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Selecting a Training Management System for the Eden Prairie Fire Department

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CERTIFICATION STATEMENT

I hereby certify that 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 use the language, ideas, expressions, or writings of another.

Signed: _____

Abstract

The Eden Prairie Fire Department (EPFD) is a combination department with nine fulltime staff and 86 paid-on-call staff who work in a duty crew model. The EPFD tracks training percentage quarterly as a requirement of maintaining active firefighter status. The current model for tracking training hours, recording certificates achieved and documenting program completion uses a data management system that is heavily restricted so that it is not available for officers or firefighters to review training status information.

Using the action research methodology, this paper studies the different programs available to create a more user-friendly experience entering and retrieving training data. A survey, interviews, application trials, and peer discussions were used to investigate available options for data management and learning management systems.

Applications explored during this project were selected based on usage by nearby departments, expense, and ease of use. The research illustrated that despite the necessary up-front investment, implementing a learning management system in the EPFD would bring tangible and intangible benefits to the department. A recommendation was made to the Fire Chief to add a line item to the budget in the next fiscal cycle to accommodate more robust training tracking and delivery software.

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Introduction

As the fire services makes strides into mainstreaming the education requirements of firefighters, there is a push for more data to be collected by individual fire departments. The problem is that the Eden Prairie Fire Department does not have an effective method for managing the learning content and data related to firefighter training and education including training attendance, courses attended, qualifications and certificates received, thereby leading to increased risk for difficulty and inefficiency with licensure requirements, training gaps, or worse, injuries or death to firefighters or the public.

The purpose of this research is to develop a recommendation for a learning management system that can be used by the Eden Prairie Fire Department for tracking firefighter training and education which will allow easy access to personnel qualifications and training information and efficient reporting of this information. Action research methodology will be applied to this research resulting in a recommendation to be reviewed by the Fire Chief and City Officials for the City of Eden Prairie.

The following questions will be answered in the research:

1. What systems are currently in use in public safety organizations to track and facilitate use of personnel training data?
2. What are the system requirements of the City for third party software that houses personnel data?
3. What learning requirements and extra training would need to be implemented in order to use the learning management system?

Background and Significance

The Eden Prairie Fire Department (EPFD) was founded in 1967 to provide fire and rescue services for the City of Eden Prairie, a 32.45 square mile, second-ring suburb of the Minneapolis/St. Paul metropolitan area with approximately 63,000 residents (62,603 in 2013 according to US Census).

The Eden Prairie Fire Department is a combination department with nine full-time staff and 86 paid-on-call staff who work in a duty crew model. The fulltime staff consists of one fire chief, two assistant chiefs, an administrative assistant, a radio technician, and four fire inspectors, all of whom respond to daytime fire calls. In the early morning and evening hours, response staffing is provided by three firefighters at each of two stations; in the overnight hours, three stations are staffed with a combined total of eight firefighters. Each firefighter works a suggested minimum of 36 shift hours each month, equaling a required minimum of108 shift hours per quarter.

The Eden Prairie Fire Department uses a computer-aided dispatch (CAD) and resource management system for the police and fire department call records and a third party data management system, New World Systems®. Because it is a data management program not a learning management platform, New World does not have the ability to store training videos and presentations. It can only house documents and lesson plans as attachments. Access to the system is limited to a very small number of people who can input and view data related to personnel. The program cannot be accessed using a web-interface, so real-time entry during training sessions is impossible. It has been found that the information entered is not easily accessed and will not readily transfer to other applications, thus creating silos of information.

Minnesota State Statute 299N.05, subdivision 1 states, “A full-time firefighter employed on or after July 1, 2011, by a fire department is not eligible for permanent employment without being licensed as a firefighter by the board.” (Minnesota Firefighter Training and Education, 2013) Therefore, all full-time firefighters in Minnesota have to hold a firefighting license issued by the Minnesota Board of Firefighter Training and Education (MBFTE). Paid-on-call and part time firefighters are addressed in subdivision 2 that states, “A volunteer firefighter may receive or apply for licensure under this section and section 299N.04 under the same terms as full-time firefighters.” Paid-on-call, part time and volunteer firefighters are not required, but are encouraged, to have a license. The EPFD has chosen to license all of the members of the Department and retain the training records required to renew the licenses every three years. According to subdivision 6 of the statute: “A license shall be renewed so long as the firefighter and the chief firefighting officer provide evidence to the board that the licensed firefighter has had at least 72 hours of firefighting training in the previous three-year period.” To accommodate the renewal of licenses for ninety-five staff members, the records will need to be easily retrievable by searching individuals as well as hours completed within specific date ranges. The present system in place with EPFD falls short of this need.

A learning management system (LMS) is a software application that can aid the documentation and tracking of training as well as storing and delivering training programs for use with electronic media or technology, referred to as *e*learning, through applications. Reports can be easily created that show tracking completion of training modules, certifications held, and information in other desired categories. Using a LMS can streamline the administrative work-flow between the needs of the paid-on-call staff who work off-business hours and the learning that was traditionally accomplished on a scheduled, in-person environment.

Many components of learning management can be achieved through database and spreadsheet creation or in data management software without implementing a LMS. However, these options often create silos of information that are not efficiently used by the full organization. There are many consumer-based LMS packages on the market that have varied capabilities. The research put forth in this paper will examine several options being used by fire departments and emergency service providers to train their personnel and track their training records. In the end of this action research, a recommendation on the appropriate LMS will be made based on the needs as well as the fiscal constraints of the Eden Prairie Fire Department.

This paper aligns with the Executive Fire Officer Program's Executive Development course content in the research, service quality, and research proposals areas. It also aligns with the USFA strategic objective four, which is to "Improve the fire and emergency services' professional status." Creating a more robust training program and tracking the training hours, education, and certificates that the firefighters obtain will promote a sense of importance for training, recognize the work put in by each individual firefighter, and foster professionalism and pride in their service to their community.

Literature Review

The literature review was compiled after completing research using periodicals, instructional manuals, research papers, interviews and web-based articles from the fire service, education, and technology fields.

