

WHAT RESEARCH TELLS US ABOUT WOMEN IN FIREFIGHTING

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Madame Chair and Distinguished Members:

Thank you for this opportunity to appear before your committee. I am Dr. Marc Bendick, Jr., an employment economist¹ and a principal researcher on the most comprehensive study of the experience of women firefighters nationwide.² My testimony presents three findings from research relevant to the issues you are addressing today:

- First: Substantial numbers of women are available for, interested in, and capable of performing the firefighting job. Research has determined that, in fire departments where women are given fair, equal, non-hostile treatment in recruitment, training, and onthejob, it is reasonable to expect a fire department's uniformed firefighters and officers to include about 17% women.
- Second: When a fire department employs women at a rate much lower than 17% -- in particular, New York City's approximately one-half of one percent -- that outcome is

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² This study was supported by the Ford Foundation, but I alone am responsible for all findings and conclusions in this testimony. In the underlying research, my co-researchers were Denise Hulett, Sheila Thomas, and Francine Mocchio.

directly traceable to a departmental culture in which hostility, discrimination, harassment and exclusion operate and are tolerated, implicitly and explicitly, by departmental leadership. Research demonstrates that, when validated, job-related physical ability tests are even-handedly administered to job applicants and trainees, women can meet physical standards at rates sufficient to achieve 17% representation; when a workplace culture of non-harassment and respect is persistently maintained, no insurmountable problems are created by 24 hour co-living in firehouses; and when women are accorded the same treatment as men, they can perform their duties as safely and effectively, and they will be retained and promoted at comparable rates.

- Third, achieving this even handed treatment requires employees at all ranks in fire departments to eliminate discriminatory practices, change outdated attitudes, drop inaccurate stereotypes, and curb inappropriate behavior. These major cultural changes require sustained effort over multiple years, including overcoming sometimes uncomfortable conflict. They therefore happen only in departments where the fire commissioner and other senior leaders are committed to these objectives and receive sustained oversight and support from their mayor and city council.

The remainder of this testimony amplifies these three points. For additional information, I have attached an article from *Fire Chief* magazine summarizing the research study on which much of this testimony is based.³

³ Still more information is available in D. Hulett, M. Bendick, Jr., S. Thomas & F. Moccio, *A National Report Card on Women in Firefighting*, which can be downloaded by googling that title, and from the International Association of Women in Fire and Emergency Services at <http://www.i-women.org>.

How Many Women are Available to Become FDNY Firefighters?

In a world in which women are treated equally with men, how many women would be firefighters and fire officers in FDNY today? Establishing a precise number, such as one that would stand up in court, would require a statistical analysis that has not yet been performed. However, our research provides a credible approximate number: 17% of the Department's uniformed staff. For FDNY's total uniformed force of 10,500, that would be about 1,890 women, not the approximately 100 women (including EMTs) in uniform today.⁴

Our research developed this 17% benchmark by computing from the 2000 Census the proportion of women in the nation-wide labor force of typical firefighter age (20–49) and educational background (high school graduate but no college degree) employed at least 35 hours per week in 184 occupations resembling firefighting in requiring strength, stamina, and dexterity, and/or involving outdoor, dirty or dangerous work. These “dirty, dangerous, demanding” comparison occupations include: bus mechanics, drywall installers, enlisted military personnel, highway maintenance workers, loggers, professional athletes, refuse collectors, roofers, septic tank servicers, tire builders, and welders. The proportion of women among these workers in the U.S. labor force nationwide is 17%.

