

DEPARTMENT OF FIRE PREVENTION AND ELECTRICAL SAFETY

2007 Strategic Plan

Plan Period: FY2009 – 2010 (July 1, 2008 through June 30, 2010)

Results Statement:

- ✚ Wyoming families and individuals living in a stable, safe, supportive, nurturing, healthy environment.
- ✚ A diverse and stable economy that provides a livable income and ensures wage equality.

Our Contribution to Wyoming Quality of Life:

Through aggressive and effective electrical and fire prevention programs we can:

- ✚ Ensure Wyoming children; families, and the public are safe from fire and electrical hazards.
- ✚ Protect the stability of our economic base through effective fire prevention and firefighter training programs.
- ✚ Be responsible as a steward of State assets and effectively responds to the needs of residents and guests.

Department Facts:

The Department of Fire Prevention and Electrical Safety consists of 36 personnel in 4 divisions: Administration (4), Fire Prevention (10), Electrical Safety (11), and Training (11). Our main office is located in Cheyenne with field offices in Riverton, Douglas, Green River, Buffalo, Afton, and Worland.

Funding: The total operating budget for the department for FY 07-08 is \$6,044,333.00. Of this amount \$5,567,379.00 are General Funds, and \$476,954.00 are Other Funds (electrical licenses and permits).

Division Budgets: **Administration:** \$1,506,203.00 **Fire Prevention:** \$1,595,857.00

Electrical Safety: \$1,752,319.00 **Training:** \$1,189,954.00 **Wyoming Fire Academy:** \$899,218

Six primary functions of our Department:

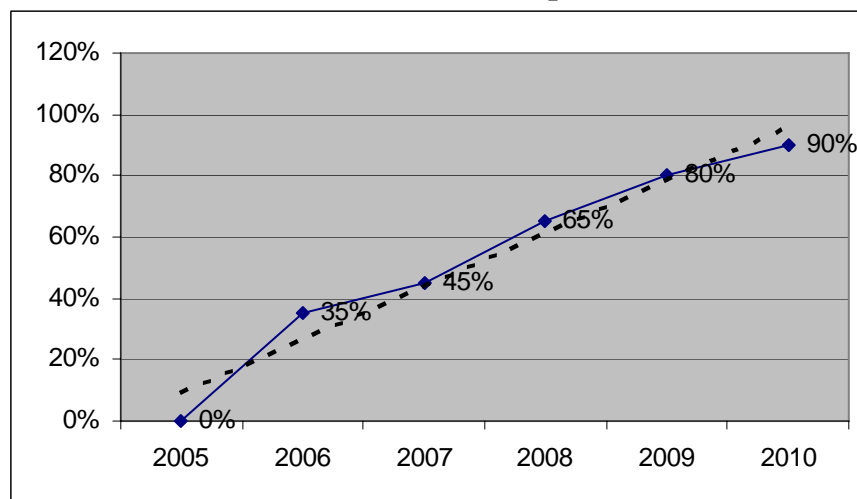
1. ***Conduct Fire and Life Safety, and Electrical Inspections*** in public buildings such as hotels/motels, schools, day cares, restaurants, and institutions.
2. ***Train Firefighters*** from across Wyoming in all aspects of fire suppression and fire prevention.
3. ***Provide Fire and Safety Education Programs*** to the children, families and general public in Wyoming.
4. ***Collect and Analyze Fire Data*** to identify fire problems and trends so resources are accurately directed towards their mitigation.
5. ***Conduct Non-Structural Plan Reviews*** for compliance with fire and life safety and electrical codes on public buildings being constructed or remodeled.
6. ***License*** all electricians working in the state and ***issue permits*** for electrical work being conducted across the state.