Available research on data collection in the fire service is limited; however, a National Fire Service Summit was conducted in May of 2011 on collecting data on fire incidents making them more standard. The findings were compiled in a Firefighter Safety and Deployment Study titled National Fire Service Data Summit Proceedings. Averill, Moore-Merrell, Notarianni,

Santos, and Wissoker (2011) wrote about collecting statistical data across the fire service. Although they were specifically discussing fire response data collection, the identified roadblocks and objectives apply in the case of training also. According to Averill et al (2011), one of the obstacles is the abundance of software vendors on the market, which generates the problem of vendors and departments creating custom programs that are incompatible and cannot be reliably compared between agencies. Another identified problem area is that, "Many fire departments collect similar data in different ways which is an obstacle to comparing outcomes between similar communities. This is due to the fact that several data collection systems serve purposes other than information for the fire service." (Averill et al., p. 15)

According to the International Fire Service Training Association Fire and Emergency Services Instructor, Seventh Edition (2006) text, training and attendance records are required to be properly documented and stored for a variety of state and federal agencies. "Accurate records not only give long-term informational inventories of an organization's training activities, they may also be important and necessary in legal proceedings and management reviews and accreditation programs." (Stowell, 2006, p. 68) "Computer software programs improve the efficiency of records management and make it easy to record, access, and process training information." (Stowell, 2006, p. 127) Some organizations develop their own records management systems using spreadsheets or online programs that can be personalized to a department's specific needs. Many departments use third-party software programs. One of the drawbacks to third-party applications for smaller agencies is the price that accompanies them. In Minnesota, the State Fire Marshal Division offers data management software, ImageTrend, free to all fire departments in the state. According to Stowell (2006), training records could be

considered an extension of a firefighter's personnel file, which would require fire departments to restrict access to those files.

Benefits to a LMS include managing training information and records, automation of reporting, and improvement in delivery. "The system can be used to test knowledge, record a course completion, and send the information to the learner's permanent employment record, as well as send follow-up correspondence to the learner." (Carliner, 2005) Also, "The LMS provides online reports for each course and the learner, while the department can track who has completed it and who has watched and taken the course." (Diaz-Batista, 2014) Additionally, "The use of an LMS provides student and teachers with a set of tools for improving learning processes and managing them." (García-Peňalvo, Conde, Alier, and Casany, 2011, p.1224)

Some downfalls to LMS are also identified in the research. One of these is customization; Carliner (2005) likened it to clothing for hard- to-fit people The majority of fire departments have vastly different in the needs for recording their training than the corporate institutions which many LMS programs are written for. Therefore, it may be left for the training officers to customize the programming itself, if they are tech savvy enough, or if the program selected is customizable. Diaz-Batista (2014) also raised the issue of customization, listing several packaged LMS platforms that are available for fire departments, but went on to say that "the content provided by these LMSs may not meet your department's standards." (Diaz-Batista, 2014)

It is essential when developing a training program using a Learning Management System that the training side of the system speaks to the needs of those being trained. In the fire department setting, those are adult learners, of varying ages and educational backgrounds. "Not recognizing students' varied learning styles and abilities can hinder attaining the instruction

objectives; consequently, only a fraction of the students may retain the information, depending on the teaching method and media used." (Petrakis, 2003, p. 135) It has been shown that, "For every person in the classroom who best learns from your teaching style, at least two or three need the material presented in an alternative format." (Criss, 2002, p. 61) "Online training models offer a whole new world of 'show-don't-tell' instruction, which helps users to better learn, experience, and digest the information." (Crume, 2013, p. 7) He goes on to discuss how the e-training platform allows the users to be self-directed and interactive, learning from videos, webinars, and other stored data sources. "Tailoring instruction to each user is possible with an extensive and searchable knowledge base hub accessible whenever and wherever the user is ready to learn." (Crume, 2013, p. 7)

Learning Management Systems help trainers meet the needs of their adult learners by providing opportunities for small doses of training, or follow-up training, if used in the learning platform. "As training is intended to build knowledge for immediate application, so LMSs are designed to support a large number of short training events." (Carliner, 2005) It is important to keep in mind that "When a course is being created, the instructor/facilitator needs to remember that different generations may be taking his course." (Diaz-Batista, 2014)

A new approach to fire training is taking a flipped training approach. Flipped training allows students to have access to the basic content of the course to go through on their own time ahead of the hands on session. They can access video clips and documents at their pace, which can be integrated into a learning management portal. "The flipped learning process also allows the instructor to evaluate the ability and individual needs of every student more often. Instructors are able to engage students at a higher level, which has been shown to increase student learning and retention of information." (Lipski, 2013)

Several LMS platforms were listed throughout the research, as examples from emergency service providers, corporations and educational institutions: NetDimensions EKP, Saba, SumTotal Systems (Carliner, 2005), Jones and Bartlett (Kaplan), Blender, TargetSolutions, and Center Learn (Diaz-Batista, 2014).

One LMS platform that was referred to in detail in several articles was Moodle, which stands for Modular Object-Oriented Dynamic Learning Environment. Moodle is an open-source platform, which means that no company owns or retains the rights to the software. The source code is open and allows for programmers across the globe to use and develop the software. Due to its cost and ease of use Moodle is the most popular LMS on the market (Dunn, 2012), and it is being used by programmers and novices alike. Moodle's architecture has evolved over time, creating a more user-friendly product. Moodle is so easy to use that according to Diaz-Batista (2014) "Many vendors such as Jones and Bartlett and Kaplan are using Moodle as the back end of their LMS delivery." Going on to say, "It is the very same LMS many of these vendors are reselling at the trade shows."

The research on Learning Management Systems led to further study of how people take in and retain the information that is being provided to them. This is turn directed additional research on learning and retention, particularly adult learning styles.

According to Griffin (2013), emergency responders, like elite athletes, need to perform skills without even thinking about them. Griffin cited Lt. Colonel Dave Grossman's four levels of skill mastery: unconscious incompetence, conscious incompetence, conscious competence, and unconscious competence; each of the four levels building upon on one another. As an emergency service provider, first responders need to be at the highest level of competence, unconscious competence. Not only do emergency responders have to learn a variety of skills,

but those skills are frequently updated. Griffin describes the reasons that people are not able to reach the unconscious competence level and states that the one fix for the inability to reach unconscious competence is repetition. “Repetition means daily, until one is unconsciously competent. Even when someone begins to perform a skill at this level, it does not mean that they have reached the end of the learning chain. They still have to perform maintenance to ensure the highest level of mastery will continue.” (Griffin, 2013, p. 45)

There are a variety of factors that lead to student success in retention. García-Peňalvo et al, (2011) found that trainers have to go beyond Learning Management Systems and center the learning on students, referred to as Personalized Learning Environments. “eLearning needs to evolve, and this evolution must take the student into consideration.” (García-Peňalvo et al., p. 1235) They went on to say, “If students are not placed at the center of the eLearning processes, and if emerging technological and sociological trends are forgotten, any eLearning activity will fail.” (García-Peňalvo et al., p. 1235)

Adult learning styles can be categorized into three groups: visual, auditory, and kinesthetic; often referred to as seeing, hearing and doing. “Not recognizing students’ varied learning style and abilities can hinder attaining the instruction objectives; consequently, only a fraction of the students may retain the information, depending on the teaching method and media used.” (Petrakis, 2003, p. 135)