Current employment of women in selected “best practices” fire departments confirms the reasonableness of this 17% benchmark. Women now approach, equal, or exceed 17% in a number of jurisdictions. Large departments with the highest proportion of women include Minneapolis (17%), San Francisco (15%), and Miami-Dade, FL (13%). Among 114 fire departments responding to our own survey, one in six reported employing 10% or more women

⁴ Within these totals, women of color typically face the “double disadvantage” of gender discrimination on top of race/ethnic discrimination. Our research estimated that, nationwide, women of color are under-represented among firefighters at about double the rate of white women.

among their uniformed officers, including two over 17%. Among the nation's 291 large metropolitan areas reported in the 2000 Census, in the "top ten percent" in terms of women firefighter employment, the average is 14.5%. Simply stated, if these fire departments can do it, there is no reason FDNY can't do it

How Do Fire Departments Keep Women Out and Keep Women Down?

So why are many fire departments, including FDNY, not even close to this 17% benchmark?

Whenever anyone starts pressuring fire departments to employ more women, fire officials quickly respond with elaborate explanations of the unique nature of firefighting that makes the virtual absence of women "natural." These officials claim that the work is so dirty and dangerous that women do not want the job; that women are not strong enough to meet the job's stringent physical demands; that women do not want to be separated from their families for overnight firehouse duty; and that women disrupt the smooth teamwork and strong camaraderie that safe, efficient firefighting requires.

Although such explanations often sound plausible and often go unchallenged, they are in fact excuses not based on reality. The 17% benchmark already takes account of the nature of the job, its work hours, and the ability of women to meet the job's physical demand. To say that women are not available, interested, or capable of the job is to rely on outdated, inaccurate stereotypes. It is obviously contradicted by the experience of the multiple fire departments already at or near 17%.

Furthermore, this litany of firefighting's "special circumstances" is not unique to firefighting. The same explanations have been offered for the near-exclusion, past or present, in

many traditionally male-dominated, blue collar occupations, ranging from the construction trades to mining, logging, auto maintenance, military combat, policing, rapid transit, and heavy manufacturing.⁵ Research on these occupations consistently confirms that, where women are chronically under-represented in a workforce, employer exclusionary behavior, not lack of available women, is the principal cause.

One prominent form of this employer behavior is creation by fire departments of artificial barriers making it close to impossible for women to succeed. The most common example involves adopting physical ability standards that are unreasonably high, not related to actual job

⁵A small sampling of this research includes: J. Brown & F. Jacobsohn, *From the Ground Up: Building Opportunities for Women in Construction* (New York: Legal Momentum, 2009); T. Ferguson, *Blue Collar Women: Trailblazing Women Take on Men-Only Jobs* (Far Hills, NJ: New Horizon Press, 2008); M. Fonow, *Union Women: Forging Feminism in the United Steelworkers of America* (Minneapolis: University of Minnesota Press, 2003); S. Gluck, *Rosie the Riveter Revisited: Women, the War and Social Change* (New York: New American Library, 1987); J. Gruber, "The Impact of Male Work Environments and Organizational Policies on Women's Experiences of Sexual Harassment," *Gender & Society*, 12 (1998), pp. 301-320; B. Gutek, *Sex and the Workplace: The Impact of Sexual Behavior and Harassment on Women, Men and Organizations* (San Francisco: Jossey-Bass, 1985); J. Jacobs & K. Gerson, *Revolving Doors: Sex Segregation and Women's Careers* (Stanford, CA: Stanford University Press, 2001); A. Nunes & B. Seligman, *A Study of the Treatment of Female and Male Applicants by San Francisco Bay Area Auto Service Shops* (Berkeley, CA: Discrimination Research Center of The Impact Fund, 2000); E. Lafontaine & L. Tredeau, "The Frequency, Sources, and Correlations of Sexual Harassment among Women in Traditional Male Occupations," *Sex Roles* 15 (1986), pp. 433-41; I. Padavic & B. Reskin, "Men's Behavior and Women's Interest in Blue-Collar Jobs," *Social Problems*, 37 (1990), pp. 613-628; F. Moccio & M. Fenkelstein, *In Their Own Words, Women in the Blue Collar Construction Trades* (Ithaca: Cornell University Press, 2001); K. Scarborough, *Women in Public and Private Law Enforcement* (Boston: Butterworth-Heinemann, 2002); K. Schilt, "Just One of the Guys?" *Gender & Society*, 20 (2006), pp. 465-490; B. O'Farrell & S. Harlan, "Craftworkers and Clerks: The Effect of Male Co-Worker Hostility on Women's Satisfaction with Non-Traditional Jobs," *Social Problems* (1982), pp. 252-265; M. Swerdlow, "Men's Accommodations to Women Entering a Non-Traditional Occupation: A Case of Rapid Transit Operatives," *Gender and Society* 3 (1989), pp. 373-387; J. Schroedel, *Alone in a Crowd: Women in the Trades Tell Their Stories* (Philadelphia: Temple University Press, 1985); and M. Walshok, *Blue Collar Women: Pioneers on the Male Frontier* (Garden City, NY: Anchor Press/Doubleday, 1981).

