
A Checklist for Measuring Performance

APPENDIX B

This appendix describes the measures we used to evaluate the performance of fire departments for our study. It also offers a checklist of performance measures that fire departments may wish to use in assessing their own performance. We first explain briefly the importance of measuring performance and the process for doing so. Then we list the measures of performance we identified for this review, many of which we used in our analysis. Fire departments that measure their performance may choose to use these measures or develop ones of their own.

THE VALUE OF PERFORMANCE MEASUREMENT

Fire departments that develop goals, objectives, and performance measures are able to evaluate the level of services they provide. They analyze information on their departments' impact, efficiency, and effectiveness. Performance data provide a record of the value a fire department offers for the dollars it expends.

Fire departments that measure their performance over time will have information to quantify their achievements as well as identify areas needing improvement. Performance data show the actual results of fire departments' actions. They allow fire departments to demonstrate their real needs with verifiable data on workload, personnel, and other resources, which can be helpful in justifying budget requests, charting a direction for the department's future, and suggesting changes in service.

It is important to note that, when done correctly, measuring the performance of any government function, including fire services, is a sizable task. It requires resources and time for identifying the mission and goals of the department, developing yardsticks to measure performance, actually recording all the department's activities, and then

analyzing what is measured. An automated system helps in the collection, recording, and analysis of data. To provide useful information, evaluating performance must be done consistently and over time; it is not something to do quickly or only once. Further, support for performance measurement must come from fire department leadership if the data are to provide meaningful help in setting direction for the department.

Defining a Mission, Goals, Objectives, and Measures

Before evaluating its performance, a fire department should define its mission. A fire department's mission describes its fundamental purpose and programs. This is the foundation from which a department's goals, objectives, and performance measures come.

The next step is setting goals. Goals are broad statements that outline the outcomes a fire department intends to produce. For fire departments, goals should cover all aspects of their service—whether it is fighting fires, educating the public on fire safety, providing emergency medical services, conducting rescues, or other activities.

After articulating its mission and goals, a fire department sets objectives for what it hopes to achieve and by when. Objectives are typically very specific and measurable, targeted to individual activities or programs, and they relate directly to the department's goals. For example, in line with a general goal to provide fire education materials to school students, a fire department's objective might be to increase by 5 percent the number of third graders demonstrating knowledge of appropriate actions to take when confronted by a fire, as determined by testing.

Then, to determine how well it is meeting its objectives, a fire department has to develop

measures of its performance. The measures are quantifiable and are typically one of four types: measures of outputs, outcomes, efficiency, and cost-effectiveness. “Output” measures are usually simple counts of services, such as the number of calls for fire suppression in a given year. The “outcome” measures indicate the actual results of fire department actions. An example might be the high percentage of incidents to which the fire department responded within an acceptable response time. “Efficiency” measures look at costs (in terms of dollars, personnel, or time) per output. One example of an efficiency measure is expenditures per number of fire calls in a year. Finally, “cost-effectiveness” measures assess costs per unit of outcome. An example is expenditures per number of incidents responded to within an acceptable response time.

PERFORMANCE MEASURES FOR FIRE SERVICES

We identified numerous performance measures related to the five goals and seven actions recommended in Chapter 2. We based the measures on state statutes and rules, as well as on recommendations of national organizations such as the National Fire Protection Association and the International Association of Fire Chiefs.

Because the measures we used in this study are also usable by individual fire departments, we arranged

them below in a way that allows fire departments to review their own performance. In some measures used during our analysis, we compared fire departments to statewide median rankings, such as the number of fire fighter hours spent on fire-safety education. For these measures, fire departments making their own evaluations may compare their actions to their individual baseline data instead of statewide data. That is, to measure changes a department would compare its number of fire-safety education hours one year to that in a subsequent year.

We list the following measures in an order that corresponds to the seven actions we recommend in Chapter 2. We have converted them to a “yes or no” format to make it easier for fire departments to apply to their own performance; questions answered “yes” indicate the fire department meets that performance measure. Some measures may relate to several of the actions we recommend. For instance, having adequate health and safety practices applies both to our Action 6 related to supporting safe operations and to Action 7 related to preparing for on-scene responses.

