CHAPTER 3
CPAT AND YOUR FIRE DEPARTMENT

In order for your department to utilize the CPAT you must comply with the Uniform Guidelines on Employee Selection Procedures (1978). When the IAFF, IAFC and the ten departments and their local union affiliates of the Joint Labor Management Wellness-Fitness Task Force decided to embark on the development of a physical ability test for fire service candidates, we were required to comply with these guidelines. Any fire department utilizing CPAT must validate that the CPAT is a suitable test for your jurisdiction.

The specific section in the Code of Federal Regulations (CFR) that applies to validating a test for one organization that was developed by another organization is found in 29 CFR 1607.7. This section of the Guidelines requires these organizations to provide evidence in three specific areas.

First, an employer must provide evidence that the selection procedure is valid.

Second, an employer must provide evidence of job similarity with the job on which the validity study was performed.

Third, an employer must provide evidence of test fairness. It is for this reason that departments are required to submit their CPAT results to the national database at the IAFF using the *CPAT Administrator*, the required CPAT data collection software.

TRANSPORTABILITY STUDY

Transportability studies are a routine part of the selection criteria adoption process. Most tests are developed with the assistance of a limited number of participants and then applied to additional participants after the initial development phase has been completed. In general, the goal of the transportability study is to demonstrate that the major work behaviors required of the participants in the initial test development are sufficiently similar to the major work behaviors required by other users of the selection criteria.

The steps to conduct an effective transportability study include:

- Selection of a transportability study leader
- Analysis of essential job duties required by the department
- Completion and analysis of the physicality and criticality surveys found in Appendix C
- Completion and analysis of the equipment survey found in Appendix C
- From this analysis, creation of a written job description
- Apply for licensure from the IAFF

Listed below are descriptions of each of these steps.

SELECTION OF A TRANSPORTABILITY STUDY LEADER

One person from within your department should be responsible for coordinating the implementation of the CPAT for your fire department. The individual designated as the leader of the transportability study should be someone who is familiar with CPAT protocols and has good administrative and communication skills.

The leader of the transportability study is responsible for ensuring all parts of the transportability study remain in their possession and the transportability study is administered exactly as the instructions are written. Securing the data is essential to ensuring the study is valid and accurately reflects the opinions and practices of the department's personnel.

JOB ANALYSIS

Performing the job analysis is the basis for the transportability study. In order to accurately perform the job analysis you will have to perform several steps including, determining the number of required survey participants, selecting survey participants, determining where and how you will administer the surveys, administering the surveys, and having the data evaluated by a testing professional from either within your department or an outside consultant.

DETERMINING THE NUMBER OF SURVEY PARTICIPANTS

Surveying an adequate number of fire fighters in your department is critical to the validity of the results. Similarly, adequately representing the diversity of your department is essential for acquiring a representative sample. The following procedure must be followed to assure a diverse group of individuals have completed the survey:

The number of personnel required to complete the survey is dependent on your department's size. The results are strengthened if more personnel complete the survey. Larger fire departments will be able to survey a percentage of their personnel while smaller fire departments may be required to survey all their personnel. The quantity of surveys completed ensures the results adequately represent the opinions of fire department personnel regarding the criticality and physicality of the survey's 31 fire fighting tasks.

SELECTION OF SURVEY PARTICIPANTS

Members of your department who complete the criticality and physicality ratings of the 31 fire fighting tasks should be selected using a stratified sampling. The selection of these survey participants must follow these steps:

- Individuals selected to complete the survey must represent personnel from all areas within your department's operational rank structure. Probationary fire fighters and fire fighters serving in administrative positions should not complete the survey due to their lack of experience or current exposure to fire fighting tasks.

- Personnel randomly selected to complete the survey must represent a diverse group of department members. Survey participants must include personnel from different ranks, ages, gender, and ethnic/minority groups. The survey participants ultimately selected must include a representative sampling from each of these groups although it is acceptable to have more participants from the lower ranks. Failure to include a diverse department sample may jeopardize the validity of the survey results. A testing professional should be contacted if you experience difficulty regarding your ability to achieve the diversified sample.

DISTRIBUTION OF SURVEYS

The transportability study leader is responsible for administering the criticality and physicality surveys to department personnel. To alleviate having to read the instructions multiple times, large groups should be assembled if possible. Similarly, to assure consistency in the administration of these surveys the same person must administer all surveys.

The method used to distribute the surveys to selected personnel will vary from department to department. If your fire department is large and well diversified, the surveys can be distributed as part of a group training exercise. The surveys can be administered during different exercises until representative sampling is achieved. If your department is small to mid-size, and not well diversified, you can administer the surveys to an entire station or shift that has the required representative sampling. Your department's Personnel Section or Human Resources Department should be able to assist you with identifying the work locations of underrepresented members.

ADMINISTRATION OF SURVEYS

Once a group of survey participants have been assembled, the transportability study leader must distribute the job task surveys and #2 pencils with instructions to all participants not to proceed until all instructions have been read and understood. The transportability study leader reads the following instructions after all survey participants have received a job task survey and a #2 pencil:

Please open your booklets to page one and follow along as I read the instructions. The instructions must be followed exactly. Please do not proceed to the survey until I have read the instructions.

The CPAT is a comprehensive evaluation system that evaluates whether fire fighter candidates possess the minimal physical ability to commence training as an entry-level fire fighter.

Your fire department, as the employer, has elected to validate the test for use by your department. The validation effort will require you to participate in a survey regarding fire fighter job requirements. We need you to identify, based on your experience, the critical and physical tasks that all fire fighters must perform.

Your responses to the questionnaire and participation will be completely confidential. You are not required to state your name or provide any identifiers. You have been randomly selected and will remain anonymous. Your completed questionnaire will be collected and analyzed to determine if the CPAT is suitable for use by your department.

Initially, the technical committee, made up of members from the original ten participating departments, reviewed job descriptions and job analyses from each of the ten fire departments. From these job descriptions the committee derived a list of 31 physical tasks are critical to the job of fire fighting.