duties, and not scientifically validated.⁶ Other policies or practices which often undermine women firefighters' ability to succeed include failure to recruit in places where likely women job seekers are to be found; refusal to purchase uniforms and equipment in sizes and designs that fit women; and insistence on conducting fire academy training in an unnecessarily abrasive, degrading, "macho" manner.

A second form of employer behavior that keeps women from succeeding in fire careers is allowing women's co-workers and supervisors to behave in hostile, harassing, or unsupportive ways. Common examples documented in our research include:⁷

- Failure to support women on fire scenes. Fire scenes are dangerous places, and firefighters routinely depend on their team-mates to protect and support them. However, women are often excluded from this protective care and instead placed in unnecessary danger -- for example, by male firefighters shutting off the water when a woman was at the nozzle end of a fire hose, tampering with women's protective gear, or erasing women's names from lists used to check that all firefighters are accounted for.
- Withholding coaching. New firefighters learn many of the skills needed to perform their job efficiently and safely via informal, on-the-job coaching and mentoring. One of the

⁶ Furthermore, physical ability tests that have been validated as reasonable and job-related can be administered in ways that are not gender neutral -- for example, offering test-taking tips to men and not women, limiting women's access to opportunities to train, and providing encouragement to men and not women.

⁷ Reports of such problems in major fire departments across the nation can be readily found by googling "sex discrimination fire departments." See, for example, Terri Langford, "Concerns Raised About Sexism in the Houston Fire Department," *Houston Chronicle* March 29, 2010; Gretel Kovach, "The Woman-Hating Culture inside the Dallas Fire Department," *D Magazine*, November 2009; Will Guzzard, "Chicago Fire Department Hiring: Women Face Discrimination," *Huffington Post*, July 19, 2011; and Weldon Latham, "Major Metro Departments Face Claims of Widespread Discrimination," *Viewpoints, an American City & County Blog*, November 13, 2013.

most effective ways to keep women down and drive them out is for their more experienced fellow workers and immediate supervisors to fail to provide this important informal training to women while routinely providing it to men.

- Isolation/silencing. Camaraderie within the firehouse is a very important psychological reward of firefighting, as well as important to team morale and cooperation. In many fire houses nation-wide, women are routinely shunned by their male colleagues, never spoken to, excluded from preparing and sharing communal meals, and otherwise isolated and rejected.
- Hostile and harassing “jokes”. Among firefighters, jokes and pranks are enjoyable parts of living and working together and contribute usefully to team spirit and cooperation. But with respect to women, these jokes are sometimes used to create the opposite effect -- to communicate that the women are unwanted and that they are excluded from the team. Multiple examples of such behavior described to us by women firefighters involved human excrement.
- Sexually charged atmosphere. Some fire departments across the country tolerate a “fraternity house” atmosphere in fire stations where, for example, pornography is displayed, and sexual comments and gestures are routinely interjected where they are irrelevant.