This is not a comprehensive list of all measures to review fire department performance, and fire departments may wish to supplement it with appropriate measures of their own. A final caveat: Because fire departments did not collect data for some of these measures, we used most, but not all, of them in this study.

Checklist of Performance Measures

1. Action: Assess risks and develop long-range plans.

These performance measures relate to the need for assessing the risks of fire and other emergencies in the response area and developing long-range plans for the fire department based on the identified risks and on community resources.

<u>Measure</u>	<u>Yes</u>	<u>No</u>
A. Has the fire department written a long-range strategic plan that looks out at least three years into the future? The plan should be based on a risk analysis of the response area and contain (1) financial and strategic planning for personnel, apparatus, and fire stations and (2) contingency plans to guarantee service in the event of a disaster.	<input type="checkbox"/>	<input type="checkbox"/>

Action 1, continued ...

<u>Measure</u>	<u>Yes</u>	<u>No</u>
B. Are fire stations sufficient in number and located in areas that permit the fire department to respond to all points within its response area in an acceptable response time for 90 percent of the calls? (One NFPA rule of thumb for response times is 8 minutes from receipt of alarm to when an initial attack team is on the scene; for volunteer, non-staffed stations, the rule of thumb is about 12 minutes.)	<input type="checkbox"/>	<input type="checkbox"/>
C. For fire departments in areas with municipal water systems, has the fire department been involved and satisfied with the process for planning and providing water supplies for fire protection in the response area?	<input type="checkbox"/>	<input type="checkbox"/>
D. Has the ISO credit for water supply been maintained at or improved to acceptable levels (the credit includes measures of fire flow capacity, hydrant spacing, water storage and pumping capacity)?	<input type="checkbox"/>	<input type="checkbox"/>
E. Do all fire pumper apparatus properly match local road conditions and local fire fighting pumper performance needs (such as gallon per minute ratings, tank capacities and discharge rates, hose and nozzle loads)?	<input type="checkbox"/>	<input type="checkbox"/>
F. Does the fire department have a replacement plan for capital purchases that provides for future acquisitions and estimates the expected replacement year of apparatus based on their projected life cycles and costs?	<input type="checkbox"/>	<input type="checkbox"/>
G. Are the fire department's capital expenditures per capita over the past ten years at or below the median for similar departments in the region (or, alternatively, within acceptable levels in the community)?	<input type="checkbox"/>	<input type="checkbox"/>
H. Are the fire department's capital expenditures per capita over the past ten years at or below the median for similar fire departments in the region that have properly matched their pumper apparatus to local road conditions and pumper performance needs?	<input type="checkbox"/>	<input type="checkbox"/>
I. Does the fire department have a systematic process of determining road and fire fighting performance requirements that can be used in developing bid specifications for purchasing department vehicles?	<input type="checkbox"/>	<input type="checkbox"/>

2. Action: Evaluate fire department performance and use resources cost-effectively.

The following performance measures relate to evaluating the fire department's response activities and its overall performance over time. They also refer to the extent of the fire department's involvement with mutual aid activities and examination of alternative service-delivery mechanisms.

<u>Measure</u>	<u>Yes</u>	<u>No</u>
A. Does the fire department take steps throughout the year to evaluate the effectiveness and efficiency of its activities?	<input type="checkbox"/>	<input type="checkbox"/>
B. Does the fire department keep a log of on-scene activities at emergency incidents?	<input type="checkbox"/>	<input type="checkbox"/>
C. Does the fire department maintain an information system (such as a computer program or regularly updated manual system) to record and retrieve information on fire department activities?	<input type="checkbox"/>	<input type="checkbox"/>
D. Does the fire department conduct postincident analyses and debriefings following emergency responses to identify what to either change or reinforce in future responses?	<input type="checkbox"/>	<input type="checkbox"/>

Action 2, continued ...