Please rate each task on two scales based on your experience as a fire fighter. First assess the critical nature of the task during a fire emergency. Second, assess the physical effort required to successfully perform each task. Use the following scale:

Criticality

1 = Not Performed
2 = Least Critical (failure to perform results in no negative consequences.)
3 = Important (beneficial for the successful performance of the job.)
4 = Critical (essential for the successful performance of the job.)
5 = Extremely Critical (failure to perform results in extreme negative consequences.)

Physicality

1 = No physical effort required
2 = Minimal physical effort required
3 = Moderate physical effort required
4 = Excessive physical effort required
5 = Maximal physical effort required

As you rate each task for criticality and physicality be sure not to include the rating variable of frequency. Evaluating the frequency of these job functions, or how often these tasks are performed, was determined by the technical committee to be unnecessary. Due to the emergency nature of a fire fighter's job, a critical task is essential regardless of how frequently it may be performed. For example: Very few fighter pilots ever have the experience of ejecting from the seat of a fighter jet. However this is commonly rated as a critical task for a fighter pilot regardless of how frequent the task is performed.

Are there any questions?

Be sure all incorrect responses are erased and all selections are clearly marked.

After you have completed the survey please close the booklet and hand in your survey. Thank you for taking the time to participate in the CPAT implementation effort. Please begin the survey.

EQUIPMENT SURVEY INSTRUCTIONS

OVERVIEW

During the CPAT development process the technical committee developed an equipment survey to identify the type, size and weight of tools, equipment, and personal protective clothing used by each fire department. Additionally, local demographic information was requested on building construction and codes as well as the average weights of fire fighters and patients admitted to local hospitals and emergency departments.

From the Equipment Survey data, the technical committee developed the standard weights and types of tools and equipment, established the distances used in the course layout, and determined the lengths used in prop and test equipment design.

PERFORMING THE EQUIPMENT SURVEY

The accuracy of your responses to the survey is critical. Inaccurate information can jeopardize your department's ability to utilize the CPAT program. Please follow these steps to insure accurate information:

- Locate the equipment listed on the survey.
- Measure and weigh each piece of equipment using accurate scales (lbs.) and measurement instruments (feet/inches) as identified in the survey. Weights and lengths of equipment taken from specification sheets and or catalogs are also acceptable.
- Insert weights and measures in the appropriate blanks on the survey.
- Fill in the required information on the person who compiled the measurements.
- Compare your survey results with the results of from the 10 task force departments.

EVALUATION OF JOB ANALYSIS AND EQUIPMENT SURVEY

The job analysis survey data must be analyzed to determine if your fire department is similar to the original 10 fire departments. Comparisons should be made using the original 10 fire department's job analysis found within Appendix E. Furthermore, you must be able to demonstrate that your department personnel rate each of the eight CPAT-related tasks similarly as the original 10 fire departments.

The equipment survey data for your fire department must also be compared to the original 10 fire departments. This data must demonstrate that your fire department uses similar equipment as did the original 10 fire departments, and more importantly what each of the eight CPAT events requires.

It is important the data is properly analyzed. A testing expert should perform the final data analysis and report to ensure the data comparisons are within the limits to allow your fire department to use the CPAT,

LICENSURE

To ensure that the CPAT is being used properly and used only as intended employers responsible for hiring fire fighter candidates must apply for CPAT licensure. This procedure was instituted by the Task Force to protect the integrity of the CPAT Program and the interests of the members of the IAFF and the IAFC by ensuring that the program is implemented properly and as intended.

Under the current policy, authorization to use the CPAT will only be granted to fire departments and other entities

that will be fully administering the CPAT Program. Limiting the granting of licenses to only those entities that actually administer the program have enabled us to better ensure that the CPAT is only being administered in strict compliance with the licensing agreement.

Third party testing organizations (including but not limited to state/provincial fire academies, colleges/universities, or for profit and not for profit testing agencies) that only administer the physical testing portion of the CPAT may apply for a Limited License. Such Limited Licenses allow such third party testing organizations to use the CPAT for purposes of testing the physical capability of fire fighter candidates. However, this license is granted only upon the express conditions that the licensee may only administer the CPAT for a fire department that already possesses a complete and valid license from the IAFF. These Limited License organizations then operate under the license of the jurisdiction that is responsible for administering the overall CPAT Program.

In addition, a fire department that uses another fire department's resources and facilities to test candidates must apply for a license of their own. The licensing policy ensures that the CPAT Program used by the licensee fully covers every aspect of the CPAT, including recruiting and mentoring programs, orientations, and pre-test, so as to provide recruits with fitness guidance to help prepare them for the CPAT and setting up and administering the test.

If you are contemplating use of the CPAT, you need to complete and forward an application found at www.iaff.org/safe/cpatlicense. As soon as an acceptable application for a CPAT license is completed and received by the IAFF, setting forth the terms and conditions that you will be required to follow in your utilization of the CPAT, a license will be forwarded to you. Any use of the CPAT without a license or any misuse of the CPAT program is a violation of the IAFF copyright on this program. ■

The Fire Service Joint Labor Management Wellness/Fitness Initiative

The International Association of Fire Fighters (IAFF), the International Association of Fire Chiefs (IAFC) and ten fire departments in the United States and Canada have joined together to identify critical and physically demanding tasks performed by entry level fire fighters. Our goal is to develop a fair and valid evaluation system in the selection of fire fighters to ensure that all fire fighter candidates possess the physical ability to complete critical tasks effectively and safely.

Your fire department and local IAFF union affiliate are in support of this project. You are one of 1,000 selected to participate in a survey regarding fire fighter job requirements. We need you to validate, based on your experience, the critical physical task skills that all fire fighters should possess. Your participation will provide a better understanding of the physical abilities necessary for the position of fire fighter.

Your response to the questionnaire and participation will be completely confidential. You are not required to state your name or provide any identifiers. You have been randomly selected and will remain anonymous. Your completed questionnaire will be collected and sent to IAFF headquarters where it will be compiled with the records of the participants from the other nine fire departments and statistically analyzed. None of the information you provide will be available to your fire department.

We have reviewed job descriptions and job analyses from each of the ten fire departments participating in this project. We then derived a list of 31 tasks to investigate. The attached survey questions directly relate to these 31 tasks.