I have not studied the FDNY specifically, and therefore I leave it to others⁸ to discuss the presence or absence of such issues in New York City. But the important point of this discussion is not the specific ways in which gender discrimination manifests itself in a particular fire

⁸ See, for example, the film *Taking the Heat: The First Women Firefighters in New York City*, described at <http://www.pbs.org/independentlens/takingtheheat/film.html>. Unfortunately, many of the issues raised in this portrayal of events in 1982 remain relevant today.

department. Rather, the main point is that, in whatever form gender discrimination manifests itself, the fire department itself can legitimately be held responsible for it.

How Can the Number of Women Firefighters be Increased?

If FDNY is responsible for the extremely low representation of women among its fire fighters and fire officers, what can cause the department to make serious, sustained changes?

One possibility is to ignore the situation and await litigation by either public enforcement agencies (such as the federal Department of Justice) or private litigators. The City has considerable experience with this approach, especially with regard to racial issues,⁹ and from that experience should be vividly aware of how protracted, painful, expensive, divisive, disruptive, and demoralizing the process can be. With a shortfall of about 1,800 female FDNY uniformed employees,¹⁰ a litigator would probably have little trouble establishing a *prima facie* case of gender discrimination against the City. Litigation seems not a matter of whether New York City will be sued but instead simply when.

If the city instead chooses to address these issues proactively, one good place to start would be with the policies and practices that create the most significant barriers to women's success. For example, I understand that concerns have been raised about physical ability

⁹ *United States of America and the Vulcan Society, Inc. et al. v. City of New York et al.* (United States District Court for the Eastern District of New York, 07-cv-2067). This case has been ongoing for more than six years.

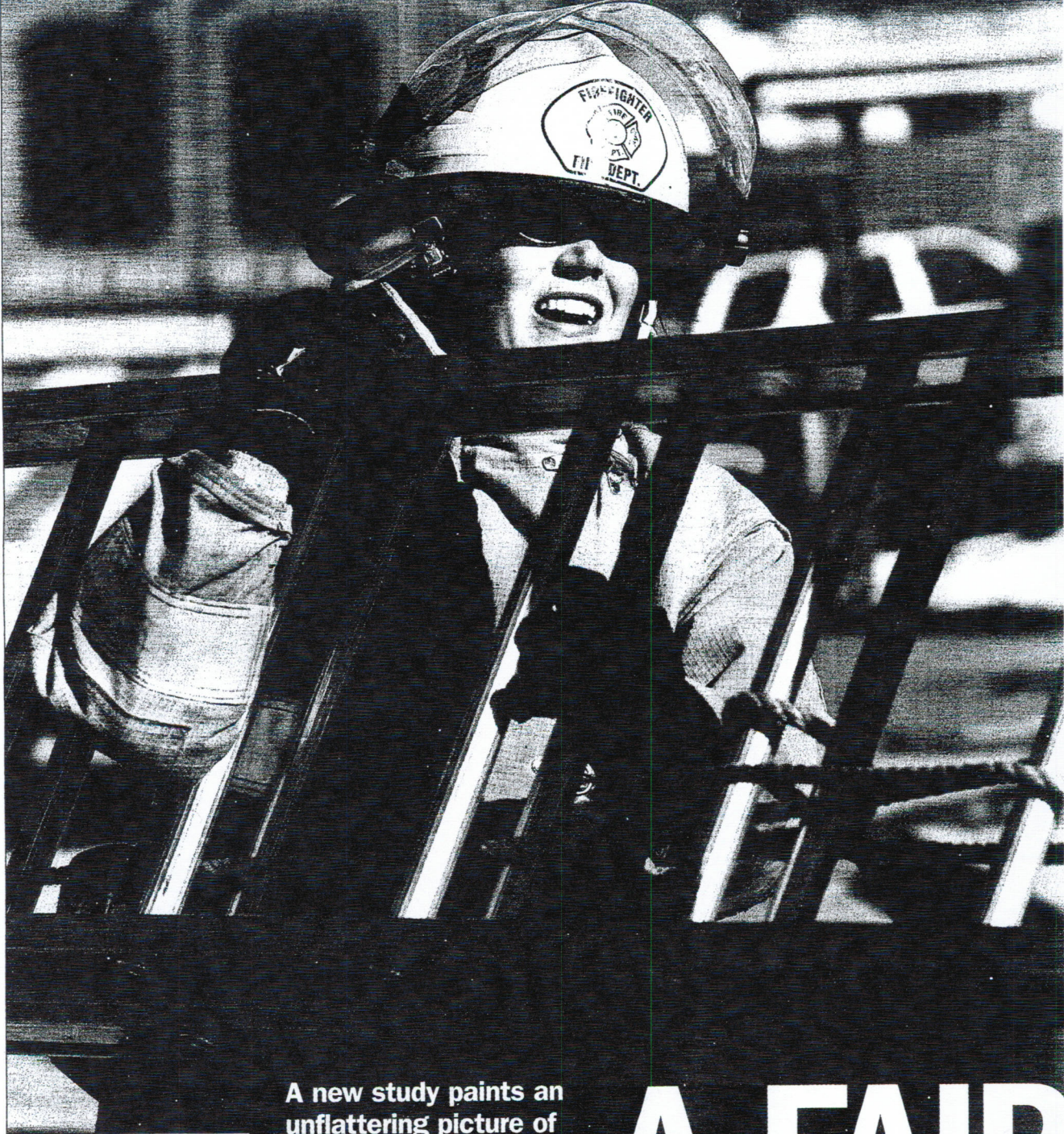
The city also recently spent more than more than seven years and \$7 million to settle a smaller suit alleging sex discrimination in NYFD EMT promotions ("The Kurland Group Announces Settlement of Discrimination Lawsuit Against the City of New York," at <http://kurlandandassociates.com/2013/06/17>).