	<u>Measure</u>	<u>Yes</u>	<u>No</u>
E.	Has the fire department developed a formal program of setting goals and objectives and measuring its progress toward meeting those goals?	<input type="checkbox"/>	<input type="checkbox"/>
F.	Has the fire department used alternative means of purchasing apparatus (pumpers, ladder trucks, tankers, grass rigs, other vehicles) such as acquiring vehicles either in exchange for services delivered by contract, or jointly with another fire department, or through the Federal Excess Property Program, or via bids developed in collaboration with other fire departments?	<input type="checkbox"/>	<input type="checkbox"/>
G.	Are the fire department's total expenditures per capita at or below the median for similar departments in the region (or, alternatively, within acceptable levels in its community)?	<input type="checkbox"/>	<input type="checkbox"/>
H.	Are the fire department's total expenditures per emergency response at or below the median for similar departments in the region (or, alternatively, within acceptable levels in its community)?	<input type="checkbox"/>	<input type="checkbox"/>
I.	For those responses made within acceptable response times, are the fire department's number of work hours spent per incident, and the expenditures per incident, at or below the median for other fire departments responding to similar incidents?	<input type="checkbox"/>	<input type="checkbox"/>
J.	Does the fire department participate in a mutual aid association and, if so, does it conduct joint operations using standard operating guidelines agreed to by participating departments?	<input type="checkbox"/>	<input type="checkbox"/>
K.	Are all of the fire departments' active members familiar with mutual aid procedures, equipment, standard operating guidelines, and safety measures?	<input type="checkbox"/>	<input type="checkbox"/>
L.	Does the fire department and its mutual aid association offer interagency training on an ongoing basis?	<input type="checkbox"/>	<input type="checkbox"/>
M.	Has the fire department and its mutual aid association agreed on a standard approach to incident command?	<input type="checkbox"/>	<input type="checkbox"/>
N.	Has the fire department designated radio frequencies and standard radio procedures for interdepartmental communications with those departments for whom mutual aid is commonly provided?	<input type="checkbox"/>	<input type="checkbox"/>
O.	Has the fire department and its mutual aid association agreed to operate with written agreements that address: incident command responsibility, jurisdictional issues, insurance coverage, legal responsibilities, and standardized communications systems and protocols?	<input type="checkbox"/>	<input type="checkbox"/>
P.	Is the fire department highly satisfied with its ability through mutual aid to: receive access to additional fire fighters; coordinate fire fighters from multiple departments; get access to apparatus or equipment from other departments; allow for effective communication; and provide quick, effective response to its requests for aid?	<input type="checkbox"/>	<input type="checkbox"/>
Q.	For fire departments satisfied with the effectiveness of their mutual aid arrangements, is the fire department's expenditures per capita at or below the median for similar departments in the region satisfied with the effectiveness of their mutual aid (or, alternatively, within acceptable levels in its community)?	<input type="checkbox"/>	<input type="checkbox"/>
R.	Does the fire department participate with its mutual aid association in: educating the public about fire safety, making cooperative purchases of equipment, jointly using specialized equipment or apparatus and facilities, investigating fires, and providing other specialized services?	<input type="checkbox"/>	<input type="checkbox"/>

3. Action: Promote public awareness of fire safety.

These indicators measure fire departments' activities regarding public education on fire safety.

