

**Initiating a Project Management Program for the Liberty Township Fire
Department**

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A proposed research project submitted to the Ohio Fire Executive Program

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CERTIFICATION STATEMENT

I hereby certify that the following statements are true:

1. This paper constitutes my own product, that where the language of others is set forth, quotation marks so indicate, and that appropriate credit is given where I have used the language, ideas, expressions, or writings of another.

2. I have affirmed the use of proper spelling and grammar in this document by using the spell and grammar check functions of a word processing software program and correcting the errors as suggested by the program.

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ABSTRACT

The proper approach to management of projects in most fire departments in Central Ohio has been a major challenge. Lacking a structured program creates a problem when there are proposals that cannot get done. An urgent need for a program that is customized to address the project management needs of the Liberty Township Fire Department is required.

The purpose of this research is to get information on how to improve the internal operations of the Liberty Township Fire Department by providing a template to follow that incorporates business management models with fire department structure.

The research paper was based on information collected from secondary sources. Great care was taken while identifying and selecting the kind of source. Ideas borrowed from other authors were carefully synthesized and paraphrased to avoid plagiarism. The necessary credits were given. Furthermore, a survey was released to Central Ohio Fire Departments for their input regarding how they handle their internal projects. Lastly, action research was accomplished by developing five small projects to see how the theorized template would work within the fire department culture. Based upon the researched material, survey, and action research recommendations have been developed to assist the Liberty Township Fire Department in future project completion rates along with other similar departments having like problems.

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INTRODUCTION

Statement of the Problem

The Liberty Township Fire Department lacks a formalized, published process for development of creative opportunities that would directly or indirectly affect the department's ability to provide a service to the community. The current informal and unpublished program has no specific guidelines to follow. The problem this study will investigate is what can be done to improve the program and manage the projects within the Liberty Township Fire Department.

There are resources for projects but critical management skills are not being utilized effectively. To reach and maintain the leading edge in fire protection services in the region, the department has to change its management approach to a more efficient one. There is an urgent need for developing a program that is customized to address the project management needs of the Liberty Township Fire Department. The other fire departments in Delaware County can learn from Liberty Township once the recommendations have been proven to be successful.

Purpose of the Study

To develop a model / handbook entitled "Project Management Program" that can be used by any and all fire departments. This model would have to be modified based upon the size and resources available for the specific fire department. This research will be accomplished by using three modes of study. The first will be of course, literature review. The second will be reviewing data received from surveys. Lastly, action research will be accomplished based upon the model developed from what the literature review states.

Research Questions

1. What research material can be found and used to develop a “best practices” model?
2. What processes have been developed by other fire departments that will be useful to the Liberty Township Fire Department?
3. What significant data can be identified by developing a research based model and using it as a test element?
4. What model can a fire department accept to become more successful in project management?

BACKGROUND AND SIGNIFICANCE

The Liberty Township Fire Department provides Emergency Medical Services (EMS), Fire, and Rescue services to an estimated 35,000 residents (Census 2006). This population is comprised of the incorporated area known as the City of Powell, Ohio population 11, 494 (Census 2006) and the unincorporated area of Liberty Township population 24, 445 (Census 2006). This area is protected by 51 full-time firefighter paramedics and 10 part-time firefighters who will respond to approximately 2200 calls for service with 72% being EMS related (Annual Report, 2007).

Liberty Township took its first run in 1947 (Bernans, 2008) as a volunteer department. In 1972, it was the first volunteer department in Delaware County, Ohio to provide paramedic level service (Bernans, 2008). In 1990, the volunteer department changed to a career department hiring its first full time chief and then slowly added six personnel (Annual Report, 1991). In the next five years the department grew to four personnel per shift plus two part time personnel (Annual Report, 1996). In the subsequent five year period, the department added one person per shift each year, added a prevention department and an assistant chief, raising the department total to 25 personnel (Annual Report, 1997-2003). In 2004, the department added another 15 personnel to staff the second station that was built to maintain coverage of the township's southern district, decreasing response times considerably (Annual report, 2005). In 2009, the department now has a force of 51 full-time staff, one chief, one assistant chief, two captains, two prevention personnel, six lieutenants, and thirty-nine full-time firefighter paramedics. The crews are augmented by one part-time firefighter per day giving a maximum of 16 line personnel with a minimum of 13 line personnel on duty 24 / seven.

This explosive growth of professional staff has given way for many more ideas to be proposed to enhance Liberty Township's services. One example of a proposed project was for someone to develop a program where responding personnel, when arriving at a long driveway, would know how long the driveway is based upon the color coded sign posted at the road. This project was assigned as a summer project for a part-time firefighter who was off on summer break from college. This project began in the summer of 2003. To date, Liberty Township Fire Department still does not have this program adopted. In fact, most people forgot that this project was ever assigned.