All of our major business processes are interconnected in some way. If a fire occurs and an investigator is dispatched to help determine the origin and cause as part of their investigation, they need access to plan reviews for the property as well as any fire or electrical inspections that have taken place. Currently, information is stored in numerous systems, none of which are connected and easily accessible. In FY2007-2008, a business case was submitted for the purpose of re-engineering our 5 major business processes in order to increase efficiencies within the department and increase service to our constituency. The monies appropriated were to begin the first phase of the process with an understanding that additional amount of \$1,015,000.00 would be requested to finish the project during FY2009-2010.

Performance Measure #1:

Projected percentage increase in construction plans reviewed, percentage increase in permits issued, and percentage increase in electrical licenses issued/renewed.

Plan Review Graph



Story behind the Performance Measure #1:

Of five major business processes we conduct in the department we have selected the above to illustrate a trend within our department and one for which we must plan now if we are to maintain the same level of services and improve on timeliness in the future. We cannot control the number of project plans we review for code compliance, but the trend has been, and continues to be increasing. Construction across the state is projected to continue to increase which directly impacts us in carrying out our responsibilities. In the case of plan reviews we have seen a 35% increase in 2005, while electrical permits are expected to increase 9% annually over the next three years and electrical licenses at 5% over the same period. We cannot, in a meaningful way, alter the time it takes to complete any of the processes without integrating technology into them. Without streamlining the process and employing a system where we reduce redundant data entry, manual record searches, and staff time "triaging" via phone and mail our service will be decreased.

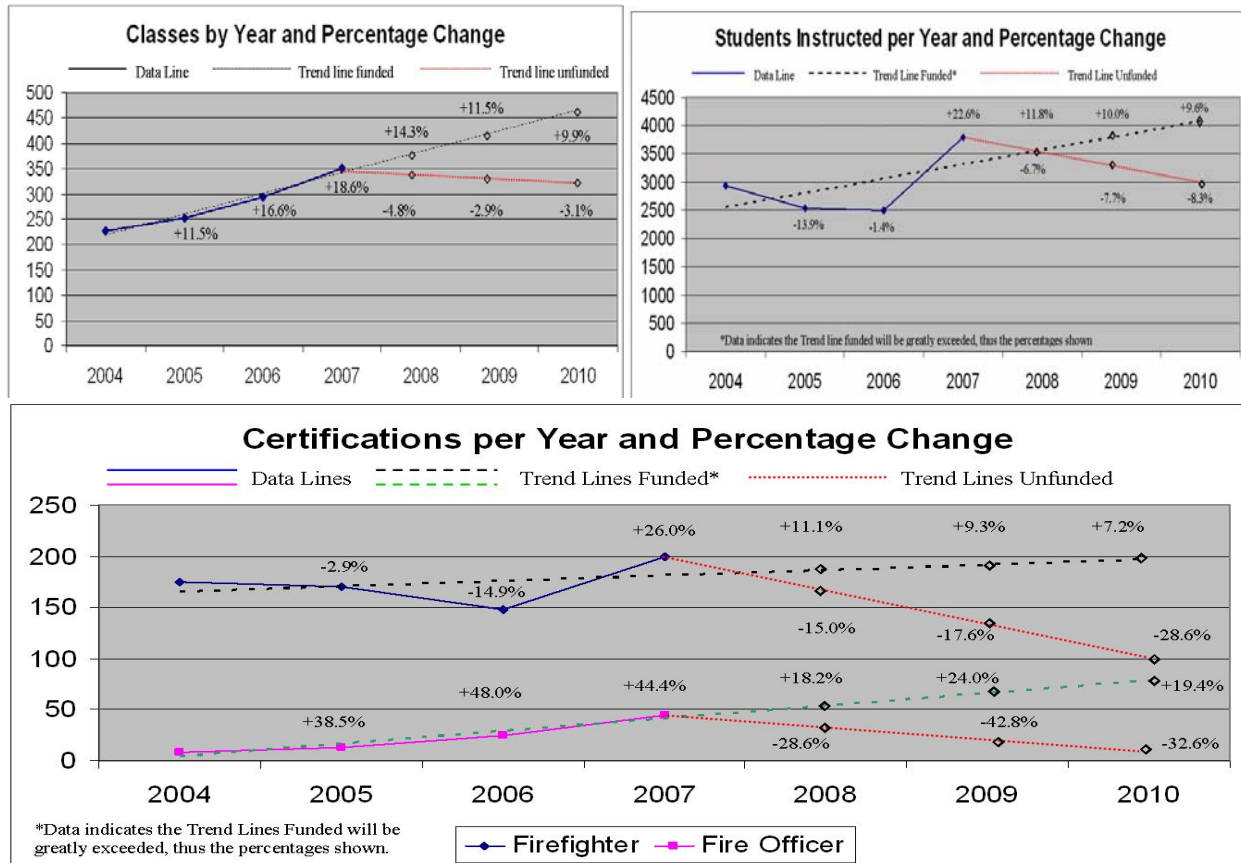
The current business process' we use are labor-intensive with each requiring manual processing by staff, extensive use of phone and letters, and manual searches of numerous databases and hard files for application accuracy and information. The result is we are slow in processing applications and plan reviews, which in turn negatively impacts our constituency's ability to conduct their business. With the current process' we cannot accurately measure our effectiveness because the information is housed in unconnected databases and paper files.