<u>Measure</u>	<u>Yes</u>	<u>No</u>
A. Are the fire department's fire-safety awareness efforts based on local fire risks and hazards it identified in the community?	<input type="checkbox"/>	<input type="checkbox"/>
B. Are the fire department's fire-safety messages targeted to specific audiences?	<input type="checkbox"/>	<input type="checkbox"/>
C. Does the fire department conduct activities in conjunction with the annual Fire Prevention Week in October?	<input type="checkbox"/>	<input type="checkbox"/>
D. Does the fire department collaborate with local teachers and school administrators on fire education programs?	<input type="checkbox"/>	<input type="checkbox"/>
E. Does the fire department use public-education materials and literature available from other sources, such as NFPA's "Learn Not to Burn," a safe-escape house owned by another department or group, etc.?	<input type="checkbox"/>	<input type="checkbox"/>
F. Does the fire department provide fire-safety materials in languages other than English if they are spoken within the community?	<input type="checkbox"/>	<input type="checkbox"/>
G. Does the fire department monitor its education programs on an ongoing basis to determine their effectiveness?	<input type="checkbox"/>	<input type="checkbox"/>
H. Has the fire department designated a fire-safety public education officer who coordinates education programs and who meets professional qualifications (such as those specified by NFPA 1035, <i>Standard for Professional Qualifications for Public Fire and Life Safety Educator</i>)?	<input type="checkbox"/>	<input type="checkbox"/>
I. Does the fire department use a variety of media to convey fire-safety messages and use other community organizations as partners in delivering the messages?	<input type="checkbox"/>	<input type="checkbox"/>
J. Does the fire department's education program include activities with businesses, such as instructing employees on fire-safety practices?	<input type="checkbox"/>	<input type="checkbox"/>
K. Does the fire department offer voluntary fire-safety surveys for private residences?	<input type="checkbox"/>	<input type="checkbox"/>
L. Does the fire department participate in an intervention program to prevent repeat behavior by juvenile fire setters?	<input type="checkbox"/>	<input type="checkbox"/>
M. Does a high percentage of the population in the fire department's response area receive fire-safety messages on an ongoing basis?	<input type="checkbox"/>	<input type="checkbox"/>
N. Does a high percentage of people receiving the fire-safety messages understand what the fire department conveyed, as measured through mechanisms such as citizen surveys or tests administered before and after the instruction?	<input type="checkbox"/>	<input type="checkbox"/>
O. Is the fire department highly satisfied with the quality of the services provided for public fire-safety awareness?	<input type="checkbox"/>	<input type="checkbox"/>
P. Is the rate of fire incidents per capita at or below the median rate for similar communities in the region?	<input type="checkbox"/>	<input type="checkbox"/>
Q. Is the number of fire fighter work hours spent on fire-safety education activities at or above the median hours for similar fire departments in the region (or, alternatively, within acceptable levels in its community)?	<input type="checkbox"/>	<input type="checkbox"/>
R. Are the fire department's expenditures per capita on fire-safety education at or below the median for similar departments in the region that have reached a high percentage of their populations with fire prevention messages (or, alternatively, within acceptable levels in the community)?	<input type="checkbox"/>	<input type="checkbox"/>

4. Action: Ensure fire code enforcement.

The measures below help evaluate the effectiveness and efficiency of ensuring fire-code inspection and enforcement.

<u>Measure</u>	<u>Yes</u>	<u>No</u>
A. Do a high percentage of the buildings covered by the fire code receive inspections by the fire department or local building inspectors within a time cycle established locally?	<input type="checkbox"/>	<input type="checkbox"/>
B. Does the fire department or local building inspectors set code inspection priorities among life-safety hazards and property hazards in the community?	<input type="checkbox"/>	<input type="checkbox"/>
C. If directly involved with code inspections, has the fire department established job performance requirements for its inspectors, and does it offer training in line with professional qualifications (such as those specified by NFPA 1031, <i>Standard for Professional Qualifications for Fire Inspector</i>)?	<input type="checkbox"/>	<input type="checkbox"/>
D. If directly involved with code inspections, does the fire department evaluate inspectors based on their performance, including scheduled field checks to assess the quality of inspections performed?	<input type="checkbox"/>	<input type="checkbox"/>
E. If directly involved with code inspections, do fire department fire-code inspectors routinely gather prefire planning information to share with other fire fighters for use when responding to fires?	<input type="checkbox"/>	<input type="checkbox"/>
F. If directly involved with code inspections, do fire department fire-code inspectors emphasize educating building owners on fire safety as well as enforcing code provisions?	<input type="checkbox"/>	<input type="checkbox"/>
G. If directly involved with code inspections, do fire department fire-code inspectors participate in preconstruction meetings, review construction plans for compliance with fire codes, participate in the sign-off for construction permits and certificates-of-occupancy, and coordinate reviews with local building officials and design professionals?	<input type="checkbox"/>	<input type="checkbox"/>
H. If directly involved with code inspections, does the fire department retain records of all inspections and their dispositions for at least three years?	<input type="checkbox"/>	<input type="checkbox"/>
I. If directly involved with code inspections, is the number of fire-code inspections per hour of inspection activities at or above the median number for fire departments in the region with similar building structures (or, alternatively, within acceptable levels in the community)?	<input type="checkbox"/>	<input type="checkbox"/>
J. Does the fire department collaborate with other agencies involved with code administration and enforcement, such as a local building inspection agency?	<input type="checkbox"/>	<input type="checkbox"/>
K. Does the fire department consult with a fire protection engineer, when necessary, for plan reviews, interpretations, and variances (through a staff fire protection engineer, by contract, or the State Fire Marshal Division)?	<input type="checkbox"/>	<input type="checkbox"/>
L. Does the fire department or local building inspector work to ensure that code violations are corrected within a reasonable time after providing initial notice of the violations?	<input type="checkbox"/>	<input type="checkbox"/>
M. If directly involved with requesting occupancies to document code compliance, does the fire department receive a high percentage of code compliance documentation?	<input type="checkbox"/>	<input type="checkbox"/>
N. Is a board of appeals in place allowing building owners to appeal orders issued pursuant to the fire code?	<input type="checkbox"/>	<input type="checkbox"/>
O. Is the fire department highly satisfied with the quality of fire-code inspection and enforcement activities?	<input type="checkbox"/>	<input type="checkbox"/>
P. Is the rate of fires low in occupancies inspected for fire-code provisions within a locally set time cycle?	<input type="checkbox"/>	<input type="checkbox"/>