¹⁰ In round numbers, FDNY's 10,500 uniformed employees * 17% = 1,890 expected female uniformed employees. 1,890 expected female employees – 100 actual female employees = 1,790 "missing" females.

requirements for Fire Academy graduation which are allegedly un-validated, not job related, and unrealistically demanding; about an unnecessarily “macho” style of training within the fire academy; and about deliberately assigning women firefighters to firehouses where they are the only women and where the firehouse has a history of ostracizing women.

An equally important arena for change will be the overall workplace culture of the Department. A workplace’s culture is simply the sum of often-unspoken assumptions, shared values, and standard practices that pervade daily work life – “the way things are done around here.” Even-handed treatment of women will require employees at all ranks to change outdated attitudes, drop inaccurate stereotypes, and curb inappropriate behavior. An important starting place would be to clearly announce that the old “ground rules” tolerating hostile, discriminatory, and un-collegial treatment of women no longer apply, and then – most importantly -- demonstrating consistently and repeatedly through action that the rules have actually changed. Department management also needs to squelch leaks, rumors, and innuendos that inflame hostility toward women, including proactively contradicting statements that label actions to “level the playing field” between men and women as special treatment for women.

Research, as well as practical experience, confirms that such major changes in a workplace’s culture require sustained effort over at least three to five years. They typically engender at least some uncomfortable conflict, and they frequently involve at least some changes in personnel. They certainly will not occur without a strong fire commissioner and other senior departmental leaders who make these changes a priority, as well as continuing advocacy and oversight by elected official, including the Mayor and City Council.



A new study paints an unflattering picture of how women are treated in the fire service.

By Marc Bendick

A FAIR

In 1921, suffragist Alice Paul drafted an Equal Rights Amendment to make men and women equals in the eyes of the law.

Two years later it was first introduced into Congress; it has been introduced every year since. The ERA passed in 1972, but only 35 of the required 38 states ratified it before the 1982 deadline.

