

# **State of Alaska FY2009 Governor's Operating Budget**

## **Department of Public Safety Fire and Life Safety Results Delivery Unit Budget Summary**

**Fire and Life Safety Results Delivery Unit**

**Contribution to Department's Mission**

Prevent the loss of life and property from fire and explosion.

**Core Services**

- Public fire safety and prevention education.
- Building plan review of commercial buildings, 4-plex and above.
- Building and fire code management (development, adoption, interpretation, and review).
- Fire and life safety inspections of priority occupancies.
- Fire service training.
- Fire investigations of major fire incidents involving high dollar loss, fatality, or major community impact.

End Result	Strategies to Achieve End Result
<p><b>A: Reduce loss of life due to fire.</b></p> <p><u>Target #1:</u> Reduce unintentional fire fatalities by 5% compared to the previous 5-year average.  <u>Measure #1:</u> % change in number of unintentional fire fatalities.</p>	<p><b>A1: Public education programs.</b></p> <p><u>Target #1:</u> Reduce fire fatalities in high-risk groups by 10% compared to the previous 5-year average.  <u>Measure #1:</u> % change in number of fire fatalities in high-risk groups.</p> <p><u>Target #2:</u> Reduce fires in high loss regions by 10% compared to the previous 5-year average.  <u>Measure #2:</u> % change in number of fires in targeted regions.</p> <p><b>A2: Fire and life safety inspections.</b></p> <p><u>Target #1:</u> 30% of all buildings scheduled for priority fire and life safety building inspections to be found in compliance at time of inspection.  <u>Measure #1:</u> % of buildings found in compliance with legal standards at time of inspection.</p>
End Result	Strategies to Achieve End Result
<p><b>B: Reduce property loss due to fire.</b></p> <p><u>Target #1:</u> Reduce property loss by 5% compared to previous 5-year average.  <u>Measure #1:</u> % change in dollar value of property loss.</p>	<p><b>B1: Building plan review for code compliance.</b></p> <p><u>Target #1:</u> Complete yearly 95% of submitted building plan reviews.  <u>Measure #1:</u> % of building plan reviews completed.</p> <p><b>B2: Public education programs.</b></p> <p><u>Target #1:</u> Reduce property loss in high loss occupancies-residential structures by 10% compared to previous 3-year average.  <u>Measure #1:</u> % change in property loss.</p> <p><b>B3: Fire training.</b></p>

	<u>Target #1:</u> 10% increase in number of students attending firefighter and fire officer training. <u>Measure #1:</u> % change in number of students.
End Result	Strategies to Achieve End Result
<b>C: Reduce number of fires.</b>  <u>Target #1:</u> Reduce number of structure fires by 5% compared to the previous 3-year average. <u>Measure #1:</u> % change in number of structure fires.	<b>C1: Fire training.</b>  <u>Target #1:</u> 10% increase in the number of fire prevention education courses delivered to firefighters. <u>Measure #1:</u> % change in number of fire prevention education courses.  <u>Target #2:</u> 10% increase in number of firefighters attending building safety inspection training. <u>Measure #2:</u> % change in number of firefighters attending building safety inspection training.

### Major Activities to Advance Strategies

- Coordinate company inspection classes for local fire departments.
- Start new public fire education programs in willing communities.
- Work with local fire departments to improve existing public fire education programs.
- Coordinate delivery of public fire education programs to owners and occupants of high loss occupancies.
- Coordinate delivery of public fire education programs to residents of high loss regions.
- Initial fire and life safety inspections, inspection follow-ups. Fire system reports review and follow-up.
- Code review and adoption.
- Advanced search and rescue training. Thermal imaging training.
- Coordinate advanced fire suppression classes for local fire departments.
- Coordinate public fire education classes for local fire departments.
- Coordinate company inspection classes for local fire departments.