Please rate each task on two scales based on your experience as a fire fighter. First, assess the critical nature of the task during a fire emergency. Second, assess the physical effort required while performing the task. Use the following scale:

Criticality
1 = Not Performed
2 = Least Critical (failure to perform results in no negative consequences.)
3 = Important (beneficial for the successful performance of the job.)
4 = Critical (essential for the successful performance of the job.)
5 = Extremely Critical (failure to perform results in extreme negative consequences.)

Physical Effort
1 = No effort
2 = Minimal physical effort
3 = Moderate physical effort
4 = Excessive physical effort
5 = Maximal physical effort

Thank you for your time and participation.

Local 660

Local 2068

Local 1403

Local 94

Local 854

Local 2898

Candidate Physical Ability Survey

To ensure consistency with government studies, please provide the appropriate response to each question below. Please completely fill in the appropriate box with a number 2 pencil to each statement below.

1. What is your age?

20 or under	21 to 30	31 to 40	41 to 50	51 or over
☐	☐	☐	☐	☐

2. What is your gender?

Male	Female
☐	☐

3. What is your ethnic background?

African American	Hispanic	Native American	Asian/Pacific Islander	Caucasian
☐	☐	☐	☐	☐

4. Rank

Firefighter	Lieutenant	Captain
☐	☐	☐

5. Years of experience.

1 - 4 yrs	5 - 8 yrs	9 - 12 yrs	13 - 16 yrs	> than 16 yrs
☐	☐	☐	☐	☐

Candidate Physical Ability Survey (Physical Effort)

Please rate according to your personal experience as a fire fighter. Assess the critical nature of the task performed during a fire emergency based on the following scale. Please completly fill in the appropriate box with a number 2 pencil to each statement below.

	No Effort	Minimal Physical Effort	Moderate Physical Effort	Excessive Physical Effort	Maximal Physical Effort
1. Wear full protective clothing and equipment, including SCBA	☐	☐	☐	☐	☐
2. Extend dry hoseline from fire apparatus to fire occupancy	☐	☐	☐	☐	☐
3. Enter through door using force	☐	☐	☐	☐	☐
4. Crawl through smoke filled structure pulling charged hoseline	☐	☐	☐	☐	☐
5. Remove ladder from fire apparatus, carry and place at structure	☐	☐	☐	☐	☐
6. Climb ladder carrying tools	☐	☐	☐	☐	☐
7. Remove equipment from fire apparatus and carry to scene	☐	☐	☐	☐	☐
8. Ventilate roof with power tools	☐	☐	☐	☐	☐
9. Ventilate roof with hand-held axe	☐	☐	☐	☐	☐
10. Climb stairs with high rise packs	☐	☐	☐	☐	☐
11. Hook up to hydrant	☐	☐	☐	☐	☐
12. Pull ceiling to check for fire extension	☐	☐	☐	☐	☐
13. Drag dry supply line from apparatus to hydrant	☐	☐	☐	☐	☐
14. Search for victim in fire occupancy with limited visibility	☐	☐	☐	☐	☐
15. Remove victim or injured partner from fire scene	☐	☐	☐	☐	☐
16. Extricate victim from vehicle	☐	☐	☐	☐	☐
17. Raise or lower equipment from windows	☐	☐	☐	☐	☐
18. Carry stretcher or gurney	☐	☐	☐	☐	☐
19. Move heavy objects to gain access to fire and or free trapped persons	☐	☐	☐	☐	☐
20. Extend, hold and support a charged attack line with flowing water	☐	☐	☐	☐	☐
21. Start power tools	☐	☐	☐	☐	☐
22. Walk along uneven/narrow surfaces (i.e. roof)	☐	☐	☐	☐	☐
23. Operate at elevated heights	☐	☐	☐	☐	☐
24. Pull self up and over an obstacle or into an opening	☐	☐	☐	☐	☐

(Continued on other side)

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	No Effort	Minimal Physical Effort	Moderate Physical Effort	Excessive Physical Effort	Maximal Physical Effort
25. Remove debris from fire scene	☐	☐	☐	☐	☐
26. Climb fence or wall in full protective clothing with equipment	☐	☐	☐	☐	☐
27. Remove, carry and throw salvage covers to protect equipment	☐	☐	☐	☐	☐
28. Climb stairs in full protective clothing carrying fire fighter equipment	☐	☐	☐	☐	☐
29. Roll up hose and place on apparatus	☐	☐	☐	☐	☐
30. Advance charged attack line around obstacles while remaining stationary	☐	☐	☐	☐	☐
31. Operate fire extinguishers	☐	☐	☐	☐	☐

Candidate Physical Ability Survey (Criticality)

Please rate according to your personal experience as a fire fighter. Assess the critical nature of the task performed during a fire emergency based on the following scale. Please completely fill in the appropriate box with a number 2 pencil to each statement below.

	Not Performed	Least Critical	Important	Critical	Extremely Critical
1. Wear full protective clothing and equipment, including SCBA					
2. Extend dry hoseline from fire apparatus to fire occupancy					
3. Enter through door using force					
4. Crawl through smoke filled structure pulling charged hoseline					
5. Remove ladder from fire apparatus, carry and place at structure					
6. Climb ladder carrying tools					
7. Remove equipment from fire apparatus and carry to scene					
8. Ventilate roof with power tools					
9. Ventilate roof with hand-held axe					
10. Climb stairs with high rise packs					
11. Hook up to hydrant					
12. Pull ceiling to check for fire extension					
13. Drag dry supply line from apparatus to hydrant					
14. Search for victim in fire occupancy with limited visibility					
15. Remove victim or injured partner from fire scene					
16. Extricate victim from vehicle					
17. Raise or lower equipment from windows					
18. Carry stretcher or gurney					
19. Move heavy objects to gain access to fire and or free trapped persons					
20. Extend, hold and support a charged attack line with flowing water					
21. Start power tools					
22. Walk along uneven/narrow surfaces (i.e. roof)					
23. Operate at elevated heights					
24. Pull self up and over an obstacle or into an opening					
25. Remove debris from fire scene					

(Continued on other side)

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	Not Performed	Least Critical	Important	Critical	Extremely Critical
26. Climb fence or wall in full protective clothing with equipment	☐	☐	☐	☐	☐
27. Remove, carry and throw salvage covers to protect equipment	☐	☐	☐	☐	☐
28. Climb stairs in full protective clothing carrying fire fighter equipment	☐	☐	☐	☐	☐
29. Roll up hose and place on apparatus	☐	☐	☐	☐	☐
30. Advance charged attack line around obstacles while remaining stationary	☐	☐	☐	☐	☐
31. Operate fire extinguishers	☐	☐	☐	☐	☐

IAFF/IAFC Wellness/Fitness Initiative

Equipment and Demographic Survey

1. What is the dry weight of the full structural protective ensemble worn by your fire fighters (Please include protective coat, protective trouser, station uniform, helmet, boots, gloves and hood)?

