400	4,487	5,600	3,000	3,000	3,000
This new account is requested to allow for better tracking of costs associated with loss time injuries sustained while on duty.						
51505 Longevity	21,025	22,125	21,900	21,700	22,300	22,300
These funds are needed to compensate career employees for length of service in accordance with the collective bargaining agreements.						
519020 Sick Leave Buyback:	9,000	-	9,000			
These funds formerly in this account now appear in 514080 Sick Leave Incentive.						
Total Personnel Services (001)	\$ 4,048,156	\$ 3,864,581	\$ 3,777,017	\$ 3,821,003	\$ 4,116,539	3,867,939
002 Expenses						
519030 Tuition Reimbursement	2,500	3,641	3,500	3,500	3,500	3,500
This is the first year these funds have been requested and is needed to satisfy the requirements of the collective bargaining agreement. Employees receive 50% tuition reimbursement for achieving an average mark on college level course work.						
519040 Uniform Allowance:	3,700	2,100	4,300	2,000	4,300	4,300
These funds are needed to purchase uniforms for dispatch personnel in accordance with the collective bargaining agreement.						
519050 Uniform Cleaning Allowance:	30,600	31,088	29,400	28,800	29,400	28,800
These funds are required in accordance with the collective bargaining agreement and used to compensate personnel for cleaning and maintaining work uniforms.						
524020 Vehicle Maintenance	34,000	33,696	45,000	42,000	45,000	45,000
These funds are required to purchase services of a third party vendor to supply vehicle repair services for the department's fleet vehicles and fire apparatus and EMS vehicles.						
524030 Equipment Maintenance – Other	12,500	13,575	10,000	10,000	10,000	10,000
These funds are used to maintain miscellaneous fire and EMS equipment including (SCBA) and the purchase of oxygen for EMS operations						
524040 Office Equipment Maintenance	4,000	35	2,000	2,000	2,000	2,000
These funds are used to maintain miscellaneous office equipment associated with the department's administrative services.						

524050	Computer Equipment Maintenance Funds in this account are used to maintain computer network equipment and appurances.	10,000	1,620	10,000	9,000	10,000	10,000
524060	Communications Equipment Maintenance These funds are necessary to obtain services to maintain the department's radio communications system. Devices covered under this account include radio pagers, portable radios, mobile radios, base station radios and radio repeaters.	5,000	3,959	5,000	5,000	5,000	5,000
524090	Other Contractual Services These funds are used to purchase maintenance contracts for equipment associated with the department emergency medical services and includes equipment such as cardiac monitors and IV pumps. Additionally, funds are used for service contracts for the department's software system and EMS medical control.	20,000	18,751	23,250	32,250	32,250	32,250
527030	Equipment Rental These funds are used for the rental associated with telephone pagers for department personnel.	1,600	1	1,600	-	-	-
530300	Health/Medical Services These funds are used to compensate for medical services associated with the department's infectious control program which includes annual inoculations, vaccinations and infectious testing.	10,000	1,477	7,000	3,500	7,000	7,000
534020	Telephone These funds are needed for the purchase of telephone services to include local and long distance service and cellular telephone providers.	11,000	2,416	7,000	5,000	5,000	5,000
534040	Printing & Binding These funds are used to purchase various print items for the department. These items include stationary, report forms, envelopes and like supplies.	2,000	3,400	3,000	3,000	3,000	3,000
542010	Office Supplies These funds are necessary to purchase various clerical supplies for the department's administrative functions.	5,700	5,336	5,700	5,700	5,700	5,700
542080	Office Equipment The funds in this account are used for the purchase and replacement of miscellaneous office equipment for use by the department.	4,517	2,893	4,517	3,000	4,525	4,525
542110	Uniforms and Clothing These funds are required to purchase uniforms for uniformed personnel in accordance with various collective bargaining agreements.	45,500	37,931	43,900	38,400	39,200	38,400
548010	Vehicular Parts & Accessories These funds are needed for the routine maintenance supplies for the department's fleet of vehicles. These supplies include filters, tires, batteries and like items.	10,000	10,612	15,000	10,000	10,000	10,000
548020	Vehicular Tires & Tubes These funds are needed to tires, tubes and similar materials for the department's fleet vehicles, fire apparatus and ambulances.	-	7,092	-			