### FY2009 Resources Allocated to Achieve Results

FY2009 Results Delivery Unit Budget: \$5,648,900

**Personnel:**

Full time	30
Part time	1
<b>Total</b>	<b>31</b>

## Performance Measure Detail

### A: Result - Reduce loss of life due to fire.

**Target #1:** Reduce unintentional fire fatalities by 5% compared to the previous 5-year average.

**Measure #1:** % change in number of unintentional fire fatalities.

#### Number of Unintentional Fire Fatalities (calendar year)

Year	Yearly Fatalities	5-Yr Avg Fatalities	Percent Inc/Dec
2000	15	18	
2001	16	16	-11%
2002	9	15	-44%
2003	7	12	-53%
2004	11	12	-8%
2005	14	11	+17%
2006	20	12	+82%

Source: Division of Fire and Life Safety

**Analysis of results and challenges:** The Division of Fire and Life Safety had a major victory during the FY2007 legislative session. Senate Bill 84, requiring that only cigarettes that have been certified as "Reduced Ignition Propensity" (self-extinguishing) may be sold in Alaska after August 2008, was signed into law by Governor Palin. The division hopes and anticipates that this law will help to reduce significantly the number of fire fatalities in Alaska.

Alcohol and drug usage continues to be a contributing factor in fire fatalities. It is alarming to note that in 81% (17 of the 20) of the fire fatalities in CY2006 it is known that alcohol or drugs were a contributing factor to the fire or the victim's inability to escape. The division is currently researching methods to address this factor.

Alaska still ranks above the national average in per capita fire fatalities. The division is targeting areas of concern for intensive media and public education campaigns. The division is implementing a Public Responsibility campaign to educate the public on their responsibility to prevent fire and keep their families safe.

Note: There was one intentional fire fatality in CY2006; this is lower than in previous years. Fire fatalities caused by homicide or suicide are considered intentional.

### A1: Strategy - Public education programs.

**Target #1:** Reduce fire fatalities in high-risk groups by 10% compared to the previous 5-year average.

**Measure #1:** % change in number of fire fatalities in high-risk groups.

#### Number of Fire Fatalities in High-Risk Groups (calendar year)

Year	High Risk Fatalities	5-Year Average	Percent Inc/Dec
2000	4	5	
2001	4	5	-20%
2002	3	5	-40%
2003	2	4	-60%
2004	1	3	-75%
2005	3	3	0%
2006	4	3	+33%

Source: Division of Fire and Life Safety

**Analysis of results and challenges:** Nationally, children and the elderly have been identified to be at higher risk for fire related fatalities. The Division of Fire and Life Safety has determined Alaska's high-risk groups to be children under 10 years and adults over 65 years of age.

During CY2006, one ten month old and three elders over 65 died as the result of unintentional fires. In one case, the elder was disabled and unable to escape the home before the flames reached her room. Alcohol was known

to be a contributing factor in 50% of the deaths.

The division has made great strides to prevent fire fatalities in high-risk groups by focusing programs on caregivers of young children. The number of children under the age of 10 dying in fires has dropped substantially.

The use of alcohol by elders over the age of 65 continues to contribute to loss of life among that section of the high-risk group. The division continues to research methods to educate this audience and their families on the increased dangers of alcohol and drug use around heat sources. The implementation of the use of the "Reduced Ignition Propensity" (self-extinguishing) cigarettes will also be a factor in reducing these fatalities.

**Target #2:** Reduce fires in high loss regions by 10% compared to the previous 5-year average.

**Measure #2:** % change in number of fires in targeted regions.

#### Number of Fires in Targeted Regions - Western Alaska, Central Alaska, and Anchorage (calendar year)

Year	Fires in Targeted Reg.	5-Year Average	Percent Inc/Dec
1999	781		
2000	817	708	
2001	901	778	+27%
2002	813	796	+4%
2003	867	836	+9%
2004	802	840	-4%
2005	894	855	+6%
2006	939	863	+10%

Source: Division of Fire and Life Safety

**Analysis of results and challenges:** The Division of Fire and Life Safety is working to reduce fires in target regions. Target regions are those areas of the state that experience a proportionately higher number of fires. Fire incident reports indicate the greatest number of fires occur in western Alaska, central Alaska, and Anchorage. These areas are targeted for increased educational and inspection efforts to reduce fires.

The small increase in reported fires in the targeted regions can be attributed to the increased ability of fire departments to report fires. The division has experienced a 24% increase in the number of reporting fire departments since 2002. This number will stabilize as the number of newly reporting fire departments levels off in the next few years.

The number of fire departments (and corresponding incidents reported) increased in CY2006. This is attributed to registration of new fire departments as a result of project "Code Red" and Federal Emergency Management Agency (FEMA) grant recipient requirements.