Four learning strengths were identified by Criss (2002), concrete experience, reflective observation, abstract conceptualization and active experimentation. Concrete experience learners need their new learning to tie into previous experience, and they thrive when given positive feedback. Reflective observation learners will watch a skill being performed several times before they will attempt it. They will also wait until others have voiced their opinions and will not offer

their own until they have gained personal experience. Abstract conceptualization learners like things laid out in logical steps and will complete the process in the same order they learned it. The final group, active experimentation learners tend to be the risk takers. They will keep trying something until they succeed, often adapting using their own creativity. Criss (2002) stresses setting up lessons and learning environments to reach each of those learners. "Helping adults learn involves more than just providing information. It requires a basic understanding of why adults come to the classroom and how people learn – as well as an inventive delivery style." (Criss, 2002, p. 68)

The cost benefit analysis is an important consideration, as there are many costs associated with training record management. The staffing time for data entry into programs, training users, computers and other hardware that will be used, depending on if the software can be used on existing hardware. There are also recurring fees for software licensing. Many packages are billed on an annual cycle, which helps with budgeting for the recurring fees. "No matter how the fee schedule works, you should attempt to evaluate the amount of use the system will get and weigh that against total cost." (Lipski, 2013) Looking at all of the fees and costs associated with training will help evaluate the return on investment for the department.

Procedures

Discussions with the previous Assistant Chief of Training and the Fire Chief for the Eden Prairie Fire Department, as well as training officers from nearby communities, indicated that the inability to provide robust *e*learning solutions to our members or an accurate, streamlined way to access personnel information related to training and certifications was as an for all, regardless of their size or response model. The topic of learning management systems was discussed and

determined to be the greatest void for efficient practices in the Training Division in the Eden Prairie Fire Department (Schmitz, T., Personal communication, February, 2014).

Research was conducted on identified vendor-operated learning management systems by identifying which programs were available and which ones were being used in the emergency service fields. Similar sized fire departments in the immediate area were polled as to whether or not any of them were using learning management systems and if so, which one(s). Each of the departments contacted expressed a desire to have a learning management system, but very few were using learning management systems. Those that had implemented LMS were not using the systems to their full potential. The Minnesota Board of Firefighting Training and Education Director was contacted to discuss the future requirements for firefighter licensing so that the identified learning management system would have the features required to compile the data that will be audited in the future for firefighting licensing. A survey was developed and sent via email to 215 contacts throughout the state of Minnesota and twenty-five contacts in departments around the United States. See Appendix A for a list of the survey questions. Minnesota responses numbered 114 and 162 responses were received from other states, and 11 from outside of the United States. There were 24 repeat responses, where a second or third member from the same department responded to the survey; the repeats were removed from the data response charts to best represent the statistical data. All of the information that was excluded from the statistical data was repeated information that would have skewed the data. Responding agencies are listed in Appendix B. The difficulty in analyzing the survey responses was the use of open ended questions, forcing the respondents into free-form, open-ended answers. Due to the large volume of responses, organizing the data into a usable format was also difficult. Limiting

answers to a drop down menu in the future will help compile data in a more useable and reportable format.

During the research phase, a meeting was conducted on June 8, 2014, among the training officers from southwest metro fire departments to discuss the findings and how each would work in the different departments. In an effort to have a system that could be used by multiple departments to share training programs, the author participated on a phone conference with members of the board of the Minnesota Firefighter Training and Education (MBFTE) on June 17, 2014, to discuss the options for *e*learning facilitated by the MBFTE for fire departments across the state of Minnesota.

Comprehensive research was done on data collection in the fire service, learning and data management systems, *e*learning, and adult learning styles. The information gained in the research is listed in the literature review section and citations are listed in the references section.

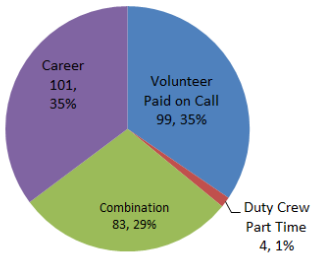
After all of the information was collected and the research paper was written, a memorandum was submitted to the Fire Chief of the Eden Prairie Fire Department with the recommendation for the learning management system that would meet the needs of the Eden Prairie Fire Department Training Division. This recommendation letter is provided in Appendix C.

Results

The first research question addressed the need to look at what systems are currently in use in other similar agencies, what systems are currently in use in public safety organizations to track and facilitate use of personnel training data? Looking at what other agencies are doing to accomplish the same training and learning management goals within their organizations sets the context for LMS selection for EPFD. The survey was specifically sent out to full-time,

volunteer/paid-on-call and combination departments in order to ensure enough data would be gathered on the different programs or procedures that are being used in the field. Responding agencies are represented in Table 1.

TABLE 1: DEPARTMENT TYPE



The survey that was sent out requested information on the types of programs being used in the fire service for call response and training records. The survey yielded 290 responses with a variety of different software programs used for call response recording; the top responses are reflected in Table 2.

TABLE 2: DATA RECORDS MANAGEMENT FOR CALL RESPONSE

Software	# of Responses
Firehouse	97
ImageTrend	72
NFIRS/Paper Reports	13
New World	8
Emergency Reporting	6
Other	50 *(27 other brands)*
No Response	41

A similar spread was found when compiling the data for training records; the top responses for those systems can be found in Table 3.

TABLE 3: SOFTWARE USED FOR TRAINING PROGRAMS AND CERTIFICATION PROGRAMS

Software	# of Responses
Firehouse	78
ImageTrend	29
Target Solutions	39
New World	4
Moodle	3
Other	50 *(19 other brands)*
No Response	84

A majority of the departments scan and attach certificates and other training completion documentation and store them in data management programs, or copy them and keep them in file cabinets.

Throughout the research, several suggestions were found about limiting the access to personnel data to a select number of individuals because of personal information that is tied to those personnel records. This led to the realization that more information was needed from the City of Eden Prairie about the system requirements for using a third-party, possibly web-based, program. The specific question was stated as, what are the system requirements of the City for third party software that houses personnel data?

A series of interviews were conducted with City of Eden Prairie staff to understand the policies surrounding personnel data as it relates to third-party records management programs. Kristi Etter, Information Technology Manager; Alecia Rose, Human Resources Director; and Kitty Porta, City Clerk, confirmed that the City of Eden Prairie allows the use of third party software that is supported by the Information Technology Division, as long as the personnel records are limited to a select number of individuals to protect the privacy of fire department personnel.

The potential move to a new platform for storing training information lends itself to a learning curve for the entire staff, whether they are tasked with inputting information, or just accessing their own personal training records. This led to the final question, what learning requirements and extra training would need to be implemented in order to use the learning management system?

After attending online sessions with two of the vendors it was obvious that there would be a steep learning curve, but the slope of that curve would depend on the abilities of the

individuals being trained. Firefighters and officers with higher levels of computer exposure would be able to adapt to the platforms from Target Solutions and Moodle quickly because those two appeared to have more intuitive set ups. With some time investment, users would be able to navigate ImageTrend and New World if they were adequately trained on the different tabs and report options and were granted the proper restrictions to view and modify data.