549050	Food – Departmental	1,500	3,500	2,000	2,500	2,500	2,500
	These funds are used to purchase food and other rehabilitation supplies needed to sustain emergency services personnel while operating at prolonged operations. Additionally, funds are used to purchase refreshments for various department events.						
550010	Health/Medical Supplies	51,000	43,415	51,000	50,000	51,000	51,000
	These funds are used to purchase expendable medical supplies used in the providing Emergency Medical Services. These supplies include bandages, splitting materials, oxygen tubing and similar supplies. The requested increase is due to increasing costs of supplies and anticipated increase in usage.						
552050	Firefighting Supplies	35,000	12,077	31,000	20,000	21,000	21,000
	These funds are used to purchase various items used in emergency service operations.						
	- Miscellaneous Tools & Equipment = \$ 30,000 - Supplies for stipend positions = \$ 5,000						
552060	Fire Hose Replacement	3,500	427	-		-	-
	These funds are requested to provide routine replacement of fire hoses.						
552070	Fire Alarm Supplies	800	-	500	500	500	500
	These funds are used to purchase services and supplies needed to maintain the Town's municipal fire alarm systems.						
552090	Other Public Safety Materials and Supplies	4,000	673	2,500	1,500	2,500	2,500
	The funds are needed to purchase public education materials used in the school programs, open houses and various information sessions presented by the department.						
553040	Instructional Materials	1,000	-	1,000	-	-	-
	These funds are used to purchase materials used in the department's in-service education programs.						
553900	Other Equipment	-	11,285	-	-	-	-
	Funds requested in this account in previous years have been relocated in Accounts 552050 Firefighting Supplies and 552060 Fire Hose Replacement						
554035	Chemicals	-	-	-	-	-	-
	These funds are necessary for the purchase of chemicals such as foam used for fire fighting operations.						
555015	Books & Subscriptions	600	30	1,500	1,040	1,500	1,500
	The funds in this account are used to purchase books used to support training and continuing education efforts of department members.						
571100	Meetings & Conferences (Training and In-State Travel)	51,850	43,544	47,756	35,000	35,000	35,000
	These funds are used to compensate external contractors which provide instructional services in both Fire and EMS continuing education session. Additionally, funds cover the costs associated with the attendance of conferences, schools and seminars for department personnel.						
573010	Dues & Memberships	7,000	12,701	8,000	8,000	8,000	8,000
	These funds are used to purchase memberships in various trade organizations trade related subscriptions to periodicals. Funding in this account also compensates for the medical control necessary to maintain the department's paramedic services.						-
	Total Expenses (002)	\$ 368,867	\$ 307,275	\$ 365,423	\$ 321,690	\$ 337,875	336,475

003	Equipment Outlay						
Total Equipment Outlay (003)		-		-			
004	Capital Improvements						
5841	Building Improvements						
5874	Other Equipment						
Total Capital Improvements (004)		-		-			
Total Operating Budget		\$ 4,417,023	\$ 4,171,856	\$ 4,142,440	\$ 4,142,693	\$ 4,454,414	\$ 4,204,414
Variance from FY'10 Approved			6,194	(274,583)	253	311,974	61,974
Percent variance from FY'10 Approved			0.1%	-6.6%	0.0%	7.5%	1.5%



IX. Strategic Planning Items

Below are listed various items identified during the department's strategic planning exercise for Fiscal Year 2009. Due to limits in financial and staff resources all items identified could not reasonable be included within the FY'09, '10 or '11 operating budget cycles. Some items have been brought forward as Tactical Goals in the FY'12 Strategic Plan. This list of items will be continued beyond FY'11 where they will receive proper consideration along with new items which may surface during the strategic planning process.

- a. Decrease the supervisory span of control for day-to-day routine and emergency operations.
- b. Improve the department's ability to provide code compliance services.
- c. Increase administrative support for department operations.
- d. Increase the number of personnel certified as CPR instructors to enhance our ability to provide public CPR education.
- e. Reconstitute the Department's Honor Guard for deployment at ceremonial events.
- f. Implement the hiring of a Full-time Training Officer to coordinate fire and emergency medical services continuing education.
- g. Implement the hiring of a Full-time SAFE Officer to coordinate public education.
- h. Upgrade the equipment cache on the Aerial Tower to include heavy rescue devices (e.g. air bags, etc.)
- i. Purchase a four-wheeled drive pick-up truck with plow blade to assist in department operations during winter snow storms.
- j. Increase audibility of radio communications during emergency operations by providing head sets/ear pieces for portable radios.
- k. Provide evaluation and upgrades as needed for Station #2.
- l. Investigate the feasibility of staffing the department's 3rd ambulance on a full-time basis.
- m. Investigate the feasibility to providing a training tower for use by department personnel.



- n. Evaluate the need and feasibility of implementing etomidate and phentenoil in the pre hospital setting.
- o. Provide tool boxes at each station for minor repairs.
- p. Purchase a trailer for hazardous materials supplies.
- q. Investigate the feasibility of providing IV "chillers" for pre hospital use.
- r. Evaluate the effectiveness of providing permanent piece assignments for on-duty personnel.
- s. Evaluate the ability of the department to provide fitness trainers in conjunction with a comprehensive fitness program.
- t. Upgrade the current fitness equipment at Station #2.
- u. Investigate the efficiency of using surrounding communities rescue vehicles to provide station coverage on a mutual aid basis.
- v. Replace the Brush Fire Tanker that was removed from service in 2008.