What we propose to do to improve performance measure #1 in the next two years?

We are requesting monies in the FY2009-2010 budget to complete the business case, enabling us to re-engineer our 5 major business processes in order to increase efficiencies within the department and increase service to our constituency.

Performance Measure #2:

Training Classes provided to the Wyoming Fire Service



Story behind the Performance Measure #2:

Along with the reduction of fire trainers available in the state, attendance in existing Hazardous Materials Training programs dropped from 2002 through 2004. The program experienced major changes, and these policy changes took several months to implement. As a result, the Hazardous Materials classes decreased from 99 in 2004 to 34 in 2005. In 2006, however, this program was revitalized with a new curriculum being adopted and distributed to every fire department in the state. At the same time, the division was going through a fundamental change in how it delivers classes to the fire service, from facilitation to instruction. These events, combined with one of the three trainer positions being vacant at various times, led to the decreased number of classes and firefighters attending classes.

In 2004, the DFPES conducted a Training Needs Survey. This survey was mailed to the fire service asking what they wanted from the DFPES. The response overwhelmingly pointed towards the need for basic firefighter training. This survey produced the same results as one done by the National Fire Protection Agency in 2004; almost 45% of our firefighters have never received any formal firefighter training. In the same year, many of the programs being delivered by the DFPES required updating. This was particularly true with the National Fire Academy Courses. When this was combined with the extra daily demands being placed upon the average volunteer firefighter's time, it had a profoundly negative effect on course attendance. In late 2005, the DFPES began programs to update this curriculum. Additionally, the DFPES began to focus on teaching basic firefighter training in the smaller departments in the state; this was often accomplished through a combination of on-line, hands on, and traditional classroom training methods.

Performance Measure #2 Cont'd:

Although this improved the quality of firefighters around the state, it initially had a negative effect on the division's overall student count. In 2006, however, word of these excellent programs spread and their popularity with the fire service increased, thus leading to increases in classes and students. By 2007 over 200 students a week were being trained through these programs, with most of these students being from small, rural, all-volunteer departments.

In late 2005 the DFPES received national accreditation for its basic firefighter certifications. To accomplish this involved several years of planning and a complete overhaul of our certification process. Certification is the end result of training, but such a dramatic change has taken everyone involved some time to adjust to a new way of doing business. As a result basic firefighter certifications had dropped but are now on the rise, while the continuing emphasis placed on training has improved the number of individuals receiving fire officer certification.