This struggle for equal opportunity and treatment has not escaped the fire service. Female firefighters are few and far between, and at times litigation has sought

to increase their number and stop harassment. New research is now available to assist fire department leaders in addressing these issues before lawsuits impose inevitably expensive, imperfect solutions.

Among the 350,000 paid firefighters in the nation today, only 3.7% are women. More than half of the nation's paid fire departments have never had a female

firefighter on staff. In the nation's largest metropolitan regions, 51.2% had zero paid female firefighters across the multiple departments in the region. More than 20 years after it faced the nation's first lawsuit on this subject, the New York City department still counts less than 0.25% women in its uniformed force.

Fire department leaders challenged

about such numbers traditionally respond that women do not want and cannot handle the job, so low numbers are to be expected.

To examine these issues, the Ford Foundation sponsored a research team that included social scientists Marc Bendick, Jr. of Bendick and Egan Economic Consultant, Inc., and Francine Moccio of Cornell University; and civil-rights lawyers Denise M. Hulett of the Legal Aid Society Employment Law Center, and Sheila Y. Thomas of the Law Offices of Sheila Y. Thomas. This team took a comprehensive look at women in firefighting by gathering confidential questionnaires from 675 male and female firefighters in 48 states, surveying 114 departments large and small, and interviewing 175 female firefighters. The team also conducted case studies in the Kansas City, Mo.; Los Angeles; Minneapolis, Prince William County (Va.), and Seattle fire departments.

The researchers developed a benchmark for expected female representation using data from the 2000 U.S. Census. They computed the percent of women of typical firefighter age (20 to 49) and educational background (high-school graduate but no college degree), in 184 occupations resembling firefighting in required strength, stamina and dexterity, or involving outdoor, dirty or dangerous work. These comparison occupations include bus mechanics, loggers, professional athletes, refuse collectors, roofers and tire builders. The

career despite its being dirty, dangerous and demanding, and the 3.7% women employed there today. In 2000, if women had been employed at the 17% rate, there would have been 39,742 additional female firefighters nationwide, or 50,577 total, quadrupling their actual number of 11,135. If women of color had been employed at their expected rate, they would account for 13,552 (34%) of those additional female firefighters.

Actual employment of women in some departments confirms the reasonableness of the 17% benchmark. Women now approach, equal, or exceed 17% of paid uniformed officers in Minneapolis (17%); Madison, Wis. (15%); Boulder, Colo. (14%); Miami-Dade (13%); Anchorage, Alaska (14%); Kalamazoo, Mich. (24%); Racine, Wis. (19%); Redding, Calif. (17%); Sarasota, Fla. (12%); Springfield, Ill. (19%); Tuscaloosa, Ala. (24%); and San Francisco (15%).

So, the study's first finding is the huge under-representation of women among firefighters. Tens of thousands of women likely to be interested in the career and capable of performing it are available, but they are not applying, not getting hired, or leaving. If courts accept this 17% benchmark, the overwhelming majority of departments nationwide are vulnerable to litigation for falling far short of it. In moving from approximately 0% in 1980 to 3.7% in 2000, the percentage of female firefighters has increased less than 0.2% per year. At that rate, females will not constitute 17% of firefighters for another 72 years.

Too few women employed is only the start of potential legal issues the study identified,

however. When women do get hired, they widely encounter treatment well outside legal boundaries for equal opportunity and non-harassment.

When it came to gender-based discrimination or exclusion in the firefighter survey, problems were reported by between 79.7% of female firefighters (for ill-fitting equipment) to 6.3% (for assaults), averaging

34.2% among the 25 problems researchers asked about. These women's experiences contrasted sharply with that of their male colleagues, who reported much lower rates when asked the same questions. When asked if they had experienced different treatment because of gender, 84.7% of women agreed, compared with only 12.4% of men.

One hopeful sign that women's experiences are improving is that female firefighters report a slightly lower rate of problems than their older counterparts — 31.7% versus 37.8%. On the other hand, 34% of women of all ages reported that gender-based problems continue into the present. Clearly, gender discrimination and harassment are not rapidly disappearing.