The MBFTE will be moving forward with a plan to assist fire departments across the state to enhance their training programs. They are unable to fund an initiative to outfit fire departments with learning management systems; however they are willing to investigate an option using the free Moodle option.

The Eden Prairie Fire Chief is considering budgeting for a LMS in the next fiscal year's cycle. He is requesting additional time be spent using the training modules in our present system to gather more information about capabilities, interfaces, and the associated learning curve.

Discussion

Fire departments need to accurately track training information for many reasons. Training records become part of an individual's personnel record and may be requested by several state and national organizations for reasons ranging from insurance ratings to investigations. National agencies that may require data surrounding training include, but are not limited to, Occupational Safety and Health Administration (OSHA), Insurance Services Office, Inc. (ISO), National Board of Fire Service Professional Qualifications (ProBoard), International Fire Service Accreditation Congress (IFSAC), International Association of Fire Chiefs and International City/County Managers Association (IAFC/ICMA). Agencies in Minnesota include the Minnesota Board of Fire Training and Education (MBFTE), the Minnesota Fire Service Certification Board (MSFCB), and the Minnesota Emergency Medical Services Regulatory

Board (EMSRB). Maintaining accurate record keeping that is easily accessible is essential in a professional organization. Having that information accessible in a user-friendly format is a necessity.

The Eden Prairie Fire Department is currently using data management software and several spreadsheets to track personnel training information. That information is only accessible by desktop computer and has access limited to a few individuals. Training is held weekly, on Thursdays both in the morning and the evening. Training records need to be recorded on paper, then transferred to a spreadsheet, then entered into the data management system. Using a Learning Management System would allow records to be entered while at training eliminating several steps in the process and eliminating sources of error in the information. Reports could also be run on individuals to see their attendance and status in various programs they are working on; for example apparatus operator hours, probationary skills completions, and promotional hours requirement completion.

EPFD's weekly training has been using learning best practices by training the instructors on the learning needs of individual firefighters. Instructors are trained in understanding learning styles, as defined by Petrakis in the literature review. It has also been an effort of the EPFD Training Division to provide classroom experience that offers variety and repetition in the skills so that students have a higher comfort level and as much exposure as possible to the skills that are covered in training.

Providing a Learning Management System benefits the EPFD and its Training Division by recording and tracking attendance and achievement information. Learning Management Systems also provide opportunities for the firefighters to watch videos and webinars that will

increase their exposure to the content covered, provide additional perspectives on a topic, and possibly deliver that material in a way that best meets the learning style of each individual.

In an effort to understand the viable options available, the author narrowed the scope of learning and data management programs to those being used by surrounding, similar sized and similar functioning fire departments, and narrowed more to address fiscal concerns. The author chose to further review two data management programs, New World Systems® and ImageTrend and two learning management programs, Target Solutions and Moodle.

The Eden Prairie Fire Department is currently using records management software from a third-party vendor called New World Systems®. This software is being used by the police and fire department, which includes the building department. Since all three departments are entering data, the amount of information in the system is significant. Contacts from traffic stops, fire and building inspections, emergency responses, and rental housing information are all stored in the system. The excess information entered by the different departments does not affect the day-to-day operations of the Training Division because the access to that information is restricted to the desktop computer and does not relate to firefighter training. There are modules built into New World for documenting training attendance, certification and program completion. Training can be entered, or tagged, as part of a certification program or as a weekly drill, but it is currently unable to be entered with more than one tag. If a training session meets the requirements for a promotional program, for example, it needs to be filed as either training or part of that program. For a new user, New World is very cumbersome in its data entry and requires upgrades to run usable reports needed by the officers of the department to track firefighter completion of training and advancement in program requirements related to apparatus operations, promotional hour completion, and recruit expectations. Ability to enter and extract

the information is limited to a very small number of people, which causes great difficulty for front line officers to track the progress of their firefighters. That limitation is based on how the permissions are granted within the software. The EPFD shares the program with our police department, if someone is allowed to modify records within New World, they will have access to go into the police records and modify them. Were this to happen, even accidently, the repercussions would be serious, therefore access is restricted to one or two people. If the permissions were set up in a way that could limit the influence people have on the system, more personnel would be allowed access to the data.

A set of online webinar sessions were conducted with two vendors from the a narrowed list programs: the current EPFD software, New World, on September 17, 2014, and another vendor that is being used or investigated by several of our neighboring departments, Target Solutions, on August 5, 2014. These two programs cannot be compared side-by-side because New World is a records, or data management system and Target Solutions is a Learning Management System. Additional research was conducted to investigate the ImageTrend and Moodle programs; however similar web-based orientation sessions were not available.

Though Target Solutions would house all of our records, it offers more than storage. It contains training documents, modules and videos allowing for delivery and tracking of training programs virtually as an *e*learning tool, as well as data entry of in-person training sessions, the latter is the only thing that New World can provide. The Target Solutions demo appeared to be very user friendly; however there was a lot of information and many tools were available. A large investment would be needed on the front end to input all the existing data into this system. Additional time investment would also be needed in learning all of the 'extras' available in the software. After discussing the software with neighboring training officers, two primary

downfalls of the Target Solutions software were identified. The first is the difficulty in a department the size and response model of Eden Prairie's with its limited full-time staff would have in investing enough time in learning all of the different elements available to use it to its full potential. The other is that the supplied videos only skim the surface of the training subjects. A representative of Target Solutions stated that this is intentional because they are trying to be general enough to cover the skills for the fire service throughout the country. The representative did offer that departments could upload their own videos or share them regionally, if neighbors are also Target Solutions users and agree to share their information.

Utilizing an LMS platform would be beneficial to firefighter retention of the skills that the department trains on. As described in the literature review, adults learn best by repeated exposure involving real life scenarios. Using video clips and hands-on stations provided through a~~n~~ LMS platform would allow firefighters to take in that information at their own pace, on their time when they are ready to learn versus always having to receive the information in large group training sessions. Certificates would be housed and stored, showing the firefighters and their supervisors, the progress that has been made by each individual, This will serve the dual purpose of motivation for some adult learners.

ImageTrend, the program offered by the Minnesota State Fire Marshal Division (SFMD), like New World, is a data management system. The program is state funded, however extra features can be purchased separately per department directly from ImageTrend. The SFMD funded the software initially to make it easier for fire departments to get their National Fire Incident Reports (NFIRS) completed and submitted. They have expanded their basic, free modules to include events, training, investigations and inspections. These extra modules were at

the request of the fire department users, but with 782 fire departments throughout the state, the user group is significant.

The author also evaluated creating a Moodle site. Moodle is an open source application, so there is a lot of information available on the web with suggestions and fixes when people stumble into problems. Many schools use Moodle sites based upon curriculum they have at their disposal. Moodle would be a viable option if there is sufficient staffing to set up the platform and create or upload the training sessions. Given the staffing available to the EPFD and time available, using a program that has already been created, rather than creating one from scratch, is a more viable option.