Franklin Fire Department

Budget FY 2011

X. Estimated Operating Budgets thru Fiscal Year 2014

A. Without Long Range Resource Plan additions.

FUNCTION

Public Safety

DEPARTMENT: Fire Department

Account	Title/Description	FY'11 Recommend	FY'12 Projected	FY'13 Projected	FY'14 Projected
1	Total Personnel Services	\$4,116,539	\$4,322,366	\$4,538,484	\$4,765,408
2	Total Expenses	\$337,875	\$354,769	\$372,507	\$391,133
3	Total Equipment Outlay				
4	Capital Improvements				
Total Operating Budget		\$4,454,414	\$4,677,135	\$4,910,991	\$5,156,541

Dollar Variance from previous Fiscal Year

\$223,807

\$234,998

\$246,747

Percent Variance from previous Fiscal Year

5.00%

5.00%

5.00%

B. With Long Range Resource Plan additions.

FUNCTION

Public Safety

DEPARTMENT: Fire Department

Account	Title/Description	FY'11 Recommend	FY'12 Projected	FY'13 Projected	FY'14 Projected
1	Total Personnel Services	\$4,116,539	\$4,509,668	\$5,298,860	\$6,368,700
2	Total Expenses	\$337,875	370,142	\$434,917	\$522,727
3	Total Equipment Outlay				
4	Capital Improvements				
Total Operating Budget		\$4,454,414	\$4,879,811	\$5,733,777	\$6,891,427

Dollar Variance from previous Fiscal Year

\$425,397

\$853,967

\$1,157,650

Percent Variance from previous Fiscal Year

9.5%

17.5%

20.2%



Franklin Fire Department

Budget FY 2011

C. Personnel allocation with Long Range Planning Additions.

Personnel Allocation	FY'11 Recommend	FY'12 Projected	FY'13 Projected	FY'14 Projected
Chief Fire Officers	2	2	2	2
Uniformed Personnel	49	54	61	66
Total Uniformed Personnel	51	56	63	68
Civilian Staff Personnel	2	3	3	3
Dispatch Personnel - Fulltime	4	4	4	4
Total Civilian Personnel	6	7	7	7
Full time Personnel	57	63	70	75
Uniformed Personnel - Part-time	0	0	0	0
Dispatch Personnel - Part-time	4	4	4	4
Civilian Staff Personnel	0	1	1	1
Part time Personnel	4	5	5	5
Total Personnel	61	68	75	80



Appendix A

Master Plan



Table of Contents

INTRODUCTION.....	29
METHODOLOGY.....	29
DATA IDENTIFICATION AND COLLECTION.....	30
EMERGENCY RESPONSE RATES.....	30
RESPONSE RELIABILITY.....	30
RESPONSE EFFECTIVENESS	31
DATA ANALYSIS.....	33
EMERGENCY INCIDENT RATE	33
RESPONSE RELIABILITY.....	34
RESPONSE EFFECTIVENESS	38
BUDGET IMPLICATIONS AND IMPLEMENTATION.....	40
RESOURCE COSTS	40
TIMELINE FOR IMPLEMENTATION.....	42
CONCLUSION	44



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%

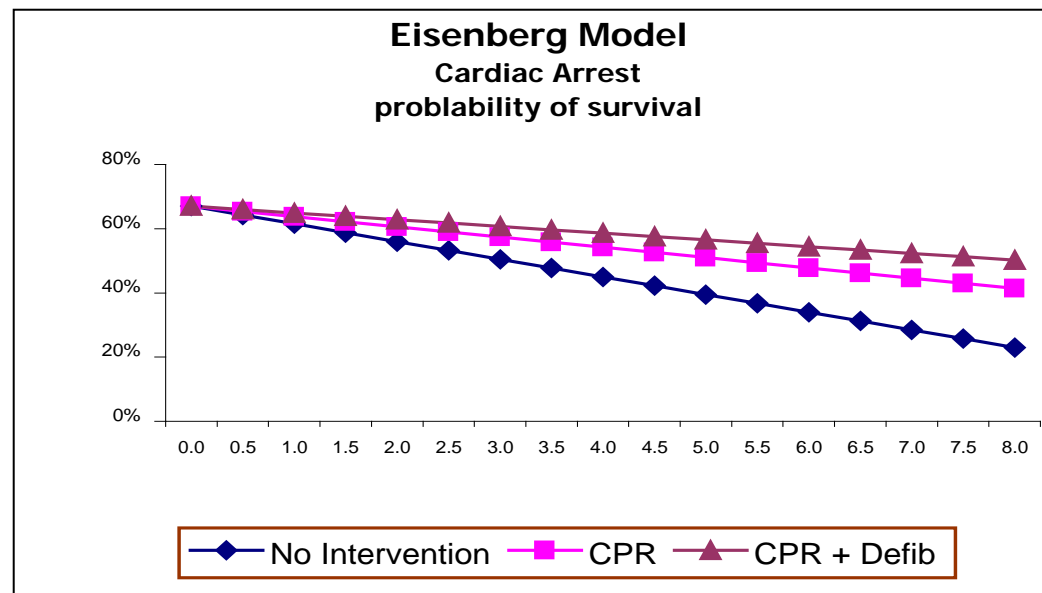
* Includes incidents where both stations responded.