#### A2: Strategy - Fire and life safety inspections.

**Target #1:** 30% of all buildings scheduled for priority fire and life safety building inspections to be found in compliance at time of inspection.

**Measure #1:** % of buildings found in compliance with legal standards at time of inspection.

#### % of Buildings Found in Compliance with Legal Standards at Time of Inspection (fiscal year)

Fiscal Year	Inspections completed	Buildings in compliance	YTD Percentage
FY 2002	729	155	21.3%
FY 2003	1,063	291	27.4%
FY 2004	1,187	344	29.0%
FY 2005	795	214	27.0%
FY 2006	1,282	429	33.0%
FY 2007	669	180	27.0%

Source: Division of Fire and Life Safety

**Analysis of results and challenges:** Prioritization of building inspections is based upon those occupancies

that are at the greatest risk of fire-related injuries and fatalities, property loss, and community impact. The division is striving to increase owner/occupant awareness of hazards so a greater number of buildings will be found in compliance with legal standards at time of inspection.

Since FY2006, staffing levels have required the Division of Fire and Life Safety to decrease and prioritize fire and life safety inspections. Presently, the deputy fire marshals (DFM) assist the plans review bureau due to the increased workload of building plans reviews requested. With the additional plans examiner funded in FY2008, the DFMs can return to Life Safety Inspection Bureau functions to increase priority inspections and the education process. As Alaska grows, so do the number of priority inspections.

## B: Result - Reduce property loss due to fire.

**Target #1:** Reduce property loss by 5% compared to previous 5-year average.

**Measure #1:** % change in dollar value of property loss.

### Dollar Value of Property Loss (calendar year)

Year	Yearly Property Loss	5-Yr Avg Property Loss	Percent Inc/Dec
1999	\$23,390,917		
2000	\$28,291,332	\$45,102,485	
2001	\$46,611,167	\$40,188,550	+3%
2002	\$31,925,829	\$39,585,202	-21%
2003	\$25,546,038	\$31,153,057	-35%
2004	\$33,572,621	\$33,189,397	+8%
2005	\$27,457,556	\$33,022,642	-17%
2006	\$74,742,621	\$38,648,933	+126%

Source: Division of Fire and Life Safety

**Analysis of results and challenges:** Alaska experiences significant fire related property loss each year. The very large increase in property losses for CY2006 can be attributed to major fire events such as those that occurred in the community of Hooper Bay (\$35 million loss) and the King Salmon Hotel (\$2.9 million loss).

## B1: Strategy - Building plan review for code compliance.

**Target #1:** Complete yearly 95% of submitted building plan reviews.

**Measure #1:** % of building plan reviews completed.

### % of Building Plan Reviews Submitted to Plans Completed (fiscal year)

Fiscal Year	Plan reviews submitted	Plan reviews completed	Percent completed
FY 2004	1,075	882	82%
FY 2005	915	771	84%
FY 2006	1,070	916	86%
FY 2007	802	675	84%

Source: Division of Fire and Life Safety

**Analysis of results and challenges:** When a building fire occurs, a key contributing factor to the amount of loss is how the building was constructed. The Plan Review Bureau is tasked with making sure that proposed buildings submitted for plan review meet or exceed the standards as adopted by the State of Alaska. The addition of another plans examiner in FY2008 will allow for an increase in the number of building plans reviewed, to a completion rate of 95% or better. The net result will be to increase the number of buildings approved for construction that have had the benefit of assuring that all required fire resistive construction features have been implemented.

**B2: Strategy - Public education programs.**

**Target #1:** Reduce property loss in high loss occupancies-residential structures by 10% compared to previous 3-year average.

**Measure #1:** % change in property loss.

**Property Loss in Targeted Occupancies-residential Structures (calendar year)**

Year	Property Loss Amount	3-Year Average	Percent Inc/Dec
2001	\$12,238,308	\$13,581,652	
2002	\$16,946,969	\$14,967,004	+25%
2003	\$14,009,186	\$14,398,154	-6%
2004	\$17,085,040	\$16,013,732	+19%
2005	\$20,353,592	\$17,149,273	+27%
2006	\$49,993,955	\$29,144,196	+192%

Source: Division of Fire and Life Safety

**Analysis of results and challenges:** Residential occupancies continue to be the type of structures where Alaska's greatest fire-related property loss occurs. The Division of Fire and Life Safety is working to reduce this property loss through a combination of public fire education, fire and life safety inspections of those occupancies at risk for greatest potential loss, and through the plan review of 4-plex (and above) residential buildings for code compliance.