_____ pounds

2. What is the weight of the SCBA used by your Department with a full air cylinder, facepiece, and regulator? (Please include any standard attachments such as rope bags, mask bags, PASS devices, etc.)

_____ pounds

[If your department utilizes different manufacturers' SCBA's or multiple configurations of an SCBA, please provide data on the one unit used by the majority of your fire fighters.]

3. What is the weight of a full SCBA air cylinder used by your Department? (Please provide data on the one unit used by the majority of your fire fighters.)

_____ pounds

4. What is the dry weight including the nozzle, of your Department's standard attack hose lines as they are carried on the apparatus (pre-connected lines)? Please complete all that apply:

1 1/2" hose	_____ length	_____ pounds	_____ material
1 3/4" hose	_____ length	_____ pounds	_____ material
2" hose	_____ length	_____ pounds	_____ material
2 1/2" hose	_____ length	_____ pounds	_____ material
3" hose	_____ length	_____ pounds	_____ material

5. What is the weight of your supply line, per length? Please complete all that apply:

3″ hose	_____ length	_____ pounds	_____ material
3 1/2″ hose	_____ length	_____ pounds	_____ material
4″ hose	_____ length	_____ pounds	_____ material
5″ hose	_____ length	_____ pounds	_____ material
___″ hard sleeve	_____ length	_____ pounds	_____ material

Other, please describe

6. What is the weight of your Department's hose clamp?

_____ pounds

7. What is the weight of any portable hydrant used by your Department?

_____ pounds

8. What is the weight of your standard portable master stream appliance?

_____ pounds, including stacked tips

_____ pounds, including variable stream tip

9. What are the weights of the following handline nozzles as your Department uses them? (Please include pistol grips and shutoffs, if used.)

Booster	_____ pounds
Forestry	_____ pounds
1-1/2" Peripheral	_____ *pounds*
1-1/2" Automatic	_____ *pounds*
1-1/2" Straight Tip,	_____ *pounds*
2-1/2" Peripheral	_____ *pounds*
2-1/2" Automatic	_____ *pounds*
2-1/2" Straight Tip	_____ *pounds*

10. What is the weight of any detachable ladder master stream device in use, including stacked tips or variable stream nozzle:

_____pounds

11. What are the sizes, weights, and lengths of the ground ladders carried by your department? If multiple models of the same length of ladder are in use, please provide the information on the most common model.

a.	Straight Ladder	Straight Ladder	Straight Ladder
	_____ Length	_____ Length	_____ Length
	_____ Material	_____ Material	_____ Material
	_____ Weight	_____ Weight	_____ Weight
b.	Extension Ladder	Extension Ladder	Extension Ladder
	_____ Length	_____ Length	_____ Length
	_____ Material	_____ Material	_____ Material
	_____ Weight	_____ Weight	_____ Weight

c. Bangor Ladder

_____ Length

_____ Material

_____ Weight

d. Pompier Ladder

_____ Length

_____ Material

_____ Weight

e. A-Frame Ladder

_____ Length

_____ Material

_____ Weight

f. Folding Ladder

_____ Length

_____ Material

_____ Weight

12. What is the weight of your standard hydrant wrench?

_____ pounds

13. What is the weight of your halligan tool?

_____ pounds

14. What is the weight of your flathead axe?

_____ pounds

15. What is the weight of your sledgehammer?

_____ pounds

16. What is the weight of your chain saw?

_____ pounds

17. What is the weight of your circular saw?

_____ pounds

18. What is the weight and length of your two most common pike poles? (trash hooks, rakes, etc)

_____ length _____ length

_____ weight _____ weight

19. What is the weight of your pickhead axe?

_____ pounds

20. What is the weight of your dry-chemical fire extinguisher?

_____ pounds

21. What are the two most common PPV and/or exhaust fans used by your Department?

_____ type _____ type

_____ pounds _____ pounds

22. What are the most common extrication tools used by your department? (Separately list the power plant and the accessories [ram, cutters, spreaders, etc.])

Power Plant: _____ manufacturer _____pounds

Ram (heaviest): _____ manufacturer _____pounds

Cutters: _____ manufacturer _____pounds

Spreaders: _____ manufacturer _____pounds

23. What is the weight and contents of your standard high-rise pack?

Contents: _____

_____

Total Weight: _____ 1 3/4" _____2 1/2"

24. What hydrant appliance does your fire department use? (e.g. Humat valve, Blake, Hydra-assist, Hydrant Gate)

_____ manufacturer

_____ pounds

25. What is the weight of your stretcher or gurney?

_____ pounds

26. What is the weight of your back board?

_____ pounds

27. What is the weight of your oxygen box? (patient oxygen and ventilation)

_____ pounds

28. What is the weight of your First Responder/BLS EMS box? (medical supplies, bandages, first aid))

_____ pounds

29. What is the weight of your ALS EMS box? (medical supplies, drugs, IV, airway, etc.)

_____ pounds

30. What is the weight of your Automatic External Defibrillator?

_____ pounds

31. What is the weight of your thumper (mechanical CPR device)?

_____ pounds

32. What is the weight of your electrical cord reels, if portable?

_____ pounds

33. What is the weight of your portable scene lighting?

_____ pounds

34. What are the dimensions and weight of your typical salvage covers?

_____ dimensions

_____ pounds

35. What is the total weight of personal issue equipment carried by fire fighters as a part of their structural protective clothing (personal ropes, extra gloves, spring-loaded center punch, dykes, flashlight, etc.):

