SECTION A

INTRODUCTION

The Utah Risk Management Mutual Association (URMMA) contracted with Thomas and Means to identify job-related physical fitness tests, standards and programs for the law enforcement officers of 19 Utah agencies. Thomas and Means identified fitness tests and standards predicting successful performance of job-related physical tasks for the 19 agencies' law enforcement officers as well as make recommendations for physical fitness programs, policies and procedures to enable officers to maintain the necessary fitness to perform strenuous physical job tasks.

The 19 agencies were mostly of small or mediaum size and by combining as a group were able to have a large enough officre sample from whoi to conduct a validation study. The agencies and number of sworn offficers per agency are below:

AGENCY	OFFICERS
Brigham City 23	
Cedar City	24
Centerville	12
Escalanti	2
Kanab City	6
Layton City	54
Mapleton	7
Mount Pleasant	5
Ogden City	114
Orem	89
Plain City	5
Riverdale	16
Roy City	38
South Jordan 19	
Springville	20
Spanish Fork 23	
Uintah 6	
West Jordan 150	
West Valley	155

The rationale for establishing physical fitness standards for law enforcement officer job classifications is that officers are called upon to perform important, often critical, job functions; their physiological capabilities and readiness bear directly upon effectiveness, their safety, and the safety of co-workers and citizens.

The identification of job-related standards must be part of a broader fitness promotion effort within a given agency. Recognize that the "bottom line" is the development and maintenance of a fit and capable work force. The key vehicle for accomplishing that objective is the physical fitness program. To that end, a broad based fitness promotion program is necessary. There will also be associated health and longevity benefits, but the objective is to have a reasonable assurance of safe, effective job performance.

Closely associated with programs are expected performance requirements. An agency may express these requirements as "goals" in a voluntary program, or as "standards", if compliance is mandatory. Regardless of approach, experience demonstrates that an agency must establish some fitness levels for trainees in order to insure training capability and eventual job performance. The methodology here was more narrowly focused than most fitness or wellness programs, in that Thomas and Means identified fitness as a job-related factor and identified a battery of tests and test standards that predict ability to perform essential law enforcement job functions.

The physical performance standards and testing battery can be viewed as a tool for assessing the ability of recruits to master job training and the ability of incumbents to perform the essential, often critical, physical job-tasks safely and effectively. As such,

the term we will apply to these standards is physical fitness standards. These standards determine an individual's fitness for the job.

A test battery and standards also provide the agency with a tool to evaluate the effectiveness of the program. The purpose is to help officers attain or maintain the level of fitness required to perform the physical tasks associated with the job. Periodic testing gauges effectiveness of the program.

A standard is a criterion for a test. Historically, employers have utilized physical fitness standards to limit disability risk and liability. There has been, however, very little scientific research or logic to justify (i.e., validate) such standards. Most standards were developed intuitively and in non-specific terms. The majority of these historical "standards" have not directly linked job requirements to worker abilities.

In defining physical fitness programs and standards that are specific, related to job requirements, and are fair, the agency must first ascertain the function or purpose of such programs and standards. The purpose of any standard is to provide a definable minimum for physical performance status to insure that a trainee or employee has:

- the physical capacity to learn and perform essential job-tasks that are frequent
- 2. the physical capacity to learn and safely and effectively perform essential job-tasks that are critical at a maximum level of physical demand
- 3. the fitness status to minimize known health risks associated with the law enforcement occupation thus affecting absenteeism and disability

Given the purpose and function of programs and standards, an agency must undertake an empirically based judgment process to "validate" them as being job-related and not arbitrary. If a standard is to be used as a criterion for applicant selection, academy graduation and/or incumbent retention, the agency must establish

the job-relatedness of that standard, using acceptable validation criteria. It is the issues surrounding this application of fitness standards that we will address in this section.