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).

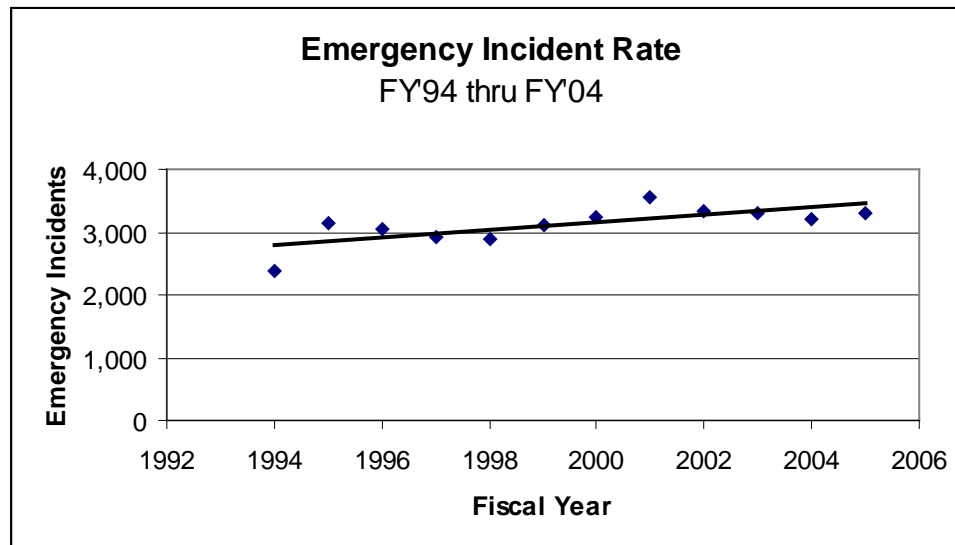
ON-TIME EFFECTIVENESS BY FIRE DEMAND ZONE															
Deployment from West Central and King Street Stations															
High FDZ				Medium FDZ				Low FDZ				System Wide			
Total	Served On Time	Not Served	% Served	Total	Served On Time	Not Served	% Served	Total	Served On Time	Not Served	% Served	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.

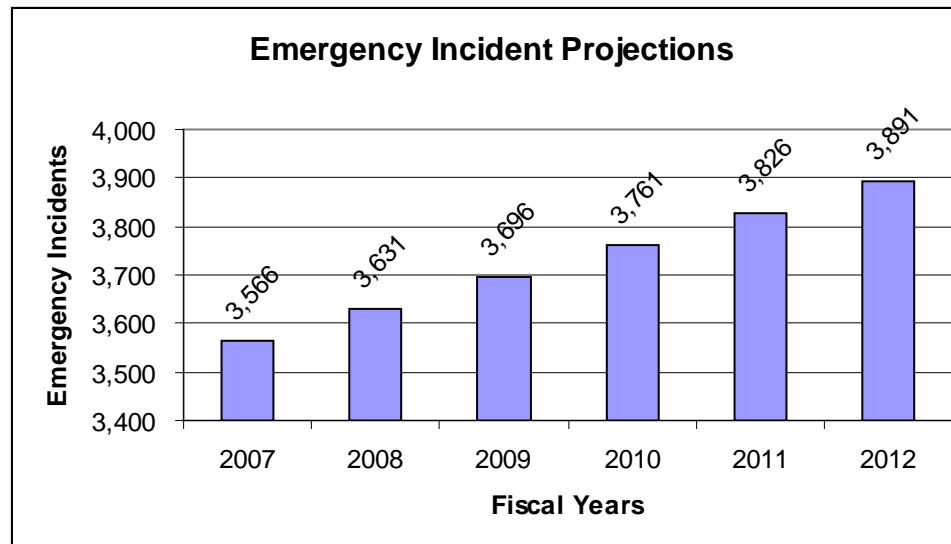


Figure 3

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.

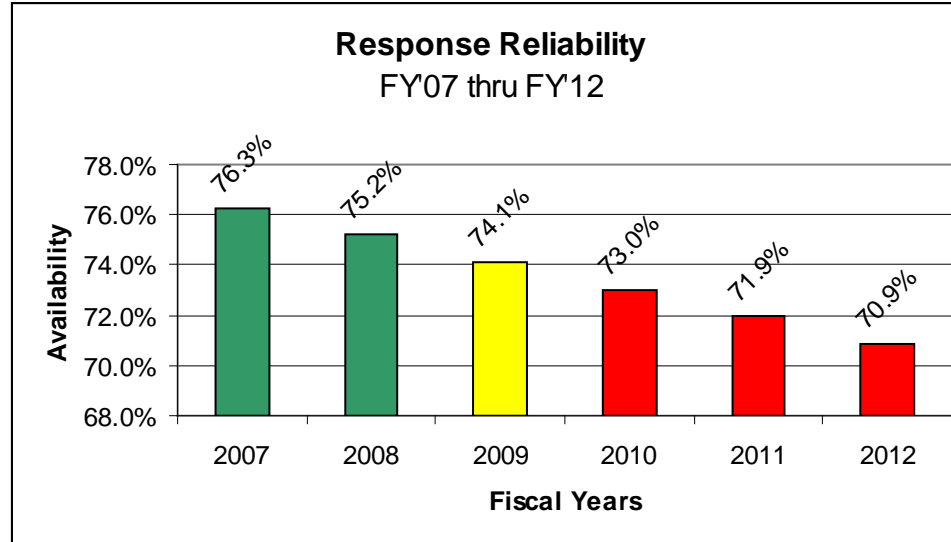


Figure 4

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).