Another project that has had no end result is the pre-plan project. Over the past few years, the project has been assigned to numerous people in hopes someone would be able to provide a well developed plan. Each time, no one can decide exactly what should be on the plan resulting in no plan that has been published for the end user.

The lack of a program to manage and ensure effective running of the fire department operations, the project, or even other sub-projects within the department is a real problem because in today's world with the current level of information and communication, there is a need of supplying correct and logical information about the progress of projects for any department of a government agency.

This research study is justifiable by the impact could bring to this department and other similar fire departments. It will allow the department to be in a position to avoid further mistakes. Solutions discussed in this paper will assist the Liberty Township Fire Department in developing new projects, while increasing the accountability to see that projects are completed. The conclusion is intended that most people who have depended on the services of this department shall now be in a position to receive better services when a solution is implemented.

LITERATURE REVIEW

The following information is drawn from several sources. A detailed description of all specific roles, tasks, and relationships for the project management team is presented in Appendix One. According to Martin and Tate (2001) there are usually a number of people who are either directly involved in the project or who have a stake in the outcome. These people are called stakeholders. (Appendix One Section One)

The first position is the project leader. According to Thomsett (2002) a successful project manager can define and work within a specific area of responsibility. (Appendix One Section Two) All of these items are used when a project is going through its ordinary process. A great candidate for this position would be a company officer that holds the skills affiliated with the above list. The project leader is considered to be the facilitator of the project. According to Thomsett (2002) they must use an open and collaborative manner with the team members so everyone has input. The essential role of the project leader is to lead the team through the processes so that the team is successful (Martin and Tate, 2001) It is the project leader who is accountable for the team's success, and they do this by focusing on a very few and clear priorities that everyone can grasp (Bossidy and Charan, 2002)

The next position to be considered and is critical for its success is the member. (Appendix One Section Three) A firefighter within the organization would hold this role. The firefighter (team member) has an active participatory roll and is accountable for ensuring that his or her work contributes to the overall success of the project (Martin and Tate, 2001)

The next position that is crucial for the process to be successful is the sponsor. The sponsor is someone from management who will oversee the project so that it will satisfy both the

customer and the needs of the organization. (Martin and Tate, 2001) (Appendix One Section Four)

The sponsor will be accountable for the project leader's success through coaching and encouraging. It is important to pass on these skills to the project leader so that they may step into the roll of sponsor in the future. (Bossidy and Charan, 2002)

The customer will receive the final deliverables from the project team. The Clientele may be the community itself, or they can be internally as a group of firefighters or they can be both with different needs met. These stakeholders can either be interested in what the project shall bring forth in form of outcomes or they may cause problems during the initiating, planning, implementation, or evaluation stages of the project (NFPA, 2001).

An example would be a project to develop a new fire engine. The final deliverable to the customer (community) is a well thought out fire engine that has the capabilities to respond to numerous types of emergencies. The internal customer will receive an up-to-date apparatus that is well built with their safety in mind. So both customers win with this type of project. Most projects are done for the internal customers who then represent the needs of the customers and end users outside the organization. (Martin and Tate, 2001) The customers are responsible to provide the project team with a clear picture of what their needs truly are. They must participate with the project team where appropriate, review the status reports and provide feedback to the project leader, and review the final status report.

The final position is the resource manager, who has the responsibility to assign the project team members. Depending on the size of the department, the responsibilities of the resource manager may fall within the project leader, the sponsor, or in a large department the

human resource section would become involved. Nevertheless, whoever takes the resource manager role they will have numerous responsibilities. (Appendix One Section Five)

Now that the cast of characters has been described, the next on the list to discuss in this research project are the four phases of the project. The sequence for a project is the same no matter how big or small the project. The sequence can be grouped into four separate areas. (Appendix One Section Six)

Prior to the execution of the first phase, the management team must avoid great risks, so fire department should take the time to formulate sound purposes of the project that it may need to run. This does not end at mentioning the sound purpose but goes ahead to justify the importance of the project. The department should validate the project before development proceeds. The sponsor of the project will usually be the management staff of the department and should be fully convinced with insight of the current pressing need. The management team should be informed so they can make the most advantageous decision. A formal written proposal developed by the highest levels of command within the fire department should be forwarded to the management team. (Appendix One Section Seven)

The justification should also include how the project is in line with the strategic plans of the township. It should show the rationale of giving priority to this particular project in relation to other projects of the department that may be competing for the limited financial resources. This justification will indicate the level of importance of this project to the community and the department and if it is likely to get funded.

As a requirement, the department should have a way of taking a time out if risks are triggered in relation to the project. This includes having a provision of who shall manage the organizational issues whenever they arise within the jurisdiction so to ensure the project meets its

key priorities; namely, the timeliness and operation within a strict budget (NFPA, 2001). No other research could be found in literature that describes a process that works for any and all entities.