The study has not simply documented problems, however. The researchers sought best practices demonstrated as feasible by being implemented in some departments. Twenty of these best practices, summarized in "Best Practices for Increasing the Inclusion of Female Firefighters," page 38, are discussed in detail in the full report, available at www.firechief.com.

In the survey, two clusters of issues concern female firefighters the most. The first, labeled incidents in the workplace, refers to encounters with discrimination, harassment or exclusion in their daily work life, combined with lack of response to these incidents by supervisors. The second, labeled fairness in employment practices, refers to women's perceptions that they are not treated equally to men in hiring, assignments and promotions. Departments seeking to make current female firefighters more satisfied with their careers and encourage other women to become firefighters should give these concerns highest priority.

Neither priority issue involves special treatment for women or lower standards for physical performance, but instead merely require departments to ensure equal employment opportunity. In most departments, an essential first step toward that goal is to recognize that the playing field is not level between the genders. The second step is to start enforcing standards of non-harassment and equal treatment, which have been required by law, as well as widely held social norms, for at least four decades.

SHAKE

proportion of women in these 184 occupations is 17%.

Seventeen percent is far below the 47% that women represent in the average occupation, so it is clear that the majority of women are not likely to seek a firefighting career. But this does not explain the gap between the 17% of women who are qualified and potentially interested in this

A FAIR SHAKE

Why are departments so slow in adopting anti-discriminatory and anti-harassment policies and practices, which long ago became standard in most law-abiding, well-managed American workplaces? The study concludes that the workplace culture in most departments continues to resent female firefighters and, consciously or unconsciously, intends to exclude them.

Formally defined, a workplace's culture is the system of beliefs, values and ways of behaving common to that workplace. More simply, it is the way things are done around here. Workplace cultures tend to resist change both actively and passively. Resistance tends to be strongest where employees remain for long careers, personal relationships are important, traditions are maintained with pride, and employment is well rewarded — all characteristics of firefighting.

Firefighting's traditional culture is proud and noble, building on shared perceptions that the occupation is dangerous and difficult. The key performance requirements are strength and courage. Only an elite subset of individuals is capable of performing its duties. And generous compensation and prestige reflect these circumstances.

Ironically, these perceptions continue to justify exclusion of female firefighters as the evolving occupation itself erodes their relevance. Obviously, fire suppression remains a dangerous, difficult task. However, the shifting balance between fire calls and medical calls brings to prominence skills and abilities, which the traditional occupational self-image ignores. Medical calls typically invoke treatment skills and knowledge more than strength or courage, as well as caregiving skills and aptitudes often associated with nurses or social workers.

Nevertheless, as the Federal Emergency Management Agency's manual on female firefighters puts it, "It is the mystique of interior structural firefighting that lures most recruits to city fire departments, and it remains the psychological focus of the

Best Practices for Increasing the Inclusion of Female Firefighters

Operation	Best Practice
Recruiting	<ul style="list-style-type: none"> Invest in active recruitment — which most departments don't. Use the same personal relationships successful in recruiting men. Increase recruiting in sports/fitness, medical and campus settings. Start with girls 11 or younger. Assist young women to obtain volunteer, cadet and seasonal firefighting experience.
Physical-Abilities Tests	<ul style="list-style-type: none"> Provide serious pre-testing training for both men and women. Use tests whose job-relatedness criterion has been validated. Ensure that all candidates are tested under equal circumstances.
Uniforms & Equipment	<ul style="list-style-type: none"> Routinely provide uniforms and equipment designed for women.
Firehouse Living	<ul style="list-style-type: none"> Adapt bunkrooms and bathrooms to provide appropriate privacy. Maintain zero tolerance for gender-hostile pranks, hazing or isolation. Maintain zero tolerance for pornography and sexually focused talk in the firehouse. Maintain zero tolerance for sexual activity in the firehouse. Provide rapid, serious responses to firefighter complaints of discrimination or harassment. Prevent retaliation against firefighters complaining of discrimination or harassment.
Promotions	<ul style="list-style-type: none"> Ensure that men and women receive equal on-the-job training and personal mentoring. Provide women equal access to formal classes and exam preparation. Avoid over-assigning women to duties outside fire suppression. Ensure women and men equal opportunity for station assignments. Replace "tap on the shoulder" selections with transparent decisions, open postings and explicit criteria.