5. Action: Develop effective communications systems.

The following measures relate to fire departments' communication abilities and systems. They apply to communication within the department, and they apply to communication between the department and individuals and organizations outside it.

<u>Measure</u>	<u>Yes</u>	<u>No</u>
A. Is the fire department highly satisfied with its system for alerting members to respond to an incident?	<input type="checkbox"/>	<input type="checkbox"/>
B. Is the fire department highly satisfied with the ability of its communications system (telephones, radio base station equipment, two-way radios, pagers, etc.) to perform without excessive delays or interference in emergencies as well as in normal daily activities?	<input type="checkbox"/>	<input type="checkbox"/>
C. Is the fire department's communication system adequate to allow emergency responses to fires, EMS calls, and other incidents within acceptable response times?	<input type="checkbox"/>	<input type="checkbox"/>
D. Is the fire department highly satisfied with the ability of its communications system to transmit and receive information between incident commanders and department members and among mutual aid departments?	<input type="checkbox"/>	<input type="checkbox"/>
E. Is the fire department's communication system adequate to allow fire department responses that contain flames to the room of origin in a high percentage of structure fires?	<input type="checkbox"/>	<input type="checkbox"/>
F. Does the fire department use standard operating guidelines for radio communications with common terminology and integrated radio frequencies?	<input type="checkbox"/>	<input type="checkbox"/>
G. Does the fire department include a written description of its communications system with standard protocols for transmitting messages in its incident management system and response plans (which are drawn up in advance of actual emergencies)?	<input type="checkbox"/>	<input type="checkbox"/>
H. Does the fire department have access to mobile command units or similar arrangements to provide a central emergency communications point for prolonged incidents?	<input type="checkbox"/>	<input type="checkbox"/>
I. Does the fire department actively and regularly communicate with others outside the department, including local elected officials, utility companies, fire-related associations, law enforcement, local water and building agencies, and school officials?	<input type="checkbox"/>	<input type="checkbox"/>

6. Action: Prepare a competent work force and support safe operations.

The following measures relate to fire fighter recruitment and retention, training, and personal protective equipment. They also refer to necessary procedures and guidelines for safety.