The first phase, the initiation, begins after the project is selected to be a project by the management team (Martin and Tate, 2001). The initiation phase will assist the project leader to give direction on what is to be delivered at the final phase. No one likes paperwork - but it is an unavoidable part of managing any size project. (Cook, 2005). One portion of the paperwork that should be developed is the charter. (All meeting minutes, status reports, change request / approvals, and lessons learned) The charter, which we will talk about in detail later, is the deliverable from this phase. The sponsor has the responsibility to develop the charter but in most organizations the project leader develops it and the sponsor approves it. (Martin and Tate, 2001).

The charter formally recognizes the existence of a project, identifies the project sponsor, project manager, and other stakeholders, states the project objectives, the overall scope, and other supporting details so the sponsor will be able to approve the project. (Cook, 2005) There are many ways that a charter can be developed. (Appendix One Section Eight)

To develop the charter, there are two areas that need to be discussed. The section entitled “other stakeholders” should have within it, a list of other individuals or organizations that have a vested interest in the project (Cook, 2005). The other area to be discussed is the project objective. All projects have an objective or it would not be a viable project but what should be included in this section are objectives that are considered S.M.A.R.T. This stands for specific, measurable, agreed, realistic, and time constrained (Cook, 2005). Experts also recommend that it is safer to write a short statement that clearly defines what the implemented project is designed to deliver. Conventionally, this statement should be brief, up to the point and should not exceed two

sentences (USFA, 2002). Once the charter is developed and signed off, the project team is on its way to success.

Bruce G. Posner once said, “Beyond the loathing and the fear lies one of the best kept secrets in American Business. Planning, it turns out, is really no more – and no less – than another word for good management.” The planning phase incorporates many specific tasks. It will be up to the project leader and the sponsor to work together to accomplish the following recommendations. The first thing that must be accomplished is setting goals for the team. Remember, getting things accomplished through others is a fundamental leadership goal. (Bossidy and Charan, 2005). As the leader you must provide leadership to the team but instead of being the true leader, you should take the stance of being a coordinator for the team. The team must know the ground rules and understand that you are there for them throughout the project. You must make sure that the team is organized, focused, and on task. All responsibilities must be accomplished within the assigned timeline to keep on track for the deadline. The leader must attack problems immediately and resolve them to ensure that you will be able to finish one phase and get the next one going. (Thomsett, 2002). Since most people on the team will have their everyday responsibilities, as the leader, you must take into consideration your team as a whole and the conflicts that could be imposed while working on the project. Another attribute, while in the planning phase is to realize the project leader will be the problem solver on the team. (Thomsett, 2002). This means that you must be accessible to your team to remedy any problems that arise. Remember that to be effective, a strategy has to be constructed by those who will execute it, namely the line people. (Bossidy and Charan, 2005).

What about the planning process with regards to the time it should take? As a general rule of thumb, it should take five percent of the entire project duration on the planning phase. (Cook,

2005) It is suggested, during the planning phase, to use the RAP structure. The RAP structure has been proven to be the most effective and efficient technique for planning and managing a project. (Thomsett, 2002) (Appendix One Section Nine)

During the RAP session the project leader and all of the stakeholders will find themselves discussing many issues to include the scope and objectives, foster project benefits, developing a strategy to accomplish the project, analyzing any risks associated with the project, discussing the costs involved, developing a schedule, and creating a project task list. All this discussion will last based upon the size of the project. Rob Thomsett suggests that a project leader should allow for one to five days. Smaller projects (less than three months) should take a day or so and larger projects can take up to five days to develop a good project plan.

During the planning phase while in the RAP session there are three milestone events that should be discussed and decided upon. According to Martin and Tate (2002) the first milestone is the project plan, this signals the end of the planning phase. Providing the final deliverable signals the end of the execution phase. Last but not least, the completion of the close out report signals the end of the final phase. These milestones should be identified to the team so that they know progress is being made throughout the entire process.

Now that the planning phase is complete the next phase to conquer will be the execution phase. Once this phase is completed, the end product will be delivered to the most important stakeholder, the customer. The execution phase will not only be the longest phase, but it consumes most of the resources – time, effort, and money. (Martin and Tate, 2001) While the team is out getting the sub projects completed, the project leader must manage the team by tracking their progress, monitoring the team, managing any changes that need to take place, and finally communicating the progress that is being accomplished both to the team members and to

the sponsor. During the team meetings, most of these tasks can be accomplished. However, it is the project leader's responsibility to stay focused and make necessary visits to see that the team is on track. Remember, the project leader has a very crucial role. When teams get busy and problems occur, teams can fragment – with disastrous impact on the project. Project team management involves leadership, motivation, team building, conflict resolution, decision making, and constant communication with the team (Cook, 2005)

Tracking the team's progress is the first responsibility. Based upon the research there are numerous ways to track the team's progress. Depending on finances there are software programs available to accomplish this task for the project leader. Since most fire departments are new to project management, it is assumed that they would not want to purchase tracking software at the beginning. So, with that said, this paper will discuss what project leaders can do without the aid of software programs. The project leader can develop computer generated spreadsheets or in financially strained departments the project leader can develop a chart manually. It will take more time, but organizing the tasks is an important part of the execution phase. This chart should then be shared, so all stakeholders can see how the progress is going.