The CY2006 property loss amount includes the significant residential loss in the Hooper Bay fire (\$20 million), the hotel in King Salmon (\$2.9 million), and a lodge in Petersburg (\$1 million). Another contributing factor to the increase in property loss is the rapidly increasing property values for residential property. For example, a 2,000 square foot home in the Mat-Su region destroyed by fire in 2006 would have a considerably higher value than if the same house had been destroyed by fire in 2001.

**B3: Strategy - Fire training.**

**Target #1:** 10% increase in number of students attending firefighter and fire officer training.

**Measure #1:** % change in number of students.

**Number of Students Attending Firefighter/Fire Officer Training (fiscal year)**

Fiscal Year	YTD	Percent Inc/Dec
FY 2005	1,745	
FY 2006	2,384	+37%
FY 2007	2,500	+5%

Source: Training and Education Bureau

**Analysis of results and challenges:** The targeted increase of 10% was not met due to reduced fire training funding by local fire departments. This reduction directly affects the number of students available to attend training programs offered by the division. The division is working with local fire departments on ways to fund additional training during FY2008.

The division continues to work with the fire service to offer the appropriate and needed training programs and is making improvements in marketing the course offerings to the fire service and other organizations needing fire training.

Proper training of firefighters and fire officers at all levels is critical to the reduction of fire-related injuries, fatalities, and property loss. This training includes all levels from basic firefighting skills to advanced fire officer strategy and tactics.

**C: Result - Reduce number of fires.**

**Target #1:** Reduce number of structure fires by 5% compared to the previous 3-year average.

**Measure #1:** % change in number of structure fires.

**Number of Structure Fires (calendar year)**

Year	Structure Fires	3-Year Average	Percent Inc/Dec
2001	1,206	1,122	
2002	1,154	1,173	+3%
2003	1,205	1,188	+3%
2004	1,183	1,181	0%
2005	1,236	1,208	+5%
2006	1,337	1,252	+11%

Source: Division of Fire and Life Safety

**Analysis of results and challenges:** The Division of Fire and Life Safety is working to reduce the number of structure fires in Alaska through public education programs, fire and life safety building inspections, and building plan review for code compliance. The challenge will be to maintain the forward progress with existing staff as population and new construction grows. With an additional plans examiner, progress will be made.

One of the factors for the increase in CY2006 is that more fire departments are reporting data to the state as a requirement for increased federal funding and "Code Red" reporting requirements. The division has experienced a 24% increase in the number of reporting fire departments since 2002. This number will stabilize as the number of newly reporting fire departments levels off in the next few years.

The Hooper Bay fire accounts for more than 50% of the increased number of structures fires.

**C1: Strategy - Fire training.**

**Target #1:** 10% increase in the number of fire prevention education courses delivered to firefighters.

**Measure #1:** % change in number of fire prevention education courses.

**Number of Fire Prevention Education Classes Delivered to Firefighters (fiscal year)**

Fiscal Year	YTD	Percent Inc/Dec
FY 2005	43	
FY 2006	251	+484%
FY 2007	491	+16%

Source: Training and Education Bureau

**Analysis of results and challenges:** In FY2006-2007, the division received funding from a federal grant to provide fire prevention education training to fire departments, allowing a dramatic increase in the number of course offerings. The funding allowed for travel-related expenses to ensure that members of small, rural fire departments could participate. The division has also improved marketing of these courses to fire departments. These fire prevention education courses are designed to give fire department members the skills and knowledge necessary to present public education programs within their communities.

**Target #2:** 10% increase in number of firefighters attending building safety inspection training.

**Measure #2:** % change in number of firefighters attending building safety inspection training.

**Number of Firefighters Attending Building Safety Inspection Training (fiscal year)**

Year	YTD	Percent Inc/Dec
2005	189	
2006	271	+43%
2007	303	+12%

Source: Training and Education Bureau



**Analysis of results and challenges:** These building safety training courses are designed to give fire department members the skills and knowledge on building safety within their communities. This training allows local fire department members to educate local building owners on fire safety hazards encountered during visits to the occupancy, either during emergency responses or during courtesy inspections. The number of courses increased in FY2007 due to demand from the fire service.