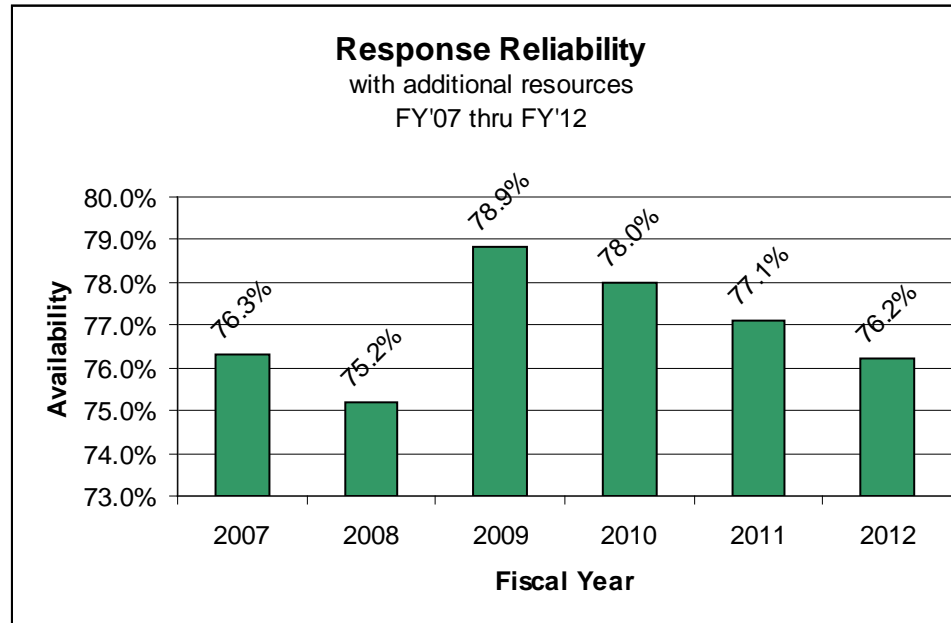


Figure 5

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.



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.



Franklin Fire Department

Master Plan FY 2008 thru 2013

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 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.