In the 2007 legislative session the DFPES Training Division was given the authority to assume operation of the Wyoming Fire Academy. This included three new full time positions. Once this transition occurs it will allow the agency to coordinate advanced and basic firefighting courses alike at the facility. This will also provide a facility to conduct the hands on portions of the on-line courses mentioned previously.

What we propose to do to improve performance in performance measure #2 in the next two years?

1. Work through transitioning the Wyoming Fire Academy to a state-owned and operated facility, begin conducting routine DFPES classes and training programs at the facility, and begin updating academy equipment as necessary. The exception budget request is \$ 60,610.00.
2. Work with local community fire departments to upgrade existing hands-on firefighter training facilities around the state to work in conjunction with DFPES on-line programs. The exception budget request is \$ 1,796,205.00.
3. Continue utilizing new technology and teaching techniques (such as on-line, email or video conferencing) in order to reach more students. The exception budget request is \$ 49,894.00.
4. Develop local fire department instructors and contract instructors to assist in training firefighters.
5. Develop a standard model for "local fire training programs."
6. Update curriculum, develop new training courses, and provide different training programs than those offered in the past.
7. Trainer/Investigator pay disparity. The exception budget request is \$ 29,280.00.

Appendix A: Data Development Agenda. List priorities for new or better data on performance:

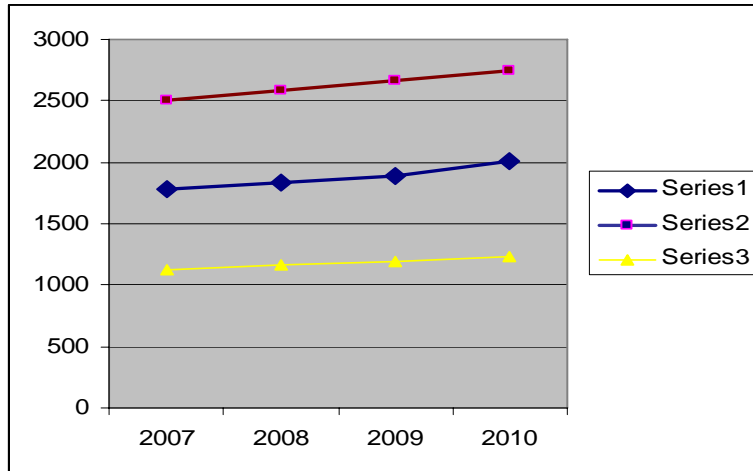
1. Develop a baseline to formally measure customer satisfaction. Customer satisfaction in the division has never been measured. Thus, the training division has no documented data to support how well we are doing with our training. A baseline will be established for 2007, and based upon this number, appropriate actions can be taken to improve upon our deliveries, and a reasonable increase in customer satisfaction can be determined.
2. Survey the Wyoming Fire Service to determine their view of the changes within the DFPES Training Division that have occurred since the 2005 *Study of Fire Service Training of Wyoming*. Furthermore, take the information obtained and utilize it to continue developing programs and goals for the Division and the State of Wyoming Fire Academy.

Proposed goals beyond FY2009-2010?

1. Develop the Wyoming Fire Academy into a training center to include advanced level firefighting, fire officer and Hazardous Materials skills.
2. Develop a system of regional training centers to assist with local training of firefighters conducting on-line training.

Performance Measure #3:

Percentage of Electrical Inspections Being Completed.



	2007	2008	2009	2010
Plan Review	1786	1840	1895	2009
Permits	2509	2584	2662	2742
Other	1127	1161	1196	1232

Story behind the next three years of Performance Measure #3:

Electrical Inspections are a priority to ensure that the facilities in Wyoming are safe from electrical hazards and fire. Below is a brief description of the types of inspections performed by our electrical inspectors.