<u>Measure</u>	<u>Yes</u>	<u>No</u>
A. For fire departments with volunteer or on-call members, has the fire department's recruitment process provided it with a sufficient number of on-call or volunteer members located within an area that allowed them to promptly respond to calls?	<input type="checkbox"/>	<input type="checkbox"/>
B. For fire departments with volunteer or on-call members, does the fire department consistently receive an adequate number of volunteer or on-call members responding when contacted for incidents?	<input type="checkbox"/>	<input type="checkbox"/>
C. For fire departments with volunteer or on-call members, does the fire department have a high retention rate of its active members?	<input type="checkbox"/>	<input type="checkbox"/>
D. For fire departments with volunteer or on-call members, does the fire department identify what encourages members to continue and what causes them to resign through means such as formally surveying members, conducting exit interviews when they opt to resign, or consistently following procedures designed to help members resolve problems?	<input type="checkbox"/>	<input type="checkbox"/>
E. For fire departments with volunteer or on-call members, does the fire department provide recognition to members for jobs well done (in newsletters, at banquets, etc.)	<input type="checkbox"/>	<input type="checkbox"/>
F. For fire departments with volunteer or on-call members, does the fire department maintain a good reputation and positive image to keep members interested (such as maintaining apparatus in prime condition as a point of departmental pride)?	<input type="checkbox"/>	<input type="checkbox"/>
G. For fire departments with volunteer or on-call members, does fire department leadership consistently exhibit a management style that encourages member participation?	<input type="checkbox"/>	<input type="checkbox"/>
H. For fire departments with volunteer or on-call members, has the fire department stated an explicit mission and goals so members know what to expect?	<input type="checkbox"/>	<input type="checkbox"/>
I. For fire departments with volunteer or on-call members, does the fire department follow a process for communicating relevant information so members stay informed about department business?	<input type="checkbox"/>	<input type="checkbox"/>
J. For fire departments with volunteer or on-call members, does the fire department consistently follow procedures to deal equitably with grievances?	<input type="checkbox"/>	<input type="checkbox"/>
K. For fire departments with volunteer or on-call members, does the fire department require training that is relevant and fits volunteers' time availability to the extent possible?	<input type="checkbox"/>	<input type="checkbox"/>
L. For fire departments with volunteer or on-call members, does the fire department offer incentives in the form of monetary compensation, medical or disability benefits, or retirement or pension plans?	<input type="checkbox"/>	<input type="checkbox"/>
M. Has the fire department developed a recruitment program based on its identified ongoing personnel needs?	<input type="checkbox"/>	<input type="checkbox"/>
N. Is the fire department highly satisfied that its recruitment process produces candidates able to perform the required duties?	<input type="checkbox"/>	<input type="checkbox"/>
O. Does the fire department offer or require training that prepares members in all areas of service in which they are expected to perform and that is based on the types of risks in the response area?	<input type="checkbox"/>	<input type="checkbox"/>
P. Does the fire department offer or require ongoing training in any specialized services that fire fighters perform, such as hazardous materials responses or emergency medical services?	<input type="checkbox"/>	<input type="checkbox"/>

Action 6, continued ...