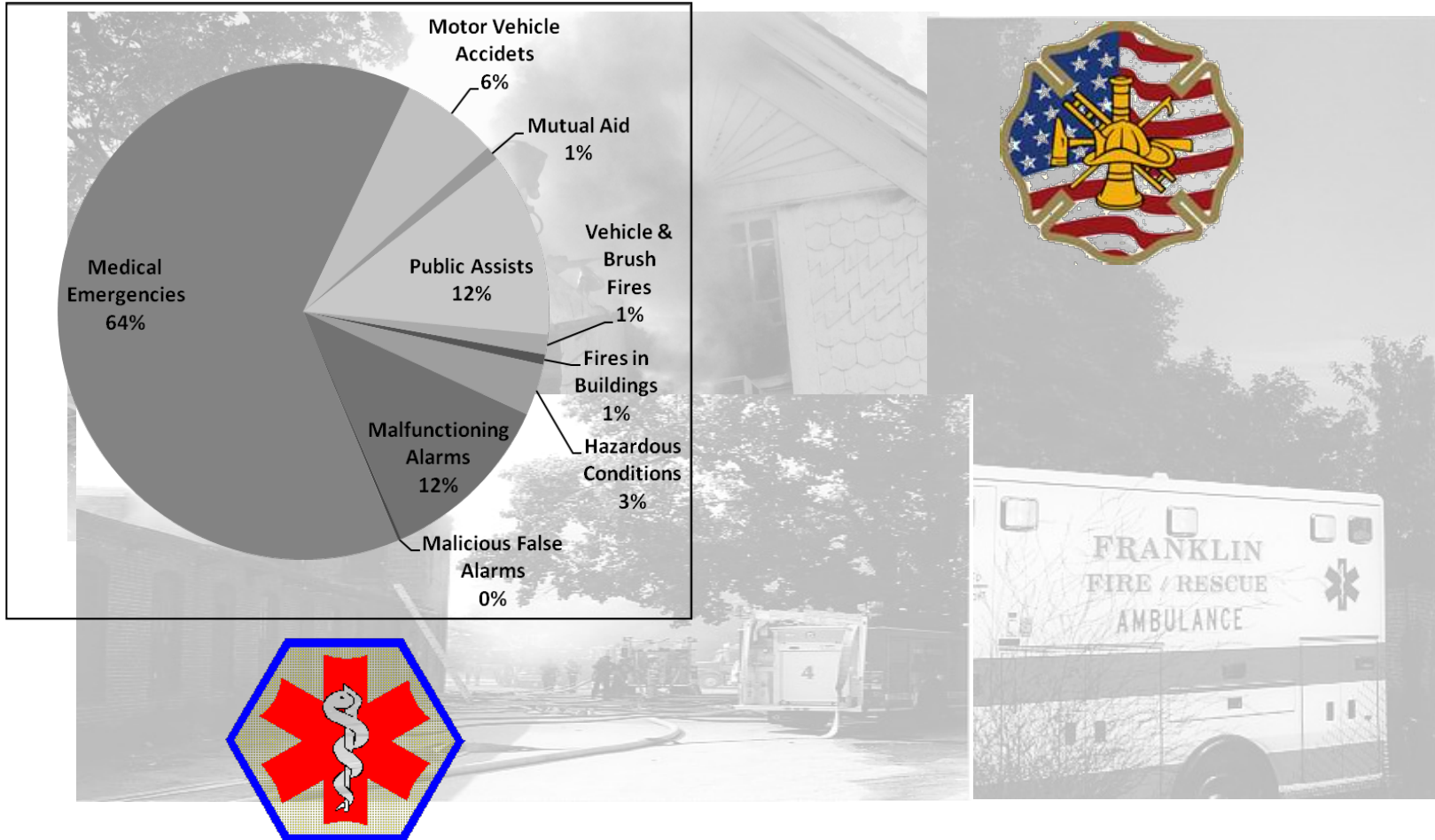


Appendix B

Response Data



Emergency Incident Response





Franklin Fire Department

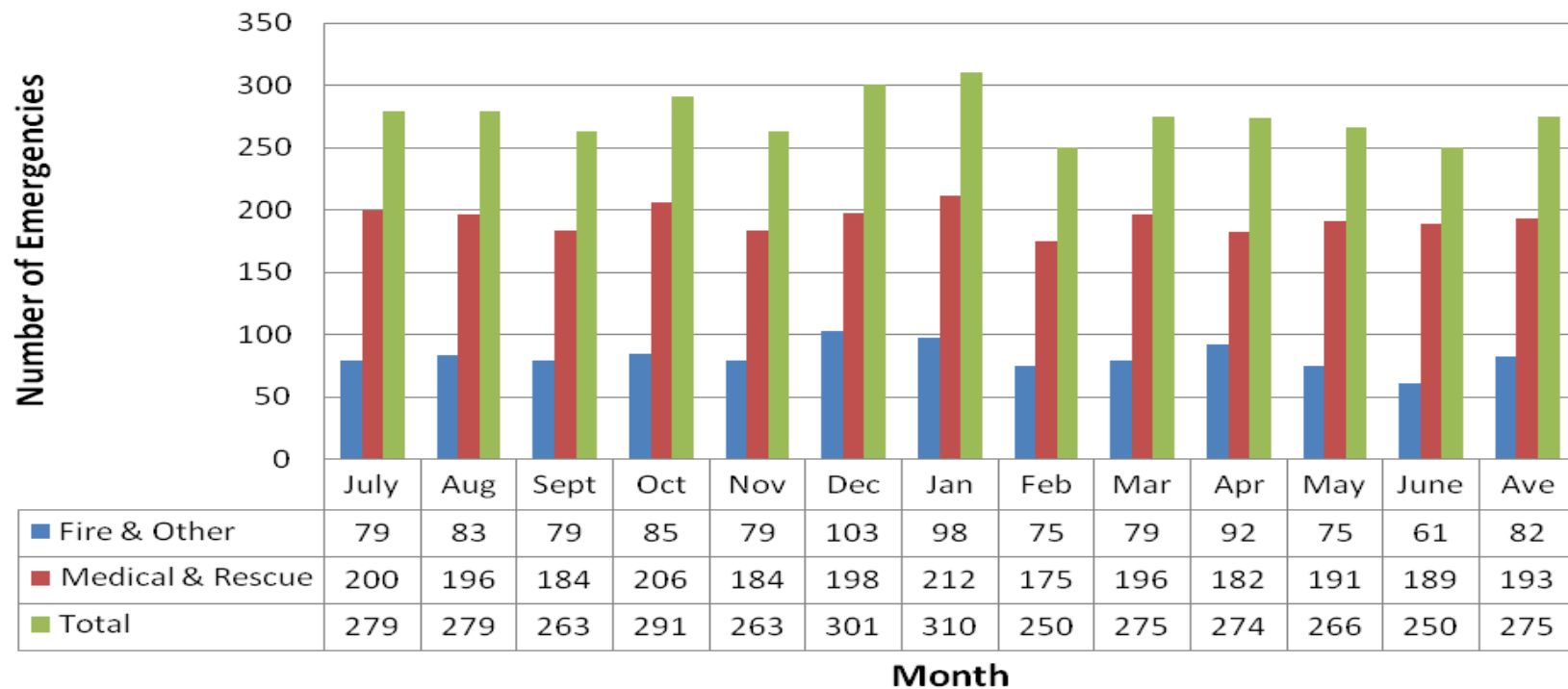
Budget FY 2011

Type of Emergency	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Fires in Buildings	27	32	26	20	27	18	31	35	26	24	23
Hazardous Conditions	124	128	143	143	97	110	72	90	83	93	115
Malfunctioning Alarms	152	193	202	197	176	237	210	253	177	398	400
Malicious False Alarms	15	19	14	14	7	10	10	10	17	10	7
Medical Emergencies	1,889	1,862	1,940	1,828	1,792	1,856	2,052	2,231	2,146	2,172	2,171
Motor Vehicle Accidents	270	193	290	335	344	295	261	270	270	217	218
Mutual Aid	4	17	11	6	27	25	42	42	38	44	32