_____ pounds

36. What is the total weight of the standard rescue rope bag used by your department (include weight of rope and all associated hardware and harnesses):

_____ pounds

37. What is the total weight of the largest rescue air bag used by your department:

_____ pounds

38. What is the average riser height (stair step) in your jurisdiction? (Check local building codes.)

_____ inches (Residential Occupancy)

_____ inches (Commercial Occupancy)

39. What is the average building height within your jurisdiction?

_____ floors

40. What is the average weight of fire fighters within your department?

_____ pounds

41. What is the average weight of adult hospital patients? *[Contact one hospital within your jurisdiction]*

Emergency Room Patient _____ pounds

Admitted Hospital Patient _____ pounds

42. What is the average distance between hydrants within your jurisdiction?

_____ feet

43. What is the average square footage of single family residence within your jurisdiction?

_____ square feet

For the purposes of any needed follow-up on this survey please provide the following information:

Who completed this form?

Name: _____

Rank (Position): _____

Address: _____

_____

_____

_____

Phone Number: _____

Fax Number: _____

E-mail address: _____

WFI Task Force Jurisdictions
Comparative Results
Criticality and Phsyicality

QUESTIONS	CRITICAL RATING	PHYSICAL RATING	QUESTIONS	CRITICAL RATING	PHYSICAL RATING
1. Wear full protective clothing and equipment, including SCBA	4.78	3.11	17. Raise or lower equipment from windows	3.41	3.19
2. Extend dry hose line from fire apparatus to fire occupancy	4.3	3.08	18. Carry stretcher or gurney	3.47	3
3. Enter through door using force	3.87	3.58	19. Move heavy objects to gain access to fire and or free trapped persons	4.26	4.25
4. Crawl through smoke filled structure pulling charged hose line	4.45	4.09	20. Extend, hold and support a charged attack line with flowing water	4.45	3.85
5. Remove ladder from fire apparatus, carry and place at structure	4.02	3.25	21. Start power tools	3.88	2.51
6. Climb ladder carrying tools	3.9	3.18	22. Walk along uneven/narrowsurfaces (i.e. roof)	3.68	2.58
7. Remove equipment from fire apparatus and carry to scene	3.94	2.85	23. Operate at elevatedheights	3.95	2.67
8. Ventilate roof with power tools	4.14	3.57	24. Pull self up and over an obstacle or into an opening	3.99	3.71
9. Ventilate the roof with hand-held axe	3.7	4.4	25. Remove debris from fire scene	3.13	2.99
10. Climb stairs with high rise packs	4.01	4.07	26. Climb fence or wall in full protective clothing with equipment	3.42	3.84
11. Hook up to hydrant	4.28	2.5	27. Remove, carry and throw salvage covers to protect equipment	3.08	2.65
12. Pull ceilling to check for fire extension	4.13	3.53	28. Climb stairs in full protective clothing carrying fire fighter equipment	4.21	4
13. Drag dry supply line from apparatus to hydarnt	3.97	3.16	29. Roll up hose and place on apparatus	3.09	2.49
14. Search for victim in fire occupancy with limited visibilty	4.71	3.86	30. Advance charged attack line around obstacles while remaining stationary	3.75	3.73
15. Remove victim or injured partner from fire scene	4.8	4.7	31. Operate fire extinguishers	3.46	2.11
16. Extricate victim from vehicle	4.39	3.6			