Integration of a learning management system will be an integral part of moving the Training Division of the Eden Prairie Fire Department forward. Members of the department will be able to track their progress as they complete educational and promotional requirements. They will be able to access their data to renew their National Registry for Emergency Medication Technician and their license requirements for the Minnesota Board of Firefighter Training and Education.

The Training Division will be able to track training percentage and completion of required and optional training programs that are offered through the department. These programs include, but are not limited to promotional progression, fire apparatus operator training, and probationary requirements. Training attendance and other training reports will be completed in a timely manner to help the station captains and lieutenants manage their personnel.

Meeting the diverse educational needs of the 95 duty crew and full-time members of the fire department, ranging from high school graduates to those with graduate degrees, with an age span of more than 30 years, is essential to the success of the training program. Having ~~a~~an LMS

platform that can be used not only to track information, but to house review materials on procedures and protocols using video clips, presentations, outlines, notes pages, illustrations, webcasts and more will help ensure the members have the tools needed to be successful with the emergencies to which they respond.

Recommendations

Based on the research completed, it was recommended to the Fire Chief, City Manager and elected officials of the City of Eden Prairie to expand the use of the New World Systems® training modules for a period of at least six months. It was also proposed that a budget line be added during the upcoming fiscal cycle to purchase the software package from Target Solutions to manage training and education information for the department members. This will be an investment of approximately $8,500, but will reduce the duplication of effort that is currently occurring in data entry and in trying to search for that information individually among the 95 members of the department. The EPFD can afford to delay this recommendation until the next budget cycle because the current system has worked for the past five years and will continue to work as long as there are staffing hours available to record the data in the same fashion. It is however, a need that the EPFD will need to consider addressing in the next fiscal cycle due to the increasing requirements associated with licensure maintenance and the rapid changes occurring in training the diverse fire service members.

This LMS platform will be used for data tracking by the individual firefighters, members of the training division or fire administration. The future opportunities for this LMS platform include using it to track individual training for promotional opportunities, firefighter licensing, required training sessions, and review materials for procedures or programs that are specific to the Eden Prairie Fire Department.

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Appendix A

List of survey questions asked via the Survey Monkey® online survey program. The survey was emailed to 240 contacts and was disseminated beyond those contacts by others. Appendix B provides the complete list of responding agencies.

Fire Department Training Management

1. Department information

   Fire Department

   City / Town

   State / Province

2. Department type

   Volunteer / Paid-on-Call

   Duty Crew / Part Time

   Combination

   Career

3. Do you use a data/records management platform for call response/NFIRS data?

   (Firehouse, New World, ImageTrend, Other)

   Yes

   No

   If yes, which one?

4. Do you use a data/records/learning management system for training records?

   (Target Solutions, Moodle, New World, Firehouse, Other)

   Yes

No

If yes, which one?

5. How do you track firefighter attendance/training percentage?
6. How do you track and store firefighter certifications?
7. Do you have a process for tracking any of these programs? *(Select all that apply)*

   Probationary firefighter requirements

   Drive/Operator requirements

   Promotional hour requirements

   National Registry hour tracking *(EMT-B/Paramedic)*

   If yes, on any, what systems do you use?
8. Please provide any additional comments on tracking training data management.

   For example: What you like/dislike about the way your department tracks information. What you feel has saved/cost your department a lot of time and energy after implementation.

Appendix B

List of departments responding to the survey listed in Appendix A.

Shaded boxes denote repeated answers.

Fire Department	**City/Town**	**State/Province**	**Response**
Cullman Fire Rescue	Cullman	Alabama	Career
Decatur Fire & Rescue	Decatur	Alabama	Career
Hoover Fire Department	Hoover	Alabama	Career
Capital City Fire Rescue	Juneau	Alaska	Combination
Gilbert Fire & Rescue Dept.	Gilbert	Arizona	Combination
San Carlos Apache Fire	San Carlos	Arizona	Career
Northwest Fire District	Tucson	Arizona	Career
Fairfield	Fairfield	California	Career
Peninsula Fire	Lake Almanor	California	Combination
El Medio Fire Protection District	Oroville	California	Career
Palo Alto Fire Department	Palo Alto	California	Career
San Diego Fire Rescue	San Diego	California	Career
Golden Fire	Golden	Colorado	Combination
Sterling Fire	Sterling	Colorado	Combination
East Haven Fire Department	East Haven	Connecticut	Combination
Hebron Fire Department	Hebron	Connecticut	Combination
Wallingford Fire Rescue	Wallingford	Connecticut	Combination
West Haven Fire Department	West Haven	Connecticut	Combination
Wilton	Wilton	Connecticut	Career
DCFD	Washington, DC	Dist. Of Columbia	Career

Fire Department	City/Town	State/Province	Response
West Manatee Fire Rescue	Bradenton	Florida	Combination
Orange County Fire/Rescue Dept.	Orlando	Florida	Career
West Sebring Fire Department	Sebring	Florida	Volunteer / Paid-On-Call
Tampa Fire Rescue	Tampa	Florida	Career
Augusta Fire Department	Augusta	Georgia	Career
Thule Fire Department	Pituffik	Greenland	Career
Idaho Falls Fire Department	Idaho Falls	Idaho	Career
Harvey FD	Harvey	Illinois	Career
Highland-Pierron Fire	Highland	Illinois	Volunteer / Paid-On-Call
Merrionette Park Fire	Merrionette Park	Illinois	Volunteer / Paid-On-Call
Midlothian Fire Department	Midlothian	Illinois	Combination
Angola Fire Department	Angola	Indana	Combination
Bloomington Fire Department	Bloomington	Indana	Career
Wayne Township Fire	Indianapolis	Indana	Career
Central Indiana Fire Academy	Indianapolis	Indiana	Career
Napoleon Volunteer Fire Department	Napoleon	Indiana	Volunteer / Paid-On-Call
Burlington Fire Department	Burlington	Iowa	Career
Cedar Falls Fire Rescue	Cedar Falls	Iowa	Combination
Sioux City Fire Rescue	Sioux City	Iowa	Career
Cherryvale Fire/Ems	Cherryvale	Kansas	Combination
Netawaka Rural Fire District #6	Netawaka	Kansas	Volunteer / Paid-On-Call