<u>Measure</u>	<u>Yes</u>	<u>No</u>
Q. Does the fire department identify the training needs of individual members and ensure they receive the training to support those needs?	<input type="checkbox"/>	<input type="checkbox"/>
R. Has the fire department designated training officers, and does it maintain fire fighter training records?	<input type="checkbox"/>	<input type="checkbox"/>
S. Does the fire department measure the effectiveness of the training offered or assess members' proficiency after receiving training?	<input type="checkbox"/>	<input type="checkbox"/>
T. Is the fire department highly satisfied with its members' understanding of department standards for training and operations?	<input type="checkbox"/>	<input type="checkbox"/>
U. Is the fire department highly satisfied with the availability of training facilities for various training and drills, including use of ground ladders, live smoke and fire operations, and apparatus operation?	<input type="checkbox"/>	<input type="checkbox"/>
V. Does the fire department follow written protocols describing safety procedures designed to limit the risk of exposure to infectious and hazardous substances during responses?	<input type="checkbox"/>	<input type="checkbox"/>
W. Does the fire department provide to all personnel adequate personal protective equipment designed for the tasks they are expected to perform?	<input type="checkbox"/>	<input type="checkbox"/>
X. Does the fire department offer or require training on the use and limitations of personal protective equipment?	<input type="checkbox"/>	<input type="checkbox"/>
Y. Does the fire department designate a safety officer at all incidents?	<input type="checkbox"/>	<input type="checkbox"/>
Z. Does the fire department designate a health and safety officer to manage the department's safety program?	<input type="checkbox"/>	<input type="checkbox"/>
AA. Does the fire department require physical examinations and periodic medical exams for members on active duty?	<input type="checkbox"/>	<input type="checkbox"/>
BB. Does the fire department follow a system for monitoring the whereabouts of fire fighters during incidents and has it developed rapid intervention protocols to assist injured fire fighters?	<input type="checkbox"/>	<input type="checkbox"/>
CC. Does the fire department require that only trained and qualified fire fighters drive and operate department apparatus?	<input type="checkbox"/>	<input type="checkbox"/>
DD. During its responses, does the fire department consistently maintain the number of fire fighters required to operate in atmospheres that are immediately dangerous to life and health?	<input type="checkbox"/>	<input type="checkbox"/>
EE. Do fire department members have access to stress debriefing following critical or traumatic incidents?	<input type="checkbox"/>	<input type="checkbox"/>
FF. Are the fire department's expenditures per capita at or below the median for similar fire departments that consistently follow safety procedures and maintain the required number of fire fighters in immediately dangerous atmospheres?	<input type="checkbox"/>	<input type="checkbox"/>
GG. Is the fire department's ratio of fire fighter injuries to incidents at or below the median of similar fire departments in the region (or, alternatively, within acceptable levels in the community)?	<input type="checkbox"/>	<input type="checkbox"/>
HH. Is the training offered or required by the fire department adequate to allow fire fighters to respond to emergencies within acceptable response times?	<input type="checkbox"/>	<input type="checkbox"/>
II. Is the training offered or required by the fire department adequate to allow fire department responses that contain flames to the room of origin in a high percentage of structure fires?	<input type="checkbox"/>	<input type="checkbox"/>

7. Action: Plan for on-scene responses.

The following measures relate to the advance planning and activities required to operate successfully at emergency incidents. They also include measures for fire investigations and maintenance of equipment and apparatus.

<u>Measure</u>	<u>Yes</u>	<u>No</u>
A. Does the fire department have an incident management system that details department roles and activities during fire suppression and other emergency incidents? The incident management system should include: designation of incident commander and other roles for completing functions at the scene, standard operating guidelines for radio and other communication, plans for interagency coordination, and provisions for managing reserve personnel and equipment. Further, all fire fighters should be trained in the incident management system, and it should be periodically reviewed and updated.	<input type="checkbox"/>	<input type="checkbox"/>
B. Does the fire department have written standard operating guidelines for fire suppression as well as any other emergency service its members may be expected to perform?	<input type="checkbox"/>	<input type="checkbox"/>
C. Do the fire department's standard operating guidelines include provisions for: designating an incident commander and other on-scene duties, maintaining the predetermined minimum number of fire fighters for effective operations, developing preattack plans, accounting for fire fighter whereabouts and conducting search and rescue on the fire ground, resting fire fighters during operations, ongoing communications, using available water supplies, overhaul and salvage or mop up, and recording and reporting information.	<input type="checkbox"/>	<input type="checkbox"/>
D. For fire departments providing rescue services, emergency medical services, hazardous materials management, or other specialized services, has the fire department: assessed the risks and target hazards in the response area for those services? written emergency response plans describing department responsibilities and members' roles during responses? consistently maintained the number of fire fighters required to effectively provide the response? developed preincident plans for responding to target hazards and identified risks?	<input type="checkbox"/>	<input type="checkbox"/>
E. Does the fire department have contacts with adequately trained and equipped personnel to conduct rescues, emergency medical services, hazardous materials management, or other specialized services, if the department does not itself provide these services?	<input type="checkbox"/>	<input type="checkbox"/>
F. Has the fire department written, and periodically updated, preincident plans for the targeted fire risks and hazards in its response area?	<input type="checkbox"/>	<input type="checkbox"/>
G. Do the fire department's preincident plans for fire suppression contain the following information: identification of fire risks and hazards; current maps with property boundaries, roads, and means of access and egress; building floor plans, site plans, or maps of specific hazards; location of on-site fire control equipment; occupancy information for high-hazard buildings; fire flow needs, hydrant locations, and primary and back-up water supplies; location of airports and airstrips if needed for wildland fire fighting; lists of cooperating agencies and contact names; and lists of reserve personnel and equipment and mutual aid resources.	<input type="checkbox"/>	<input type="checkbox"/>
H. Does the fire department use a preventive maintenance program for its apparatus and equipment with routine, scheduled maintenance in accordance with manufacturers' recommendations?	<input type="checkbox"/>	<input type="checkbox"/>

Action 7, continued ...