WFI Task Force Jurisdictions' Comparative Results - Equipment and Demographics

JURISDICTION	AUSTIN	CALGARY	CHARLOTTE	FAIRFAX COUNTY	INDIANAPOLIS	LOS ANGELES COUNTY	MIAMI DADE	NEW YORK CITY	PHOENIX	SEATTLE
1. Weight of protective ensemble in pounds.	33 lbs	21 lbs	21 lbs	25 lbs	35 lbs	29 lbs	35 lbs	40 lbs	24 lbs	28 lbs
2. Weight of SCBA in pounds.	30 lbs	29 lbs	25 lbs	26 lbs	26 lbs	29 lbs	32 lbs	32 lbs	32 lbs	25 lbs
3. Weight of full SCBA cylinder in pounds.	14.5 lbs	17 lbs	8 lbs	16 lbs	15 lbs	16 lbs	15 lbs	14.5 lbs	15 lbs	15 lbs
including nozzle of standard attack lines.	a. N/A	a. 50'/ 20 lbs/ rubber	a. N/A	a. N/A	a. N/A	a. 50'/ 19 lbs/ syn	a. 50'/ 20 lbs/ rubber	a. N/A	a. 150'/ 68 lbs/ rubber	a. N/A
a. 1 1/2	b. 50'/ 19 lbs/ cloth	b. 200'/ 89 lbs/ rubber	b. 50'/25 lbs/rubber	b. 50' 16 lbs/ rubber	b. 50'/ 23 lbs/ nylon	b. 50'/ 22 lbs/ syn	b. 200'/ 90 lbs/ rubber	b. 50'/ 21 lbs/ rubber	b. 150'/ 70 lbs/ rubber	b. 100'/ 44 lbs/ nylon
b. 1 3/4	c. 50'/ 21 lbs/ cloth	c. N/A	c. N/A	c. N/A	c. N/A	c. N/A	c. N/A	c. N/A	c. 200'/ 128 lbs/ rubber	c. N/A
c. 2	d. N/A	d. 50'/ 56 lbs/ rubber	d. 50'/33 lbs/rubber	d. 50'/ 26 lbs/ rubber	d. 50'/ 35 lbs/ nylon	d. 50'/ 27 lbs/ syn	d. 250'/ 165 lbs/ syn	d. 50'/ 32 lbs/ rubber	d. 250'/ 164 lbs/ rubber	d. 100'/ 60 lbs/ nylon
d. 2 1/2	e. N/A	e. N/A	e. N/A	e. 50'/ 30 lbs/ rubber	e. N/A	e. N/A	e. N/A	e. 50'/ 55 lbs/ rubber	e. N/A	e. N/A
of your supply lines.				a. 50'/ 46 lbs/ cotton double						
a. 3	a. 100'/ 69 lbs/ synthetic	a. 50'/ 59 lbs/ rubber	a. N/A	jacket	a. 50'/ 38 lbs/ vinyl	a. N/A	a. N/A	a. N/A	a. N/A	a. N/A
b. 3 1/2	b. N/A	b. 50'/ 36 lbs/ rubber	b. N/A	b. N/A	b. N/A	b. N/A	b. N/A	b. 50'/ 59 lbs/ rubber	b. N/A	b. N/A
c. 4	c. N/A	c. N/A	c. 100'/86 lbs/ rubber	c. N/A	c. N/A	c. 50'/ 45 lbs/ rubber	c. N/A	c. N/A	c. 50'/ 52 lbs/ rubber	c. 50'/ 60 lbs/ nylon
d. 5	d. 100'/109 lbs/synthetic	d. 100'/ 97 lbs/ rubber	d. 100'/119 lbs/rubber	d. N/A	d. 100'/ 200 lbs/ vinyl	d. N/A	d. 100'/ 130 lbs/ rubber	d. 35'/ 47 lbs/ rubber	d. N/A	d. N/A
e. Hard sleeve	e. 10'/ 85 lbs/ rubber	e. N/A	e. 6"/ 10'/ 25 lbs/ rubber	e. 5"/ 10'/ 70 lbs/ rubber	e. N/A	e. 4"/ 10'/ 57lbs/ rubber	e. 4"/ 10'/ 60lbs/ rubber	e. 100'/ 110 lbs/ rubber	e. N/A	e. 10'/ 138 lbs/ rubber
f. Other	f. N/A	f. N/A	f. N/A	f. N/A	f. N/A	f. N/A	f. N/A	f. N/A	f. N/A	f. N/A
6. Weight of hose clamp in pounds.	15 lbs	8 lbs/ average hose 24 lbs/ 5" hose	7lbs	10 lbs	20 lbs	23 lbs	22 lbs	27 lbs	24 lbs	32 lbs
7. Weight of portable hydrant in pound	56 lbs	N/A	N/A	N/A	N/A	N/A	56 lbs	200 lbs	31 lbs	26 lbs
8. Weight of portable master stream appliance.										
a. Stacked tips	a. 37.5 lbs	a. 44 lbs	a. 30 lbs	a. 38 lbs	a. 40 lbs	a. 48.5 lbs	a. 49 lbs	a. 62 lbs	a. 39 lbs	a. 24 lbs
b. Variable stream tip	b. 55 lbs	b. 53 lbs	b. 34 lbs	b. 41 lbs	b. N/A	b. 53.5 lbs	b. 54 lbs	b. 67 lbs	b. 46 lbs	b. N/A
9. Weight of handline nozzles in pounds.	a. 4.5 lbs	a. N/A	a. 3 lbs	a. 5 lbs	a. 4 lbs	a. 2.5 lbs	a. 5 lbs	a. 3 lbs	a. 6 lbs	a. N/A
a. Booster	b. 3/4 lbs	b. .5 lbs	b. N/A	b. 1 lbs	b. N/A	b. 1 lbs	b. 1 lbs	b. N/A	b. N/A	b. N/A
b. Forestry	c. 7 lbs	c. 4 lbs	c. 4 lbs	c. 11 lbs	c. 9 lbs	c. N/A	c. 6 lbs	c. 5 lbs	c. 6 lbs	c. 5.5 lbs
c. 1 1/2 Peripheral	d. 8.5 lbs	d. 5 lbs	d. 5 lbs	d. 7 lbs	d. 6 lbs	d. 7 lbs	d. N/A	d. 6 lbs	d. N/A	d. 5.5 lbs
d. 1 1/2 Automatic	e. 8.5 lbs	e. N/A	e. N/A	e. 6 lbs	e. 3.5 lbs	e. N/A	e. 8 lbs	e. 3 lbs	e. 8 lbs	e. N/A
e. 1 1/2 Straight Tip	f. 11.5 lbs	f. 20 lbs	f. 7.5 lbs	f. 12 lbs	f. N/A	f. N/A	f. 16 lbs	f. 7.5 lbs	f. 16 lbs	f. 8 lbs
f. 2 1/2 Peripheral	g. 7.5 lbs	g. N/A	g. 8.75 lbs	g. 8 lbs	g. N/A	g. 11 lbs	g. N/A	g. 8 lbs	g. N/A	g. 8.5 lbs
10. Weight of detachable ladder master stream in pounds.	h. 6.5 lbs	h. 3 lbs	h. 6.5 lbs	h. 7 lbs	h. 9 lbs	h. 7 lbs	h. 14 lbs	h. 4 lbs	h. 14 lbs	h. N/A