The first suggestion would be to make a chart that has five columns. Beginning on the left side of the paper the columns should be labeled Task, Deliverables, Estimate, Person Assigned, and Completion Date. (Cook, 2005). Another chart may be developed in a similar fashion except it has six columns labeled; Task, Deliverable, By Whom, By When, Actual, and Comment. (Appendix 2 and 3)

According to Michael Thomsett using the Critical Path Method (CPM) or the Program Evaluation and Review Technique (PERT) are ways to track projects with aspects to time. Another credible resource also states that the Program Evaluation and Review Technique

(PERT) is usually applied to a project to ensure that the processes and operations of the project are permanent or at least sustainable so that it may repetitively produce similar product or service (Nicholson, 2004). Since these two techniques are complex and would require substantial training, it is recommended that Liberty Township find a more suitable approach.

Based upon the research found, having the knowledge of making a simple spreadsheet would work in most applications within the fire department. If a large project were to be implemented, such as building a new firehouse, the stakeholders involved would most likely be able to assist in developing a tracking device that would be simple to use.

One last item to discuss while in the execution phase is that the project leader should recognize the team for doing a great job. Most of the time, saying thank you will go a long way with the team members. Letting them know that they are appreciated will move the team to that high performance stage. Martin and Tate,(2001) suggest that when the team gets to their milestones, the project leader should stop the meeting briefly to recognize accomplishments of the team. Doing so will show the team that their hard work is appreciated. They also suggest providing a snack during the meeting to show your appreciation as well. If you want people to produce a specific result, you reward them accordingly. This fact seems so obvious that it shouldn't need saying yet, many corporations do such a poor job of linking rewards to performance that there is little correlation at all. They don't distinguish between those who achieve results and those who don't, either in base pay or in bonuses and stock options. (Bossidy and Charan, 2005).

Once the last deliverable is provided to the end user, the customer, the execution phase has ended. The team will enter into the closing out phase of the project. Closing projects are always important, regardless of the size of the project, yet projects are seldom closed out

correctly. (Cook, 2005). When we do not complete projects the right way, we miss a golden opportunity to improve, and improvements are one of the most important human motivators (we all want to get better at what we do). (Cook, 2005). So, to follow up on what is stated above, when you close out of a project there are a few things that the project leader and the sponsor should accomplish. Based upon Curtis Cook's ideas, the three things that you must do are first; A) hand offs the deliverables to the customer. B) Recycle the lessons learned from the particular project. C) Celebrate and reward accomplishments.

Handing off the deliverables is the easy part. What goes along with this process is evaluating how effective your team was based upon the evaluation of the customer and the other stakeholders as well. Once the customer has received the final deliverable, an evaluation should be requested regarding how the project team did. This is best done by a survey form. You can learn more about a project from outside it rather than inside it. (Thomsett, 2002) You will want to include questions that the customer can rate on a one to six or one to ten scale of strongly agree to strongly disagree. (Martin and Tate, 2001) Once the customer survey is received, you are now able to move forward with the process. (Appendix One Section 10)

While the final status report is being compiled, another similar survey can be given to the sponsor that asks the same questions and has the same rating scale as to what the customer has received. This paper should replicate the customer's survey with some added questions so the team can evaluate the team's process as seen through the sponsor.

The stakeholders or the team members should not be left out of the close out process either. They can provide some valuable lessons for everyone to learn. In this survey, you will be primarily surveying them on the project management. When you receive these surveys, it is

suggested to take all the information received and provide it on one document that represents everyone's opinion. (Martin and Tate, 2001)

A post review team should consist of five groups of people; sitting together will limit any distorted picture that may be painted on how well the group functioned. (Thomsett, 2002) (Appendix One Section 11) This team should sit around the table to discuss all of the surveys received. While all of the documents are reviewed and discussed it is recommended that someone should document on a flip chart all the lessons learned from this specific project. (Martin and Tate, 2001) Seeing the list on the flip chart will allow all the participants to follow along and pick up the key points of the specific meeting. What lessons did the team learn? These lessons can be positive and negative in nature. It will be up to the entire team to discuss and make needed changes to the process so the next time the team is tasked with another project, they will be able to perform better than before.

Finally, the last thing that is suggested is to celebrate the accomplishments of the team. No matter if it was a successful or unsuccessful team, the project leader and the sponsor should take the time to thank the entire team for their hard work. If the project was successful and big enough, the deserving team should receive its accolades in a public forum. Another suggestion to remember, some projects will be long and tedious. Certain bonds will develop among the people on the team. A great project leader / sponsor will identify with this and allow the team to enter a mourning stage. It is recommended to acknowledge the good times they had together and to give ample time to say good-bye. (Martin and Tate, 2001) This will help put closure on the project.