Fire Department	City/Town	State/Province	Response
Topeka	Topeka	Kansas	Career
Wichita Fire Department	Wichita	Kansas	Career
Southgate	Southgate	Kentucky	Volunteer / Paid-On-Call
South Bossier	Elm Grove	Louisiana	Combination
Hammond Fire Department	Hammond	Louisiana	Career
Auburn	Auburn	Maine	Career
Bangor Fire Department	Bangor	Maine	Career
Chelsea Fire Dept	Chelsea	Massachusetts	Career
Clinton Township Fire Rescue Ems	Clinton Twp	Michigan	Career
Otsego County Fire Department	Gaylord	Michigan	Volunteer / Paid-On-Call
Grand Haven Township Fire Rescue	Grand Haven	Michigan	Combination
Comstock Fire Department	Kalamazoo	Michigan	Volunteer / Paid-On-Call
Macomb	Macomb	Michigan	Combination
Grand Traverse Metro Fire Department	Traverse City	Michigan	Combination
City Of Wyoming	Wyoming	Michigan	Combination
Albert Lea Fire Dept	Albert Lea	Minnesota	Career
Alexandria Fire Dept	Alexandria	Minnesota	Volunteer / Paid-On-Call
Apple Valley Fire	Apple Valley	Minnesota	Volunteer / Paid-On-Call
Apple Valley Fire	Apple Valley	Minnesota	Volunteer / Paid-On-Call

Fire Department	City/Town	State/Province	Response
Apple Valley Fire Department	Apple Valley	Minnesota	Volunteer / Paid-On-Call
Bemidji	Bemidji	Minnesota	Combination
Bloomington Fire Department	Bloomington	Minnesota	Combination
Brewster Fire Dept	Brewster	Minnesota	Volunteer / Paid-On-Call
Brooklyn Center Fire Department	Brooklyn Center	Minnesota	Duty Crew / Part Time
Brooten Fire	Brooten	Minnesota	Volunteer / Paid-On-Call
Brownsdale Fire Dept.	Brownsdale	Minnesota	Volunteer / Paid-On-Call
Burnsville Fire Department	Burnsville	Minnesota	Career
Chaska Fire	Chaska	Minnesota	Volunteer / Paid-On-Call
Chaska Fire	Chaska	Minnesota	Volunteer / Paid-On-Call
Chaska Fire Department	Chaska	Minnesota	Volunteer / Paid-On-Call
Columbia Heights Fire Dept.	Columbia Heights	Minnesota	Combination
Comfrey Fire & Rescue	Comfrey	Minnesota	Volunteer / Paid-On-Call
Crookston Fire	Crookston	Minnesota	Combination
Deer River Fire	Deer River	Minnesota	Volunteer / Paid-On-Call
Duluth Fire Department	Duluth	Minnesota	Career
Eagan	Eagan	Minnesota	Volunteer / Paid-On-Call

Fire Department	City/Town	State/Province	Response
Echo Fire Dept.	Echo	Minnesota	Volunteer / Paid-On-Call
Eden Prairie	Eden Prairie	Minnesota	Combination
Eden Prairie	Eden Prairie	Minnesota	Combination
Eden Prairie Fire Department	Eden Prairie	Minnesota	Combination
Edina Fire Department	Edina	Minnesota	Combination
Elk River	Elk River	Minnesota	Volunteer / Paid-On-Call
Elk River Fire Department	Elk River	Minnesota	Volunteer / Paid-On-Call
Fairmont Fire Department	Fairmont	Minnesota	Volunteer / Paid-On-Call
Faribault Fire Department	Faribault	Minnesota	Combination
Fergus Falls	Fergus Falls	Minnesota	Combination
Forest Lake Fire/Rescue	Forest Lake	Minnesota	Volunteer / Paid-On-Call
Fridley Fire Department	Fridley	Minnesota	Combination
Golden Valley Fire	Golden Valley	Minnesota	Combination
Golden Valley Fire	Golden Valley	Minnesota	Combination
Grand Rapids	Grand Rapids	Minnesota	Volunteer / Paid-On-Call
Grand Rapids Fire Dept	Grand Rapids	Minnesota	Volunteer / Paid-On-Call
Granite Falls Fire Dept.	Granie Falls	Minnesota	Volunteer / Paid-On-Call
Ham Lake Fire Dept.	Ham Lake	Minnesota	Volunteer / Paid-On-Call

Fire Department	City/Town	State/Province	Response
Hamburg Fire Department	Hamburg	Minnesota	Volunteer / Paid-On-Call
Hastings	Hastings	Minnesota	Combination
Hibbing Fire	Hibbing	Minnesota	Combination
Hopkins	Hopkins	Minnesota	Volunteer / Paid-On-Call
Hopkins	Hopkins	Minnesota	Volunteer / Paid-On-Call
Hopkins Fire Department	Hopkins	Minnesota	Volunteer / Paid-On-Call
Hutchinson Fire Department	Hutchinson	Minnesota	Combination
Kasson	Kasson	Minnesota	Volunteer / Paid-On-Call
LeSueur Fire Department	LeSueur	Minnesota	Volunteer / Paid-On-Call
Lewiston Fire	Lewiston	Minnesota	Volunteer / Paid-On-Call
Lewiston Fire And Rescue	Lewiston	Minnesota	Volunteer / Paid-On-Call
Centennial Fire District	Lino Lakes	Minnesota	Combination
Loman Rural Fire Association Inc.	Loman	Minnesota	Volunteer / Paid-On-Call
Long Lake	Long Lake	Minnesota	Volunteer / Paid-On-Call
Mahnomen Fire Dept	Mahnomen	Minnesota	Volunteer / Paid-On-Call
Maplewood Fire Department	Maplewood	Minnesota	Combination
Hamel Fire	Medina	Minnesota	Volunteer / Paid-On-Call

Fire Department	City/Town	State/Province	Response
Melrose Fire	Melrose	Minnesota	Volunteer / Paid-On-Call
Minneapolis Fire Department	Minneapolis	Minnesota	Career
Msp Airport Fire	Minneapolis	Minnesota	Career
Msp Airport Fire / Metropolitan Airports Commission	Minneapolis	Minnesota	Career
Minneota Fire Dept.	Minneota	Minnesota	Volunteer / Paid-On-Call
Minnesota Lake Fire Department	Minnesota Lake	Minnesota	Volunteer / Paid-On-Call
Minnetonka Fire Department	Minnetonka	Minnesota	Volunteer / Paid-On-Call
Minnetonka Fire Department	Minnetonka	Minnesota	Volunteer / Paid-On-Call
Moorhead Fire	Moorhead	Minnesota	Career
New Brighton	New Brighton	Minnesota	Combination
New Brighton	New Brighton	Minnesota	Combination
Newport	Newport	Minnesota	Volunteer / Paid-On-Call
Newport Volunteer Fire Department	Newport	Minnesota	Volunteer / Paid-On-Call
North Mankato	North Mankato	Minnesota	Volunteer / Paid-On-Call
Norwood Young America	Norwood Young America	Minnesota	Volunteer / Paid-On-Call
Oakdale	Oakdale	Minnesota	Combination
Odin Fire Department	Odin	Minnesota	Volunteer / Paid-On-Call