11. Length, weight, and material in pounds of your departments ladders.	39.5 lbs	92 lbs	N/A	40 lbs	N/A	60 lbs	N/A	29 lbs	N/A	40 lbs
a. Straight Ladder	a. 14'/ 34 lbs/ aluminum 16'/ 50 lbs/ aluminum 20'/ 62 lbs/ aluminum	a. 14'/30 lbs/aluminum 16'/55 lbs/aluminum 20'/62 lbs/aluminum	a. 14 '/42 lbs/aluminum 16'/48 lbs/aluminum	a. 14'/ 38 lbs/ aluminum 16'/ 42 lbs/ aluminum	a. 14'/ 49 lbs/ aluminum 16'/ 52 lbs/ aluminum 20'/ 62 lbs/ aluminum	a. 16 '/49.5 lbs/wood 20'/63 lbs/wood 24'/76 lbs/wood	a. 14 '/34 lbs/Aluminum 16'/50 lbs/Aluminum 20'/62 lbs/Aluminum	a. 12'/ 39 lbs/ Aluminum 16'/ 52 lbs/ Aluminum 20/ 59 lbs/ Aluminum	a. 14'/ 46 lbs/ fiberglass 16'/ 56 lbs/ fiberglass	a. 12'/ 25 lbs/ aluminum 14'/ 30 lbs/ aluminum 16'/ 35 lbs/ aluminum
b. Extension Ladder	b. 24'/ 97 lbs/ aluminum 28'/ 107 lbs/ aluminum	b. 24'/72 lbs/aluminum 24'/92 lbs/aluminum	b. 24'/75 lbs/aluminum 35'/170 lbs/aluminum	b. 24' 76 lbs/ aluminum 28'/ 113 lbs/ aluminum 35'/ 138 lbs/ aluminum	b. 28'/ 107 lbs/ aluminum 35'/ 134 lbs/ aluminum 40'/ 211 lbs/ aluminum	b. 24'/102 lbs/wood 35'/158 lbs/wood	b. 24'/98 lbs/Aluminum 28'/103 lbs/Aluminum 35'/135 lbs/Aluminum	b. 16' 79 lbs/ Aluminum 24'/ 114 lbs/ Aluminum 35/150 lbs/Aluminum	b. 24'/ 110 lbs/ fiberglass 35'/ N/A/ fiberglass	b. 24'/ 75 lbs/ aluminum 26'/ 90 lbs/ aluminum 35'/ 130 lbs/aluminum
c. Bangor Ladder	c. 40'/ 190 lbs/ aluminum	c. 35'/ 182 lbs/ aluminum	c. 40'/ 220 lbs/ aluminum	c. N/A	c. N/A	d. 14'/ 38.25 lbs/ wood	c. 50'/ 250 lbs/ Aluminum	c. 24'/ 74 lbs/ Aluminum	c. 14'/ 43 lbs/ fiberglass	c. 50'/ 250 lbs/ aluminum
d. Pompier Ladder	d. N/A	d. N/A	d. 14'/ 45 lbs/ aluminum	d. N/A	d. N/A	e. N/A	d. N/A	d. N/A	d. N/A	d. N/A
e. A-Frame	e. 10'/ 38 lbs/ aluminum	e. 12'/ 29 lbs/ aluminum	e. 10'/ 38 lbs/ aluminum	e. 9'/ 43 lbs/ aluminum	e. 5'6"/ 30 lbs/ aluminum	f. 10'/ 18 lbs/ wood	e. 14'/ 32 lbs/ Aluminum	e. 14'/32 lbs/Aluminum	e. N/A	e. N/A
f. Folding Ladder	e. 14'/ 32 lbs/ aluminum	f. 10'/ 18 lbs/ aluminum	f. 10'/ 14 lbs/ aluminum	f. 10'/ 15 lbs/ aluminum					f. 10'/ 18 lbs/ wood	
12. Weight of hydrant wrench in pound	5.2 lbs	4.5 lbs	3 lbs	5 lbs	7 lbs	2.5 lbs	5 lbs	5 lbs	5 lbs	13 lbs
13. Weight of halligan tool in pounds.	14 lbs	12 lbs	6 lbs	10 lbs	10 lbs	7.5 lbs	12 lbs	12 lbs	12 lbs	11 lbs
14. Weight of flathead axe in pounds.	7.5 lbs	10 lbs	5 lbs	7 lbs	6 lbs	7 lbs	6 lbs	8 lbs	6 lbs	9 lbs
15. Weight of sledgehammer in pound	13 .5 lbs	10 lbs	8 lbs	12 lbs	15 lbs	12 lbs	12 lbs	12 lbs	10 lbs	12 lbs
16. Weight of chain saw in pounds.	21.5 lbs	16 lbs	15 lbs	17 lbs	18 lbs	21 lbs	24 lbs	16 lbs	24 lbs	24 lbs
17. Weight of circular saw in pounds.	34 lbs	36 lbs	35 lbs	23 lbs	25 lbs	26 lbs	34 lbs	33 lbs	30 lbs	18 lbs
18. Length and weight of pike poles.	4'/ 5 lbs 8'/ 6.5 lbs	7'/ 7 lbs 12'/ 11 lbs	6'/ 4 lbs 8'/ 6 lbs	6'/ 7 lbs 6'/ 5 lbs	6'/ 5 lbs 10'/ 6.5 lbs	4'/6 lbs 6'/8 lbs	6'/ 8 lbs 10'/13 lbs	6'/ 8 lbs 10'/13 lbs	6'/ 6 lbs 10'/ 8 lbs	6'/ 9 lbs 8'/ 7 lbs
19. Weight of pickhead axe in pounds.	8 lbs	9 lbs	7 lbs	8 lbs	6 lbs	7 lbs	8 lbs	10 lbs	9 lbs	9 lbs
20. Weight of dry-chemical fire extinguisher in pounds.	41 lbs	36 lbs	18 lbs	40 lbs	30 lbs	35 lbs	30 lbs	30 lbs	49 lbs	39 lbs
21. Type and Weight of PPV exhaust fans.	18" Tempest PPV/ 61 lbs 24" Tempest PPV/ 78 lbs	Gas PPV/ 86 lbs Electric PPV/ 54 lbs	Gas PPV/ 69 lbs Electric PPV/ 25 lbs	Tempest PPV/ 70 lbs Electric PPV/ 44 lbs	Tempest PPV/ 65 lbs	Unifire PPV/ 80 lbs	Tempest PPV/ 70 lbs Gas PPV/ 70 lbs	Exhaust PPV/ 70 lbs	SuperVac PPV/ 88 lbs	Electric PPV/ 50 lbs Gas PPV/ 70 lbs
22. Weight of power saws and extraction tools.										
a. Power plant	a. Amkus/ 105 lbs	a. Amkus/ 108 lbs	a. Hurst/ 45 lbs	a. Hurst/ 62 lbs	a. Hurst/ 65 lbs	a. Amkus/ 100 lbs	a. Amkus/ 100 lbs	a. Hurst/ 83 lbs	a. Hurst/ 58 lbs	a. TNT Rescue System/ 44 lbs