PROCEDURES

Definition of terms

RAP Session – A type of brainstorming that follows a specific path of events that could take one day to five days to complete.

Shift – A group of firefighters working together for a period of 24 hours.

Fire Department Survey

A survey was developed containing two parts to be mailed to all fire departments (Career, Combination, and Volunteer) within Delaware, Fairfield, Franklin, Knox, Madison, Pickaway, and Union Counties; all in Ohio. This survey was to see if they had any policy, procedure, or process that gave insight on how the specific fire department would handle internal projects that were instituted. Part one has three questions assigned. If the department did not have any policy, procedure or process regarding how they handled projects, that specific department was completed with the survey and asked to return the survey in the envelope that was provided.

If the department did have such a policy, Part two was developed to find out more specific information regarding that fire departments program. The questions in the survey would give insight to what the answer may be regarding the initial research questions developed.

To enable the respondents receiving the survey would be clear on what a project was, a definition was included within the survey explaining what the research was asking for.

A draft of the survey was first field tested with lieutenants, captains, and battalion chiefs from eight other departments not included in the mailing list of this research. Ambiguous terms and redundant questions were addressed. The survey was then prepared to be sent. (Appendix Four)

The survey will be mailed to approximately 85 fire departments within the counties identified. The fire departments will have approximately two weeks to return the survey's so analysis of the information received can take place. Once the survey's are returned the information will be deciphered, analyzed, and summarized to information using numerous tabulation techniques with most being in percentage and degree of difference formats.

Action Research

Taking the information contained in the literature review and using synonymous fire department positions, a simple model was developed and five projects were field tested to see how the program would work. Each project was assigned to different staff members and if the project met its deadline, the committee met to discuss the pros and cons of the model and how the program benefited or hindered the final outcome. If the project did not meet its deadline, a similar approach was applied to identify the reasons why the project did not meet the deadline and what could be done to eliminate this type of failure.

Limitations of the Study

The literature found had little to not direct involvement with the fire department. Most information found in literature was directed toward business oriented personnel. Over the years, fire departments have been inundated with business oriented personnel at the top leadership positions to begin running fire departments with business fundamentals. Therefore in directly the literature studied incorporates basic structures that already exist. Only the terminology is different due to the fire departments having their own language and terminology.

Since fire departments are limited in structured business practices, the surveys that were returned showed that only a few departments have implemented a project management model. The few that indicated their top leadership have backgrounds in business management structure.

The action research that was accomplished was done without providing formalized training on what was trying to be accomplished. This led to some confusion and some inefficient approaches to the projects assigned. However, surprisingly when the basic concepts were implemented the projects, for the most part, were completed on time and within the guidelines of expectations.

RESULTS

As part of the Ohio Fire Executive Officer Program a handwritten survey was developed and a model was developed based on the literature review where 5 action research projects were developed and monitored for success.

SURVEY

A survey was developed to see what fire departments had a project management program in place and how successful the program was. The survey went to 85 Central Ohio fire departments with yielding a 47% return rate.

Table 1: Percentage of Returned Surveys

	Total	Returned	Percentage of return
Delaware	13	7	53%
Fairfield	13	4	31%
Franklin	20	12	60%
Licking	18	8	44%
Madison	6	2	33%
Pickaway	7	3	43%
Union	8	4	50%
Totals	85	40	Average returned 47%

Central Ohio is composed of a large metropolitan area spread throughout Franklin County and in some areas overlaps into contiguous counties. This population shows why there is a such a large difference from county to county regarding career departments to volunteer and

the amount of people that are employed by these same departments. Career departments are defined as agencies that have all full time employees. Volunteer departments have personnel that are not paid a salary for their services and a combination department has career and part time or volunteer personnel within their ranks.

Table 2: Type of Departments

	Career	Volunteer	Combination	other
Delaware	2	1	4	0
Fairfield	1	1	2	0
Franklin	9	0	3	0
Licking	1	3	4	0
Madison	1	0	1	0
Pickaway	1	2	0	0
Union	1	1	2	0
Totals	16	8	16	0

Table 3: Amount of personnel

	Less than 50	51- 100	Greater than 1000
Delaware	7	0	0
Fairfield	3	1	0
Franklin	5	6	1
Licking	7	1	0
Madison	2	0	0
Pickaway	3	0	0
Union	2	2	0
Totals	29	10	1

Out of the 40 returned surveys only three departments had a program that addressed project management. Of those three, one had a separate division assigned to projects, one had a written policy that used the chain of command system to get things done, and the last one used a third party software program that was designed to manage projects. Interestingly the department that used a commercial software program as their project management format, they failed to reach their goal. The department in Union County used their officers in a policy to oversee

projects to get done. This department met their benchmark and produced 11- 15 projects completed annually. The Franklin County department has over 1600 personnel and has a section specifically for projects to be completed. Since this size is not the norm, detailed investigation in how this works was not completed. However, more information was gathered to see what they do to attempt to be successful. The first question that was asked was how much training was provided on project management. All three departments marked less than one hour annually. Another question, how much is money is specifically budgeted for project management? The two smaller departments responded with no money is allocated and the large metropolitan budgeted over 10,000 dollars. All three departments agreed by stating that on average one to three people are assigned to oversee a project. The final relevant question was listing the five top problems encountered by having a project management program in place. The answers are as follows:

Table 4: Problem encountered

	Answer one	Answer two	Answer three	Answer four	Answer five
Delaware	Time	Resources	Time	Time	Time
Franklin	Funding	Time			
Union	Communication	Follow Thru	Standardized Program Not Followed		

Table four shows the common problem is having the allotted time to get the project completed. It is apparent in Delaware's answer that time is a major problem. Future studies need to take place to find the root cause of why they do not have enough time.

The table below showed a 24% decrease in amount of projects initiated to the amount of projects completed. This decrease in productivity has numerous excuses. However this project is not prepared to address those excuses but to provide a simple solution to increase the department final productivity.

Table 5: Goals not reached

	Goal Reached	Not Reached	Avg. Not Reached	Information
Delaware	5	2	29%	1 dept has commercial program, did not meet goal.
Fairfield	3	1	25%	
Franklin	10	2	17%	1 dept has an entire bureau to meet project goals
Licking	5	3	38%	
Madison	2	0	0%	
Pickaway	2	1	33%	
Union	3	1	25%	1 dept has written policy, did meet goal
Totals	30	10	24%	Roughly one quarter of the departments are not meeting their goals.

It is this information in table five why this research project was implemented. 24% is quite a high number for not getting a project completed that someone in the fire department wanted to have accomplished.

ACTION RESEARCH

Based upon the literature review, a template was developed to include a draft form of a charter. Once that was completed, five minor projects were developed to implement using the new template and charter.

Shelter replacement

The first project was to develop a proposal to replace antiquated tents that were used by the hazmat team for shelter in inclement weather. These items were 15 years old and have been repaired numerous times. The tents now were dry rotting and needed replacement. The project assigned was to search out the best product for the department's operation with emphasis on

price, dependability, and versatility of the suggested purchase. The project started and completed on time with recommendations going to the chief. The final outcome was a purchase of a shelter that quadrupled in size from the originals and cost over \$14,000 for that item.

Review Glucometer testing procedures

Every 3 years, the department has to renew their Clinical Laboratory Improvement Amendments (CLIA) certificate. In doing, a review of the procedures and policies that are in places should be reviewed and updated as needed. This was perfect timing to add to this action research. The committee developed the charter and implemented the action plan including expectations of outcomes and dates when the final deliverable was due. The members took this charter as a guide, followed through with their portion of the project, and delivered recommendation for improving the policies and procedures based upon the CLIA rules and regulations.

Line of Duty Death / Critical Incident Stress Debriefing

Another project that had perfect timing was to review and implement CISD protocols. Unfortunately, the department suffered a horrific incident where a group of the firefighters had to respond to a suicide by train. They never experienced anything like it and looked to the administration for help. Fortunately, there were programs in place to accommodate such an event but no policy was provided to give direction to the people that suffered the most. A committee was formed who designed the charter, and implemented a project to develop a policy and procedure guideline if this should ever happen again.

While working on the project, the committee started to ask about line of duty issues as well. The committee reconvened and added more items to the project list. The charter was followed, the sponsor, leader, and members were able to produce a product that not only was able

to address policies and procedures but to seek and find a clergy that would be willing to represent the department and all functions where their presence would be appropriate.

Fire prevention grant

Every year the federal government provides an avenue for fire department to submit a proposal for projects that would benefit the department and the fire service in general but they do not have the funds to use on such a project. Liberty Township formed a committee to review the specifics to the grant and developed a charter to follow. Their project was to team up with a company called Edheads to develop an inter-active web based program where kids could use the computer to learn about the fire service in 4 main areas. What it takes to be a firefighter, responding to a fire, medically treating victims of fire, and finally investigating the cause. This project was estimated to cost 360,000 dollars to complete. The committee developed the grant proposal and submitted it within the timeline as needed. To date, an answer is not expected until the end of October if the department would receive funding for such a project.

Soft kits vs. hard kits

In Central Ohio, full time firefighters have the ability to work part time at other departments or affiliated businesses that hire paramedics. While this allows them to gain extra income it also affords them access to other departments / companies policies and procedures. Due to this, a request was made to change from hard shelled EMS cases to soft shelled cases. This request was supported by documentation that the kits would be lighter, less equipment needs, and easier to inventory. A committee was formed that developed the charter. The sponsor and leader developed parameters, timelines, and a due date for the project to be completed. This is the only project of the five that failed. The committee did not meet the final deadline so the sponsor and leader stopped the project.