Fire Department	City/Town	State/Province	Response
Perham Fire	Perham	Minnesota	Volunteer / Paid-On-Call
Plymouth Fire Dept	Plymouth	Minnesota	Combination
Princeton Fire Rescue	Princeton	Minnesota	Volunteer / Paid-On-Call
Mdewakanton Department of Public Safety	Prior Lake	Minnesota	Career
Mdewakanton Public Safety	Prior Lake	Minnesota	Career
Red Wing	Red Wing	Minnesota	Career
Red Wing Fire & Ambulance	Red Wing	Minnesota	Career
Rice Fire Department	Rice	Minnesota	Volunteer / Paid-On-Call
Rice Lake Volunteer Fire Department	Rice Lake Township	Minnesota	Volunteer / Paid-On-Call
Richfield Fire Department	Richfield	Minnesota	Career
Roseville Fire Department	Roseville	Minnesota	Combination
Savage Fire Department	Savage	Minnesota	Volunteer / Paid-On-Call
Scandia Fire And Rescue	Scandia	Minnesota	Volunteer / Paid-On-Call
Shevlin	Shevlin	Minnesota	Volunteer / Paid-On-Call
Excelsior Fire District	Shorewood	Minnesota	Combination
Sleepy Eye	Sleepy Eye	Minnesota	Volunteer / Paid-On-Call
Spring Lake Park-Blaine-Mounds View Fire	Slp/Blaine/Mounds View	Minnesota	Combination
St. Anthony Fire	St. Anthony	Minnesota	Combination

Fire Department	City/Town	State/Province	Response
St. Anthony Fire Department	St. Anthony	Minnesota	Combination
St. Augusta Fire Dept	St. Augusta	Minnesota	Volunteer / Paid-On-Call
St. Cloud Fire Department	St. Cloud	Minnesota	Career
St. Cloud Fire Department	St. Cloud	Minnesota	Career
St. Louis Park Fire	St. Louis Park	Minnesota	Combination
St. Paul Fire Department	St. Paul	Minnesota	Career
State Fire Marshal Division	St. Paul	Minnesota	Career
Linwood Fire Department	Stacy	Minnesota	Volunteer / Paid-On-Call
Stillwater	Stillwater	Minnesota	Combination
Stillwater Fire Department	Stillwater	Minnesota	Combination
Vadnais Heights	Vadnais Heights	Minnesota	Combination
Victoria Fire Dept	Victoria	Minnesota	Volunteer / Paid-On-Call
Waseca	Waseca	Minnesota	Combination
Waseca	Waseca	Minnesota	Combination
Wayzata	Wayzata	Minnesota	Volunteer / Paid-On-Call
Wendell Fire Dept.	Wendell	Minnesota	Volunteer / Paid-On-Call
South Metro Fire	West St.Paul	Minnesota	Career
South Metro Fire Department	West St. Paul	Minnesota	Career
White Bear Lake	White Bear Lake	Minnesota	Volunteer / Paid-On-Call
Winona Fire	Winona	Minnesota	Combination

Fire Department	City/Town	State/Province	Response
Woodbury	Woodbury	Minnesota	Combination
Woodbury	Woodbury	Minnesota	Combination
Biloxi Fire Dept.	Biloxi	Mississippi	Career
Horn Lake Fire Department	Horn Lake	Mississippi	Career
Southaven Fire Dept	Southaven	Mississippi	Career
Florissant Valley Fire District	Florissant	Missouri	Career
High Ridge Fire Protection District	High Ridge	Missouri	Duty Crew / Part Time
Ozark Fire Protection Dist	Ozark	Missouri	Combination
Springfield Fire Department	Springfield	Missouri	Career
Springfield Fire Dept	Springfield	Missouri	Career
Union Star Fire Protection District	Union Star	Missouri	Volunteer / Paid-On-Call
Metro West Fire Protection District	Wildwood	Missouri	Career
Billings Logan Intl Airport	Billings	Montana	Career
Lincoln Fire-Rescue	Lincoln	Nebraska	Career
Wakefield Fire Department	Wakefield	Nebraska	Volunteer / Paid-On-Call
Belmont Fire Dept	Belmont	New Hampshire	Combination
Clifton Fire Department	Clifton	New Jersey	Career
Evesham Fire-Rescue	Evesham	New Jersey	Combination
Gloucester City	Gloucester City	New Jersey	Combination
Robbinsville Township Fire Department	Robbinsville	New Jersey	Combination

Fire Department	City/Town	State/Province	Response
Wood-Ridge Fire Department	Wood-Ridge	New Jersey	Volunteer / Paid-On-Call
Alamo West Fire Rescue	Alamogordo	New Mexico	Volunteer / Paid-On-Call
Sandoval County Fire	Bernalillo	New Mexico	Combination
Las Cruces Fire Department	Las Cruces	New Mexico	Career
Bayport	Bayport	New York	Volunteer / Paid-On-Call
Cleveland Hill Hose Company #6	Cheektowaga	New York	Volunteer / Paid-On-Call
Dix Hills Fire Dept	Dix Hills	New York	Volunteer / Paid-On-Call
Henrietta Fire District	Henrietta	New York	Combination
Moyers Corners Fire Dept	Liverpool	New York	Volunteer / Paid-On-Call
Schuylerville	Schuylerville	New York	Volunteer / Paid-On-Call
Stuyvesant Falls Fire Company	Stuyvesant Falls	New York	Volunteer / Paid-On-Call
Durham Fire Department	Durham	North Carolina	Career
Lebanon Volunteer Fire Department	Durham	North Carolina	Combination
Kernersville Fire Rescue	Kernersville	North Carolina	Career
Pinetown Vol Fire Dept	Pinetown	North Carolina	Volunteer / Paid-On-Call
Fargo FD	Fargo	North Dakota	Career
Coventry	Akron	Ohio	Career

Fire Department	City/Town	State/Province	Response
Ashland Fire Department	Ashland	Ohio	Career
City of Bryan	Bryan	Ohio	Combination
Township Fire	Cincinnati	Ohio	Combination
Columbus Div. of Fire	Columbus	Ohio	Career
Bazetta	Cortland	Ohio	Duty Crew / Part Time
Goshen Fire And Ems	Goshen	Ohio	Combination
Jackson Twp.	Grove City	Ohio	Combination
Marion Township	Marion	Ohio	Career
Marion Township Fire Dept	Marion	Ohio	Career
Weathersfield Fire Department	Mineral Ridge	Ohio	Volunteer / Paid-On-Call
Troy Fire Department	Troy	Ohio	Career
Whitehall Division Of Fire	Whitehall	Ohio	Career
Alva Fire Department	Alva	Oklahoma	Combination
Eagletown Fire Department	Eagletown	Oklahoma	Volunteer / Paid-On-Call
Miami Fire/Rescue	Miami	Oklahoma	Career
Newberg Fire Department	Newberg	Oregon	Combination
Portland Fire & Rescue	Portland	Oregon	Career
Stayton Fire District	Stayton	Oregon	Combination
Tualatin Valley Fire & Rescue	Tigard	Oregon	Combination
Center Township Volunteer Fire Department	Aliquippa	Pennsylvania	Volunteer / Paid-On-Call
Aspinwall	Aspinwall	Pennsylvania	Volunteer / Paid-On-Call