b. Ram	b. Amkus/ 31.5 lbs	b. Amkus/ 44 lbs	b. Phoenix/ 40 lbs	b. Hurst/ 40 lbs	b. Hurst/ 41 lbs	b. Amkus/ 21 lbs	b. Amkus/ 21 lbs	b. Hurst/ 25 lbs	b. Hurst/ 45 lbs	b. Amkus/ 45 lbs
c. Cutters	c. Amkus/ 29.5 lbs	c. Amkus/ 29 lbs	c. Hurst/ 35 lbs	c. Hurst/ 40 lbs	c. Code 3/ 39 lbs	c. Amkus/ 25 lbs	c. Amkus/ 30 lbs	c. Hurst/ 38 lbs	c. Hurst/ 48 lbs	c. Amkus/ 30 lbs
d. Spreaders	d. Amkus/ 47.5 lbs	d. Amkus/ 47 lbs	d. Hurst/ 35 lbs	d. Hurst/ 74 lbs	d. Hurst/ 70 lbs	d. Amkus/ 46 lbs	d. Amkus/ 46 lbs	d. Hurst/ 73 lbs	d. Hurst/ 78 lbs	d. Amkus/ 38 lbs
23. Contents and weight of high-rise pack.										
a. 1 3/4		a. 50'/ hose spanner/ 25 lbs	a. 100'/ with nozzle/ 20lbs	a. 150'/ 2"/ 76 lbs	a. 100'/ y gated/ 69 lbs	a. 100'/ elkhart nozzle/ 45 lbs	a. 100'/ elkhart nozzle/ 45 lbs		a. 75'/ automatic nozzle/ 37 lbs	a. 200'/ 1 3/4 nozzle/ 94 lbs
b. 2 1/2		b. N/A	b. 50' with gates Y/ 28 lbs	b. 5'/ 51 lbs	b. N/A	b. 50'/ stack tip nozzle/ 35 lbs	b. 50'/ stack tip nozzle/ 28lbs	see handout	b. N/A	b. N/A
24. Manufacturer and weight of your hydrant appliance.	N/A	Akron/7 lbs	N/A	Hydrant Gate/ 13 lbs	N/A	33 lbs	Akron/ 16 lbs	Akron/ 16 lbs	Humat/ 31 lbs	6 lbs
25. Weight of gurney in pounds.	87 lbs	80 lbs	N/A	80 lbs	40 lbs	N/A	60 lbs	60 lbs	84 lbs	60 lbs
26. Weight of backboard in pounds.	18 lbs	14 lbs	8 lbs	16 lbs	4 lbs	15 lbs	12 lbs	16 lbs	16 lbs	19 lbs
27. Weight of oxygen box in pounds.	N/A	N/A	21 lbs	30 lbs	14 lbs	19 lbs	20 lbs	12 lbs	28 lbs	15 lbs
28. Weight of BLS EMS box in pounds	29 lbs	31 lbs	15 lbs	20 lbs	10 lbs	14 lbs	20 lbs	14 lbs	21 lbs	28 lbs
29. Weight of ALS EMS box in pounds	N/A	N/A	N/A	26 lbs	10 lbs	22 lbs	22 lbs	22 lbs	32 lbs	35 lbs
30. Weight of automatic external defibrillator.	19 lbs	9 lbs	4 lbs	31 lbs	13 lbs	22 lbs	18 lbs	12 lbs	18 lbs	25 lbs
31. Weight of thumper in pounds.	N/A	N/A	N/A	N/A	N/A	48 lbs	N/A	49 lbs	N/A	N/A
32. Weight of electrical cord in pounds	N/A	21 lbs	8 lbs	45 lbs	15 lbs	N/A	30 lbs	32 lbs	N/A	30 lbs
33. Weight of portable lighting in pounds.	9.5 lbs	6 lbs	4 lbs	21 lbs	8 lbs	11 lbs	16 lbs	9 lbs	14 lbs	18 lbs
34. Dimensions and weight of average salvage covers.	14 x 18/ 19 lbs	10' x 15'/ 20 lbs	10' x 12'/ 2 lbs	12' x 12'/ 13 lbs	16' x 20'/ 5 lbs	16' x 12'/ 27 lbs	16' x 12'/ 30 lbs	9' x 55'/ 100 lbs	18' x 18'/ 18 lbs	12' x 18'/20 lbs
35. Total weight of personal issue equipment.	N/A	4 lbs	3 lbs	3 lbs	N/A	10 lbs	10 lbs	10 lbs	6 lbs	5 lbs
36. Weight of rescue rope bag in poun	52 lbs	40 lbs	45 lbs	28 lbs	25 lbs	42 lbs	45 lbs	22 lbs	8 lbs	18 lbs
37. Weight of largest rescue air bag in pounds.	25 lbs	18 lbs	40 lbs	N/A	60 lbs	72 lbs	60 lbs	60 lbs	17 lbs	28 lbs
38. Riser height.										
a. Residential	a. 6 inches	a. 4.9 inches	a. 6 inches	a. 8 inches	a. N/A	a. N/A	a. 7 inches	a. 7 inches	a. 7 inches	a. 8 inches
b. Commercial	b. 6 inches	b. 7.8 inches	b. 7 inches	b. 8 inches	b. N/A	b. 7 inches	b. 7 inches	b. 7 inches	b. 7 inches	b. 8 inches
39. Average building height.	N/A	3 floors	3 floors	2 floors	10 floors	1.5 floors	6 floors	6 floors	1 floor	2 floors
40. Average weight of fire fighter.	196 lbs	199 lbs	175 lbs	185 lbs	185 lbs	N/A	190 lbs	210 lbs	191 lbs	195 lbs
41. Average weight of adult patient										
a. Emergency room patient		a. 160 lbs	a. 178 lbs	a. 150 lbs	a. 170 lbs	a. 191 lbs	a. 180 lbs	a. 180 lbs		
b. Admitted patient	N/A	b. 175 lbs	b. 178 lbs	b. 150 lbs	b. 170 lbs	b. 182 lbs	b. 180 lbs	b. 185 lbs	N/A	N/A
42. Average distance between hydrant	500'-600'	1000'	1000'	750'	300'	350'	500'	250'	500'	400'
43. Average sq. footage of single family residence.	2000 sq'	1200 sq'	2000 sq'	2600 sq'	1500 sq'	1128 sq'	2000 sq'	1200 sq'	2000 sq'	1800 sq'