1. **Plan Review Inspections:** Our plan review division reviews plans sent in by professional engineers, architects and designers. Once the plans are approved they are assigned to the appropriate inspector. Since plan review projects are constructed in phases they are usually inspected more than once. In FY2007, the Electrical Plans Examiner reviewed **178 electrical plans**, which as you can see in the above **graph generated 1786 inspections**. Currently we inspect 100% of all electrical plan reviews.
2. **Permit Inspections:** Electrical Wiring Permits are required by statute prior to electrical power being energized by the power company. In FY 2007, **4197** permits were processed in the office by the permit technicians and then assigned to the appropriate inspector for inspection. Out of the 4197 permits received, **2509** permit inspections were completed. Since electrical wiring is also done in phases, these can be inspected more than once. Due to the quantity of permits each inspector receives monthly, permits get inspected in a priority manner. Paid inspections would come first with public facilities following compared to a simple residential re-model, etc.
3. **Other Inspections: Cease & Desist Orders, Safety, Complaint, License verification, Courtesy, public Assist and Warning Notices.** These are usually initiated by phone calls, in which we are notified of an electrical hazard, unlicensed electricians, or someone needing advice on their electrical installations. Warning notices are usually not issued on the first occurrence. However, if the contractor or electrician is sited a second time for a licensing violation, permit violation or a NEC violation, a warning notice is issued. If a third warning notice is issued, the contractor or electrician may appear in front of the Electrical Board for a possible revocation of his license.
4. In the past fiscal period we performed 5,422 Inspections and drove 172,713 miles.

The Electrical Inspectors perform many other important functions such as code interpretation both to private and to the business sectors, attend and present electrical workshops, make phone contacts with building officials, fire officials and electrical contractors, all which requires office time and paper work.

What we propose to do to improve performance in performance measure #3 in the next two years?

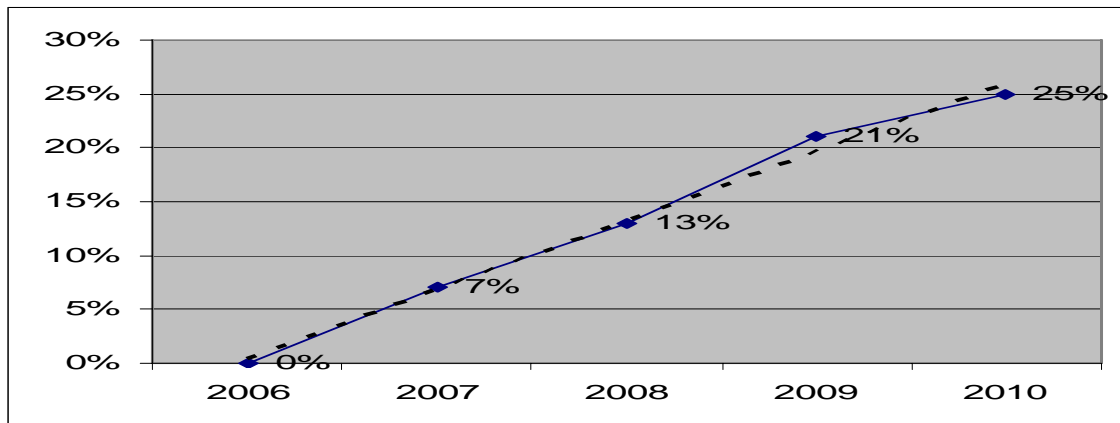
1. In order to increase the amount of inspections and increase service to our constituency, we are looking forward to upgrades out of the new business case mentioned earlier in the strategic plan that will allow time spent in the office to be cut down and the inspectors can spend more time in the field doing more inspections.

Performance Measure #3 Cont'd:

2. While construction across the state is hard to predict, it does directly impact us in carrying out more inspections and responsibilities such as cutting down the wait time for an inspection so that our constituents can move forward with money making projects. Therefore, we will monitor the amount of inspections and predict a 3% increase in the next 3 years. In our next year's performance, we will measure if there is an area that needs to be readjusted or if one more inspector will be needed.
3. The amount of electrical permits received (per statute) in this office keeps increasing by approximately 3%. At present our projected time frame for online permitting is December 1, 2007 which will produce faster on-line technology and will reduce redundant data entry by staff. Leaving the constituents to apply and fill out the electrical permits on-line which will then alter the time it takes to complete the permit process and reduce the turn around time.