	<u>Measure</u>	<u>Yes</u>	<u>No</u>
I.	Does the fire department's preventive maintenance program include the following: providing routine maintenance following a set checklist (checking fluid levels, tire pressure, etc.), keeping complete records of repairs and service; conducting inspections of apparatus and equipment within 24 hours of their use; making regular service tests on pumper engines and other apparatus; maintaining a system of inventory control for equipment; scheduling and budgeting for replacing equipment as needed; and conducting regular service tests of ground ladders, hoses, and other equipment?	<input type="checkbox"/>	<input type="checkbox"/>
J.	Does the fire department's preventive maintenance program complete 100 percent of the maintenance scheduled within a year?	<input type="checkbox"/>	<input type="checkbox"/>
K.	Does the fire department have adequate protective clothing and self-contained breathing apparatus for its fire fighters, including personal equipment such as fire shelters and portable radios for wildland fire fighters?	<input type="checkbox"/>	<input type="checkbox"/>
L.	Does the fire department have an adequate personal alert safety system or alternative to warn others when a fire fighter is incapacitated?	<input type="checkbox"/>	<input type="checkbox"/>
M.	Does the fire department have adequate hose for standard attack and large diameter hose?	<input type="checkbox"/>	<input type="checkbox"/>
N.	Does the fire department have adequate extrication tools, hydraulic tools, torches, and hand tools for cutting, striking, and prying?	<input type="checkbox"/>	<input type="checkbox"/>
O.	In areas with limited water supplies, does the fire department have adequate year-round water drafting sites, portable pumps, and portable drop or folding water tanks?	<input type="checkbox"/>	<input type="checkbox"/>
P.	Are the fire department's equipment and advance planning adequate to allow fire fighters to respond to emergencies within acceptable response times?	<input type="checkbox"/>	<input type="checkbox"/>
Q.	Are the fire department's equipment and advance planning adequate to allow the number of work hours per incident to be at or below the median for other fire departments responding to similar types of incidents in the region?	<input type="checkbox"/>	<input type="checkbox"/>
R.	For fire investigations, does the fire department have predetermined guidelines for when to contact the State Fire Marshal Division?	<input type="checkbox"/>	<input type="checkbox"/>
S.	Has the fire department established fire investigation guidelines for conducting scene examinations and documenting scenes, interviewing witnesses, conducting postincident investigations, and presenting analyses and findings?	<input type="checkbox"/>	<input type="checkbox"/>
T.	Does the fire department offer or require ongoing training for investigators in investigation methodology, fire protection technology, and current fire code requirements?	<input type="checkbox"/>	<input type="checkbox"/>
U.	Does the fire department provide the State Fire Marshal Division with written statements of facts on the cause and origin of the fire within one week of the fire's occurrence?	<input type="checkbox"/>	<input type="checkbox"/>
V.	Does the fire department offer or require instruction for fire fighters in: aspects of arson scenes, how their actions impact the work of investigators, and cautionary measures they can take in suppression, overhaul, and salvage to aid the investigation?	<input type="checkbox"/>	<input type="checkbox"/>
W.	Does the fire department offer or require joint investigation training with local law enforcement?	<input type="checkbox"/>	<input type="checkbox"/>
X.	Is the fire investigator on the scene immediately after the fire was extinguished (if not before) for a high percentage of fire investigations?	<input type="checkbox"/>	<input type="checkbox"/>
Y.	Is the fire department highly satisfied with the quality of fire investigation activities?	<input type="checkbox"/>	<input type="checkbox"/>
Z.	Is a high percentage of investigations of suspicious fires presented for prosecution?	<input type="checkbox"/>	<input type="checkbox"/>