Public Assists	498	680	842	682	743	594	574	668	652	394	413
Vehicle & Brush Fires	140	114	96	110	98	74	60	87	59	84	44

Fiscal Year	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Recap of Major Categories											
Fire Emergencies	960	1,183	1,334	1,172	1,175	1,068	999	1,185	1,052	1,047	1,034
Medical Emergencies	1,889	1,862	1,940	1,828	1,792	1,856	2,052	2,231	2,146	2,172	2,171
Motor Vehicle Accidents	270	193	290	335	344	295	261	270	270	217	218
Total Emergencies	3,119	3,238	3,564	3,335	3,311	3,219	3,312	3,686	3,468	3,436	3,423



Emergency Response Fiscal Year 2009

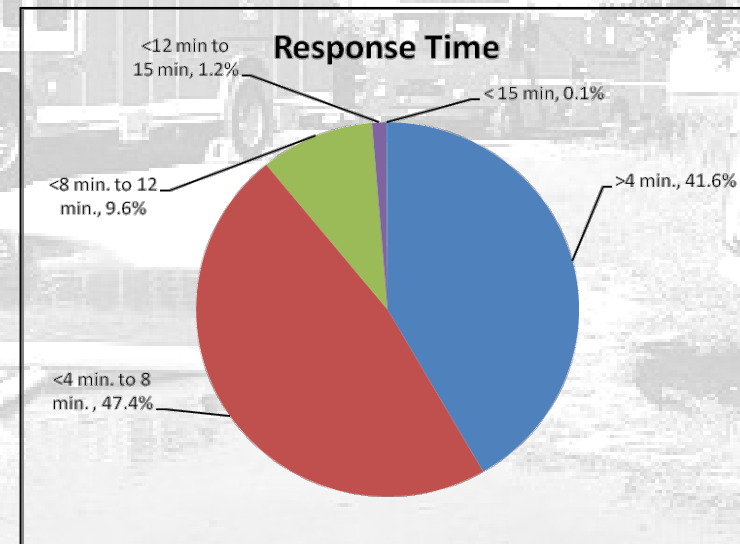
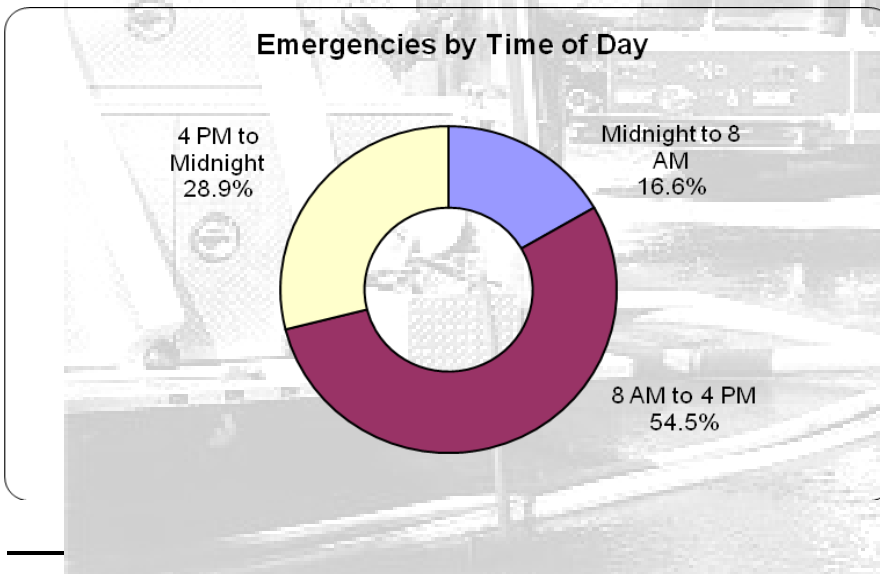
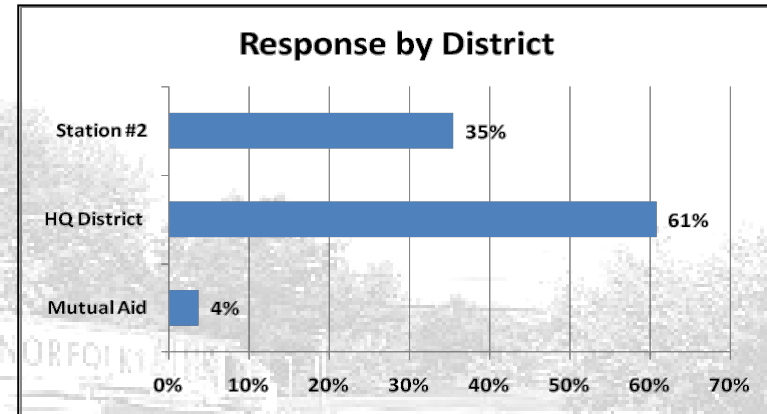