Performance Measure #4:

Percentage of Fire Inspections Being Completed.



Story behind Performance Measure #4:

Fire Prevention – Fire inspections are generated from primarily 2 sources. First, priority plan review inspections come from any buildings newly constructed or remodeled that go through the plan review process of the agency. Second, maintenance inspections are prioritized and conducted using the following general criteria; educational facilities, hotels/motels/senior centers, State owned/public leased buildings, assembly occupancies, day care centers, business occupancies, and above ground storage facilities.

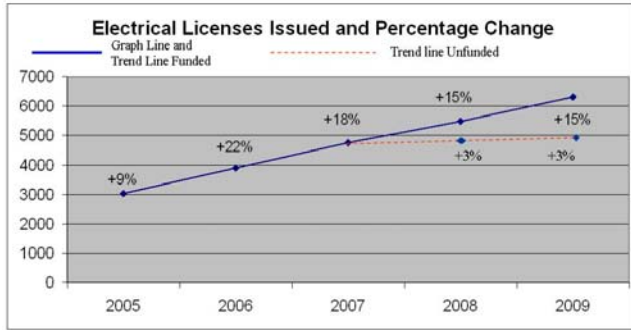
Inspection numbers have consistently increased since 2004, with the exception of a spike in numbers for 2006. For 2006, the number of inspections used for the baseline was 2106. The projected number of inspections for 2007 was 2257. The actual number of inspections in 2007 is 2408 and will be reflected in the annual report. Construction activity in Wyoming looks very positive for the foreseeable future: as such, demand for plan review, life and fire safety inspections will increase each year.

What do you propose to do to improve performance in performance measure #4 the next two years?

Fire Prevention - A critical area will be to continue to gather and document narrative data that communicates how reviewers and inspectors have effectively impacted the fire problem that exists today.

Over the past few years, a significant pay disparity has developed in the field offices between electrical and fire inspectors. In order to ensure a highly motivated work force amongst the fire inspectors, it is proposed to develop some degree of parity with regard to pay. There is a request of \$29,280.00 in the FY2009-2010 budget to address this issue.

Performance Measure #5: Professional Electrical Licenses' Issued



FY-2005 Issued 3031
 FY-2006 Issued 3905
 FY-2007 Issued 4769
 972 Contractor i.e. LV/LM
 1971 Apprentice i.e. LV/LM
 325 Master Electricians
 998 Journeyman Electricians
 513 Technician Electricians

Story behind the last two years of electrical performance #5:

The Electrical Licensing Division has 13 different categories of professional license.

Annual licenses include Electrical Contractor's and 11 categories of Limited/Low Voltage Contractors, Apprentice Electricians and 11 different categories of Apprentice Technicians. All of these licenses need to register or renew yearly.

Tri-annual licenses include Master, Journeyman and Low/Limited Technicians that were processed either by exam, reciprocity or by renewal, as these licenses are good for and renew every 3 years. Therefore, these numbers will vary from year to year depending on which year they received the tri annual license.