urban firefighter's job...." This mystique equally remains the focus of resistance to women. To their male peers, female firefighters represent more than competitors for jobs or constraints on freewheeling aspects of firehouse life. They also silently challenge the self-esteem male firefighters derive from doing a job for which only a select few have the right stuff. In these circumstances, the opposition shown in the study is not surprising.

These cultural dynamics are not unique to women in firefighting. Whenever the demographic diversity of a work force increases, inter-group relations tend initially to worsen rather than improve. Accordingly, departments cannot simply hire women and allow them to sink or swim, but instead need strategies to ensure their inclusion.

These strategies must address the specific issues from physical-abilities tests to dormitory privacy. But they also must address the underlying exclusionary

culture of which these issues are symptoms. (See "5 Steps to Culture Change," page 40.) Doing the first of these without the second will result in no employment increases, only token increases or temporary increases that fade as newly hired women are driven out.

Four decades ago, it was considered obvious that women were not capable of or interested in firefighting. That explanation will no longer suffice. The main role of such obvious but incorrect assumptions today is to justify administrative, organizational, interpersonal and technological barriers to women's employment, which are not actually necessary for safe, efficient departmental operations.

To reduce these barriers and bring women's employment to its potential will require more universal application of best practices already adopted by pioneering departments. It also will require changing the underlying workplace culture from one of exclusion to one of gender inclusion.

5 STEPS TO CULTURE CHANGE

There is no simple formula for promoting fundamental, permanent changes in a department's culture. However, research and experience suggest five key elements.

1) Commitment by mayors, chiefs and other top officials. These leaders must visibly advocate expanded female employment and persistently and insistently communicate their expectation that those reporting to them will join the effort.

2) Monitoring and accountability translating the broad goal into immediate personal consequences for mid-level managers and supervisors. Positive actions need to be rewarded through performance appraisals, awards and promotions. Negative behavior needs to be sanctioned promptly and visibly.

3) Human resource management procedures embodying transparency, objectivity, and performance-relatedness. These procedures need to replace informal procedures that allow gender stereotypes, individual favoritism, and in-group bias in hiring, promotions and assignments.

4) Changes in individuals' behavior to control biased or aggressive behavior. Zero-tolerance policies need to be enforced for serious violations and for symbolic words or actions that open the door to serious violations. Training is needed to increase employees' awareness of pervasive tendencies toward conscious and unconscious bias. Effective training uses real-life examples and provides practical tools such as scripts for alternative behavior. All staff should receive basic training, since culture is a 360-degree process, which all employees help to shape. Additional training should target first-level supervisors, the daily face of the department for individual employees.

5) Sustained effort. Significant change in a complex, long-established workplace may require deliberate effort over three to five years.

Inclusion is a far more ambitious goal than simply increasing the number of women in uniform. But it is essential if increases in those numbers are to be meaningful and self-sustaining.

Guided by this study, gender inclusion is the new standard to which departments are likely to be held by courts, the elected officials to which they report and the residents they serve. Senior fire managers need to lead their departments in achieving that standard proactively, before being forced by expensive and disruptive litigation. [FC]

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Francine Moccio of Cornell University; Denise M. Hulett of the Legal Aid Society Employment Law Center; and Sheila Y. Thomas of the Law Offices of Sheila Y. Thomas contributed to this story. To see a full version of their report, visit www.firechief.com.