Franklin Fire Department

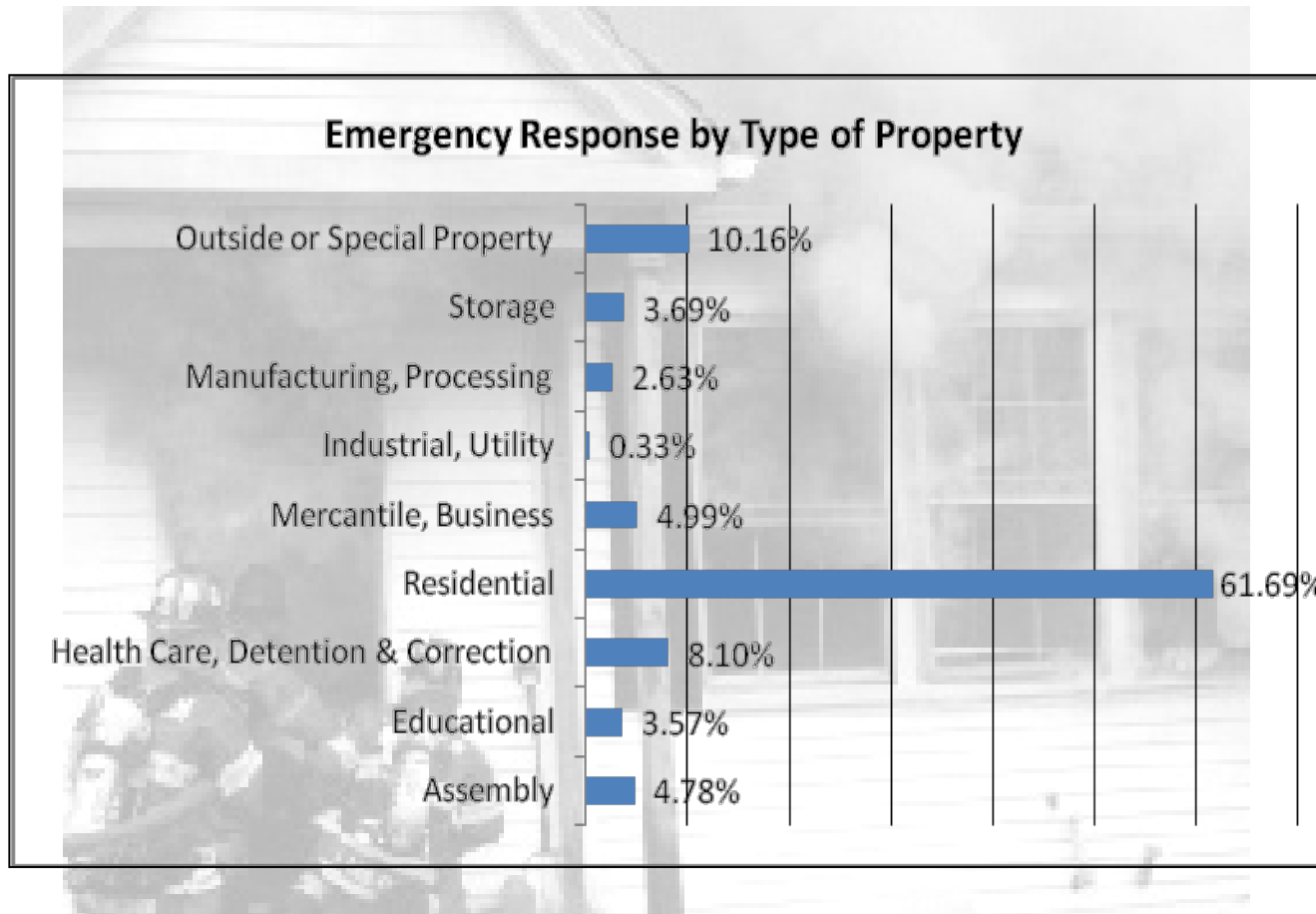
Budget FY 2011

Fiscal Year Trend Analysis		
Recap of Major Categories	'08-'09	'99-'09
Fire Emergencies	-1.2%	8%
Medical Emergencies	0.0%	15%
Motor Vehicle Accidents	0.5%	-19%
Total Emergencies	-0.4%	10%





Fire Emergencies





Franklin Fire Department

Budget FY 2011

Inspectional Services