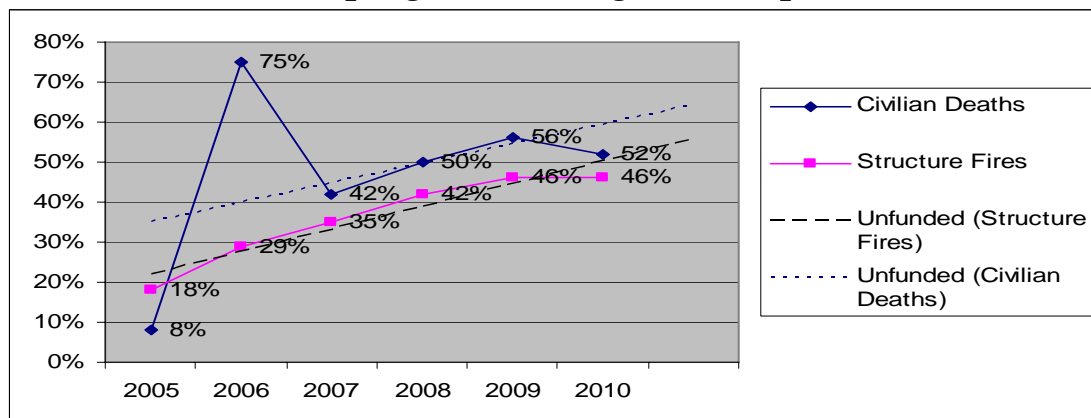
All licenses are considered a professional license. The Occupational Licensing Specialist reviews all applications and data required for licensing and examinations; including, verifying education, training, work experience, licensure in other states and the status of disciplinary actions. These must be verified before the issuance of a license or allowing an applicant to sit for an exam. This is very time consuming but as part of our new business case, the on-line application process for electrical licensing will improve this situation.

What we propose to do to improve performance in performance measure #5 in the next two years?

1. Input a software program where the majority of the paper is filled out on line by the applicant instead of by office staff.
2. Monitor the growth of licensure including the amount of out of state license and the amount of license given through exams.

Performance Measure #6:

Percentage of fire departments engaged in fire prevention and public education programs through our Department.



Performance Measure #6 Cont'd:

Story Behind the Performance Measure #6:

There is a great deal of data that supports the idea that fire prevention measures, specifically, fire fatalities/injuries and property loss can be significantly reduced through public education programs.

CDC Fire Deaths and Injuries: Fact Sheet Overview

Deaths from fires and burns are the fifth most common cause of unintentional injury deaths in the United States (CDC 2005) and the third leading cause of fatal home injury (Runyan 2004). The United State's mortality rate from fires ranks sixth among the 25 developed countries for which statistics are available (International Association for the Study of Insurance Economics 2003).

Although the number of fatalities and injuries caused by residential fires has declined gradually over the past several decades, many residential fire-related deaths remain preventable and continue to pose a significant public health problem.

Occurrence and Consequences

- On average in the United States in 2005, someone died in a fire about every 2 hours (143 minutes), and someone was injured every 29 minutes (Karter 2006).
- Four out of five U.S. fire deaths in 2005 occurred in homes (Karter 2006).
- In 2005, fire departments responded to 396,000 home fires in the United States, which claimed the lives of 3,030 people (not including firefighters) and injured another 13,825, not including firefighters (Karter 2006).
- Most victims of fires die from smoke or toxic gases and not from burns (Hall 2001).

"Smoke Detectors Saves Lives" – National Fire Protection Association

What we propose to do to improve performance in performance measure #6 in the next two years?

- Expand the Smoke Alarm Placement Program to include more communities concentrating on homes of the elderly and low income families with children. Expansion will be sought by partnering with state and local agencies, as well as community fire departments, to identify households needing adequate protection provided by working smoke alarms and grant funding sources to acquire additional funding.
- Continue the grant funded Juvenile Firesetter Intervention Program (initiated June 2004). Expand education on juvenile firesetter problem to mental health providers, law enforcement personnel and the Wyoming fire service to provide opportunities for early intervention and education.
- In partnership with local fire departments, continue to target occupancy types that are showing the highest frequency of fires, property loss and lives lost for increased education and assist the local fire departments organize and implement an educational program that addresses this.
- Continue to utilize new and exciting methods of providing fire prevention and fire safety education.
- Expand and develop new relationships with other State agencies and other likeminded agencies outside of State government to provide additional avenues for fire prevention education.