DISCUSSION

In reviewing the literature review, mailed surveys, and action research for this applied research project this author can establish that there is a need for a formalized project management program for the Liberty Township Fire Department. The fire department for all intents and purposes is a business. The fire chief has the responsibility to oversee that the department is run efficiently and effectively. Based upon the research, developing a project management program would benefit Liberty Township Fire Department and other fire departments in Central Ohio. Since fire departments are truly businesses, the literature review pertains to them as well. The only thing that would have to be changed is the cast of characters designated on a charter would have to include the rank structure of the specific department. As an example; the sponsor for a project usually oversees a large aspect of the company. Based upon that definition, Liberty Township's sponsors would most likely be the chief, two captains, and the prevention lieutenant. All of these people oversee a large aspect of the departments operation. It is the opinion of the author that any sized department could implement the business structure of project management to enhance their effectiveness with getting things accomplished.

The Charter is the most important document to have developed. This piece of paper will provide the information that will be needed throughout the projects life. When it developed, the information included will be different but must hold specific information that will affirm accountability. It must have, the name of the project, the purpose, who the project team members are, budget, list of expectations, and important dates to include the most significant, which is the deliverable date. Signatures will have to be provided to make this a binding contract amongst the personnel so everyone confirms that there is buy in. Once the project is completed and the deliverable is met, recognizing and celebrating the team's accomplishments is a must.

The mailed surveys, when returned, were interesting to see. Out of all of the returned surveys, only three of the departments have some type of format that they followed for project management. Interestingly only one department initiated the same amount of projects that they completed. Another department had a whole group of personnel assigned to project management. Based upon the size alone, this was unique and not used for consideration because the majority of departments had less than 100 assigned personnel and had no specific project management group.

Another interesting item that needs to be followed up on in future research is that a department that had a project management format failed to finish all the projects that they started with in the year. Future research needs to be done to find the root cause on why this has happened. Furthermore there are departments that returned surveys that do not have management programs in place but seem to finish the projects that they started. The research was not geared to acquire detailed information regarding why some departments can complete assigned projects within the years. Numerous questions are raised on why these departments are successful and some are not. The bottom line is more research needs to be done to question what internal issues are at hand that allow some departments to meet their expectations and some that do not.

The action research was something added in the middle of the project to provide some validity to the charter and what the business model of the literature review was saying. The projects picked as tests would have been done regardless of this research or not. It fell into place quite easily when it was added to the repertoire of the project. The internal workings of Liberty Township worked well with the model and the basic charter model developed. It took limited time to discuss the process and most people understood the reasoning and inner workings of the charter. The five projects that were assigned were all assigned randomly in similar format to

other projects of the same magnitude. One of the items that the author feels that led to the success of the project was the committee was aware that it was being supervised for its successfulness. It is the opinion, if not oversight was done; the failure rate may have been much higher. Nevertheless, the projects were completed, on time and well within the standard. The information gathered proved superficially that accountability is an important aspect in making sure projects get done and on time.

Overall this project proved that there is a viable solution that can be developed by initiating the basic fundamentals of project management. However, more research should be accomplished to address in detail why some departments are successful without such a program and some departments are unsuccessful with a program in place. Nevertheless, this initial project was successful and based upon the final outcomes, the author was able to provide some solid recommendations that will assist any department with developing a project management program in the future.

RECOMMENDATIONS

The research presented in this study has demonstrated the need for the Liberty Township Fire Department to implement a program that oversees project management so that they can improve their efficiency rating on getting projects completed.

Based upon the literature review, survey, action research, and the analysis of this applied research paper, the following recommendations have been designed to assist in the preparation of a project management program for the Liberty Township Fire Department.

1. Obtain internal support known as “Buy in”. This needs to come from all parties involved with the operation of the fire department. For Liberty Township, this would include the Township Administrator, Fire Chief, Staff officers, line officers, and all firefighter paramedics assigned. A vision needs to be developed and communicated to all parties so that “buy in” can occur.
2. Provide pertinent data that shows all parties involved how this program can improve the efficiency of the department when it comes to completing projects on time and within budget.
3. Foster development of teamwork where as all personnel involved can work together on a project and understand what each person’s responsibility truly is.
4. Develop a relationship with the community to assist in development of future project needs
5. Look at the internal make up of the department and develop a precise “charter” that depicts the fundamentals needed for this specific document.
6. Develop timelines that are reasonable and are agreed upon by all parties involved with the specific project. Furthermore, hold the project team accountable to provide the deliverables when stated on the charter.
7. Provide training so that everyone understands the inner workings of the program and based upon the need. Provide refresher training on a regular basis for personnel that do not work with this program routinely.
8. Continue research based upon the individual department’s overall makeup.

9. Find creative ways to reward project teams so they stay enthused and ready to tackle the next project that needs to be developed.

The recommendation to the future readers of this document is to continue research so that “best practices” can be used to improve efficiency in project management programs.