## Key RDU Challenges

- Staff turnover continues to be a challenge. Lead-time to fully train a deputy fire marshal (DFM) is 18 months to 2 years. Once DFMs are trained, and gain a limited amount of experience, they become highly marketable to fire departments and other agencies in Alaska and the nation. Staff turnover of commercial building plans examiners is also a challenging aspect of maintaining the required level of service.
- Oil and gas production, processing, and transportation facilities are aging, increasing the chances of failure and causing an increased dependency on existing fire protection detection and suppression systems that require closer monitoring by this division.
- There has been a decline in the plan review receipts used to partially fund the division. This has had a very negative impact on the division's ability to perform necessary functions.
- Alaska has a history of tragic fire loss. In the past two years, the state has seen an increase in civilian fatalities due to fire. Residential fires continue to be Alaska's largest number of structure fires. Currently, the Division of Fire and Life Safety has no authority to enforce residential code requirements. The only method it has to reach residential occupants is through public education programs. With limited public educators, this can only be accomplished by targeting high-risk groups and areas. At current staffing levels, these programs will not reach all Alaskans.
- Assistance from the division will be required to support the Alaska Fire Standards Council.
- Small rural fire departments need increasing support.

## Significant Changes in Results to be Delivered in FY2009

See specific components for changes in service level.

## Major RDU Accomplishments in 2007

- Conducted 669 building inspections.
- Received and completed 675 plan reviews.
- Completed 1,347 public Fire and Life Safety presentations to Alaskan groups.
- Conducted 22 life safety code surveys of Medicare and Medicaid participant facilities throughout the state.
- Investigated 36 significant fires, including all fatality fires.
- Provided training to numerous emergency responders at various levels in urban and rural communities.
- Managed the fire statistics program for the State of Alaska.
- Provided assistance and support to the statewide training conferences of the Alaska Fire Chiefs Association and the Alaska Firefighters Association.
- Issued 1,085 permits for fire system technicians and fireworks related activities.
- Because the Alaska Fire Standards Council remains unfunded, the Training and Education Bureau awarded 736 certifications in their stead.

- Provided Rural Basic Firefighter Training for eight rural communities.
- The Training and Education Bureau assisted the Alaska Fire Chiefs Association and the Alaska State Firefighters Association with their annual fall conference. During this conference, 6,080 hours of training and continuing education were performed and documented.

Contact Information
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**Fire and Life Safety  
RDU Financial Summary by Component**

*All dollars shown in thousands*

	FY2007 Actuals				FY2008 Management Plan				FY2009 Governor			
	General Funds	Federal Funds	Other Funds	Total Funds	General Funds	Federal Funds	Other Funds	Total Funds	General Funds	Federal Funds	Other Funds	Total Funds
<b><u>Formula Expenditures</u></b>												
None.												
<b><u>Non-Formula Expenditures</u></b>												
Fire and Life Safety Operations	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,360.8	0.0	1,326.1	2,686.9
Training and Education Bureau	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	885.1	851.1	1,225.8	2,962.0
<b>Totals</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>2,245.9</b>	<b>851.1</b>	<b>2,551.9</b>	<b>5,648.9</b>

**Fire and Life Safety**  
**Summary of RDU Budget Changes by Component**  
**From FY2008 Management Plan to FY2009 Governor**

*All dollars shown in thousands*

	<u>General Funds</u>	<u>Federal Funds</u>	<u>Other Funds</u>	<u>Total Funds</u>
<b>FY2008 Management Plan</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>Adjustments which will continue current level of service:</b>				
-Fire and Life Safety Operations	1,251.3	0.0	1,326.1	2,577.4
-Training and Education Bureau	875.5	851.1	1,225.8	2,952.4
<b>Proposed budget increases:</b>				
-Fire and Life Safety Operations	109.5	0.0	0.0	109.5
-Training and Education Bureau	9.6	0.0	0.0	9.6
<b>FY2009 Governor</b>	<b>2,245.9</b>	<b>851.1</b>	<b>2,551.9</b>	<b>5,648.9</b>