Fire Department	City/Town	State/Province	Response
Belle Vernon Fire Co	Belle Vernon	Pennsylvania	Volunteer / Paid-On-Call
Fleetville Fire Co	Benton Twp.	Pennsylvania	Volunteer / Paid-On-Call
Weldon Fire Company	Glenside	Pennsylvania	Volunteer / Paid-On-Call
Brookline Volunteer Fire Co	Havertown	Pennsylvania	Volunteer / Paid-On-Call
Hope Hose Company/Lock Haven Fire Department Station #2	Lock Haven	Pennsylvania	Combination
Mt. Lebanon	Pittsburgh	Pennsylvania	Combination
Point Pleasant Fire Co. #1	Point Pleasant	Pennsylvania	Volunteer / Paid-On-Call
Little Compton Fire	Little Compton	Rhode Island	Career
Smithfield	Smithfield	Rhode Island	Career
Fort Jackson	Columbia	South Carolina	Career
Irmo Fire District	Columbia	South Carolina	Career
Highway 34 Fire And Rescue	Greenwood	South Carolina	Volunteer / Paid-On-Call
Myrtle Beach Fire Dept.	Myrtle Beach	South Carolina	Career
Sioux Falls Fire Rescue	Sioux Falls	South Dakota	Career
Franklin Fire Department	Franklin	Tennessee	Career
Gilt Edge Volunteer Fire Dept.	Gilt Edge	Tennessee	Volunteer / Paid-On-Call
Nashville Fire Department	Nashville	Tennessee	Career

Fire Department	City/Town	State/Province	Response
Palmyra Volunteer Fire Service	Palmyra	Tennessee	Volunteer / Paid-On-Call
Heath Dps	Heath	Texas	Career
Houston	Houston	Texas	Career
Lubbock Fire Rescue	Lubbock	Texas	Career
Salt Lake City	Salt Lake City	Utah	Career
Forest Vol Fire Company	Forest	Virginia	Volunteer / Paid-On-Call
Fredericksburg	Fredericksburg	Virginia	Career
Norfolk Fire-Rescue	Norfolk	Virginia	Career
Petersburg Fire Department	Petersburg	Virginia	Career
Portsmouth Fire Department	Portsmouth	Virginia	Career
Quantico Fire And Emergency Services	Usmc Base Quantico	Virginia	Career
Woodstock	Woodstock	Virginia	Volunteer / Paid-On-Call
Benton County FD	Benton City	Washington	Combination
Camano Island Fire And Rescue	Camano Island	Washington	Combination
Eastside Fire & Rescue	Issaquah	Washington	Combination
Northshore Fire	Kenmore	Washington	Career
Kent Regional Fire Authority	Kent	Washington	Career
Olympia Fire Department	Olympia	Washington	Career
Seattle Fire	Seattle	Washington	Career
Central Kitsap	Silverdale	Washington	Combination
Spokane Valley Fire Department	Spokane Valley	Washington	Career

Fire Department	City/Town	State/Province	Response
Whatcom County Fire District 14	Sumas	Washington	Combination
Vienna Vol Fire Department	Vienna	West Virginia	Volunteer / Paid-On-Call
Eau Claire F.D.	Eau Claire	Wisconsin	Career
Eau Claire FD	Eau Claire	Wisconsin	Career
City Of Kenosha Fire Department	Kenosha	Wisconsin	Career
La Crosse Fire Department	La Crosse	Wisconsin	Career
Menomonee Falls	Menomonee Falls	Wisconsin	Combination
Milwaukee Fire Department	Milwaukee	Wisconsin	Career
North Shore Fire Rescue	North Shore (Ne Milwaukee County)	Wisconsin	Career
Sharon Fire And Rescue	Sharon	Wisconsin	Volunteer / Paid-On-Call
Town Of Sheboygan Fire Dept	Town Of Sheboygan	Wisconsin	Volunteer / Paid-On-Call
Waukesha	Waukesha	Wisconsin	Career
Casper Fire Department	Casper	Wyoming	Career
West Wyalong RFB	West Wyalong	Australia: Nsw	Volunteer / Paid-on-Call
Spruce Grove Fire Services	Spruce Grove	Alberta	Career
Fraser Lake Fire Rescue	Fraser Lake	BC	Volunteer / Paid-on-Call
Sproat Lake Fire Fept.	Port Apberni	BC	Volunteer / Paid-on-Call
Salt Spring Island Fire Rescue	Salt Spring Island	BC	Combination
Hampton Fire Rescue	Hampton	New Brunswick	Volunteer / Paid-on-Call

Fire Department	City/Town	State/Province	Response
Halifax Regional Fire	Halifax	Nova Scotia	Combination
Summerville & District VFD	Summerville	Nova Scotia	Volunteer / Paid-on-Call
Bracebridge Fire Department	Bracebridge	Ontario	Combination
Dutton Dunwich FD	Dutton	Ontario	Volunteer / Paid-on-Call
Mississauga Fire	Mississauga	Ontario	Career

Appendix C

Letter of recommendation for training management for the Fire Department

Letter delivered to the Fire Chief of the Eden Prairie Fire Department based on the research collected in this applied research project.

George Esbensen, Fire Chief
14800 Scenic Heights Road
Eden Prairie, MN 55344

October 2, 2014

Chief Esbensen,

After extensive research into our current training program and the data management system that we are using to house our training data, I feel it would be in our best interest to explore other options. The program we are currently using is New World, which is a data management software that will house any number of data that we input. It works well for storing information from fire calls and fire inspections and has a number of uses for our police department. It doesn't meet the needs of the training division within the fire department. We need to explore the options available in learning management systems. Utilizing a learning management system will allow us to capture training information in the field, during our weekly training drills, or during shifts with fire officers. It will allow us to track the progress of our probationary members in completing their probationary mentor packets, our fire apparatus operators who are working on completing their driving hours, and any of our firefighters who are working on their promotional hour requirements.

I don't believe we need to make an immediate change, but I propose we budget an additional $8,500 annually starting in the next fiscal cycle. This money will allow us to track the programs I mentioned above as they are happening, rather than the amount we are spending on copy costs for books for the information to be manually entered, and then entered into our current program as well as into a spreadsheet to track firefighter training percentage and certificate completion.

I would be happy to meet with you in person regarding this request.

Respectfully submitted,

Becki White

Becki White
Assistant Chief – Training & Prevention