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APPENDIX ONE – SPECIFIC ROLE, TASKS, AND RELATIONSHIPS

Section one - The primary stakeholders' positions are:

- The project leader
- The project team member
- The sponsor
- The project customer
- The resource manager

Section two - The team leader's responsibilities:

- Purpose
- Tasks
- Schedule
- Budget
- Team Coordination
- Monitoring
- Action
- Completion

Section three - The team member's responsibilities:

- technical expertise
- ensure that his parts get completed on time
- assist in providing deliverable within budget
- communicate with all parties involved

Section four - The sponsor's responsibilities:

- project leader
- objectives
- ensure team resources are available
- review status reports
- remove obstacles
- coach the project leader
- review and approve the final report

Section five – The resource manager's responsibilities:

- assign the project team members
- provide direction where applicable
- make sure people are working on the project
- allocate the needed time to complete the task
- remove any obstacles from the project team

Section six – The phases of each project:

- initiation
- planning
- execution
- close out

Section seven – List of items to be included:

- purpose
- brief history of the problem
- project needs
- estimated cost if known
- other miscellaneous considerations
- recommendations

Section eight – Items needed on a charter:

- project name
- sponsor
- leader
- other stakeholders
- stakeholders' responsibilities
- objective
- deliverables
- completion date
- budget
- assumptions
- signatures of the sponsor and project leader

Section nine – Developing a RAP session:

Participative: The management of projects is based on meaningful participation of all stakeholders

Proactive: Project management is a creative and proactive problem solving process.

Open: Everything about the project is shared openly with the stakeholders

Outward-oriented: The focus on the project manager is outward toward the stakeholders

Trusting: The project team is treated as professionals who are to be trusted

Section ten – Items to be included on a final status report:

- Project name
- Project sponsor
- Final deliverable
- Acceptance criteria
- Results
- Key milestones
- Final plan
- Actual completion
- Staffing needs
- Spending requirements
- Any changes throughout the process

Section eleven – List of people on a post review team:

- Project leader
- Key team members
- Critical stakeholders
- External group – could be internal auditors
- Project sponsor or his delegate

APPENDIX TWO – PROJECT TASK WORKSHEET ONE

Task	Deliverable	By Whom	By When	Actual	Comment

APPENDIX THREE – PROJECT TASK WORKSHEET TWO

Task	Deliverable	Estimate	Person Assigned	Comp Date

APPENDIX FOUR – SURVEY

*“Initiating a project management program for
the Liberty Township Fire Department”*

Survey

Name: _____ **Department** _____

Phone # _____ **Email** _____

Department Type: Career Volunteer Combination other

Manpower: < 50 51-100 101-250 251-500 501-1000 > 1000

Definition:

Project – a non-routine assignment that would take more than 10 duty days or 30 consecutive days to complete, and would require supervisory personnel to participate in its progress.

There are two parts. If the answer to #3 is yes on part 1, then proceed to part 2. If the answer is no, you are finished with the survey and I request that you return it in the envelope provided.

Part 1

1. On Average, how many projects does your department initiate annually?

1- 5 6-10 11 – 15 16 – 20 >20

2. On average, how many projects does your department complete annually?

1- 5 6-10 11 – 15 16 – 20 >20

8. Annually, how much money is budgeted for the project management program?

- \$0 \$1 – \$1,000 \$1,001 - \$5,000 \$5,001-\$10,000 > \$10,000

9. On average, how long does each project last?

- 0-6 months 6-12 months 12 -18 months > 18 months

10. On a typical project, how many people are assigned to that given project?

- 1-3 4-6 7-9 10-12 >12

11. Does your department have an evaluation process identifying successes and failures of assigned projects?

- Yes No

12. Please list the top 5 problems encountered by having a project management program?

1. _____
2. _____
3. _____
4. _____
5. _____

13. Of the top 5 problems, has your department identified way to overcome the stated problem?

- Yes No

14. In your opinion, has this management system contributed to the effectiveness of your departments operation capacity?

- Yes No

15. Would you be willing to share your project management document?

Yes

No

16. Who would be the most appropriate contact to discuss project management for your department?

Name: _____

Phone: _____

Email: _____

Thank you for your assistance answering the survey! If you would like a copy of the results of the survey, please check this box.

APPENDIX FIVE – CHARTER EXAMPLE

Liberty Township Fire Department

Project Charter

Project #xx-xxxx _____ **Title of project** _____

Purpose of Project:

Project Team:

Leader, Sponsor:

Committee:

Budget: Be specific

Project Parameters: Expectations

Important dates:

Implementation:

Follow up: depending on complexity – can have numerous follow-up dates to include all personnel or limited attendees depending on goals for meeting.

Deliverable date:

Authorization of signatures:

Project Leader

Sponsor

Fire Chief

Township Administrator

Project completion signatures and dates

Project leader / Date

Project sponsor / Date

Recognition / Celebration