THE FUNCTIONAL ISSUE

Historically, standards have existed only in applicant selection batteries or as a condition for completing a recruit academy. More recently, the failure to implement mandatory incumbent standards is becoming an issue. There is no basis in logic or in law for the proposition that one has to display a certain level of fitness to get hired ,but does not have to do so once on the job. The experience of installing incumbent fitness standards for law enforcement officers in a large number of agencies has revealed the following conclusions:

- Voluntary participation and standards tend not to work. We have found that only those officers already exercising participate. Approximately 25% of the officers will participate.
- Mandatory participation in fitness assessments, but voluntary compliance to standards, is a first step for evolutionary program implementation. While 100% participate (with mandatory testing), approximately 25%-50% of the officers will not voluntarily comply with standards.
- Eventual compliance with a mandatory standard is usually required to get the remaining 25% 50% (sedentary officers) to participate fully and meet the standard.

Based on these conclusions it appears that most agencies will have to address standards at some point in time. The mission of any agency fitness program is to insure the fitness of all officers to physically perform the job. And while an agency can't mandate that officers be healthy, health benefits will occur from increasing the physical capabilities of officers. Remember, however, that providing the fitness program is the most important step toward accomplishing that mission - not the fitness standards.

Physical fitness is about changing to and sustaining healthy behaviors. As such, the program elements are priority factors because they directly impact the behavior change. From a behavioral change perspective, standards are but motivational strategies to apply for meeting that objective.

The experience of installing physical fitness programs within law enforcement agencies has shown that most of the administrative concern is over the fitness standards, not the fitness program. This is unfortunate because it places an inappropriate emphasis on the fitness test standards. Physical fitness standards alone do not work. A corresponding fitness program is necessary to accomplish the mission of having officers capable of performing all essential job functions. While the focus of this report is on fitness test standards, we must underscore the fact that the process of defining standards is but one element of the total fitness program.

THE STANDARDS BALANCING ACT

The development and application of standards is the area that raises the most concerns for agencies and employees. The development and application of standards (any type of standard, not just fitness standards) is of critical importance because the standards have a bearing on one's employment status. There are many specific considerations that exert an influence on the definition of physical performance or fitness standards. The attempt to identify standards involves both downward and upward pressures. The standards should first be applicable to applicants; and to insure a measure of accountability in the work force, they must also ultimately be applied to incumbents.

The remainder of this section will discuss the issues that exert the pressures affecting the both the definition and application of a fair standard. To select and apply specific standards that are appropriate for an agency and to formulate policy regarding physical fitness standards, an agency should consider **nine standard validation issues.** These nine issues have emerged from our experience in developing fitness standards and programs and in providing expert testimony in court cases whereby fitness standards and policies that have been challenged. These issues require a close review for the deliberation on the eventual decisions regarding standards.

- 1) Adverse impact based on gender
- 2) Age discrimination
- 3) Discrimination based on disability
- 4) Liability
- 5) Continuity of standards
- 6) Past patterns and practices
- 7) Agency accountability
- 8) Relative versus absolute standards
- 9) Standards compliance sanctions

ISSUE #1-THE ADVERSE IMPACT ISSUE

Title VII The Civil Rights Act of 1964 (CRA) has been interpreted to prohibit the use of any selection device (e.g., a test) that has adverse impact based on race, color, national origin, gender, or religion unless the selection device was demonstrably jobrelated. The point of focus is whether or not a given standard impacts one of the protected classes disparately (i.e., is the success rate of any race, any color, any religious group, any nationality, or any gender substantially lower than that of a different race, color, religion, nationality or gender). If adverse impact exists, the employer would be violating federal law unless the standard can be shown to be job-related. If the standard is job-related, then it can be utilized even with adverse impact. A major focal

point for this issue is the utilization of relative (age and gender based) or absolute based standards. This is discussed under the relative standards issue number 8.

Implications for standards validation

The issue from a developmental perspective is to identify standard(s) in a valid, lawful manner that are predictive of ability/inability to perform essential job functions.

To accomplish this, the developmental process to define the fitness standard must address the job functions.

ISSUE # 2-THE AGE DISCRIMINATION ISSUE

The Age Discrimination in Employment Act of 1978 (ADEA) made it unlawful to discriminate against older applicants or employees. This impacted hiring and retirement age standards. Public safety agencies were granted an exemption until 1993 during which time the EEOC was to conduct a national study to investigate alternatives to age alone as a determinant for retirement. The Penn State Report was the result of the EEOC contracted study. It concluded that age alone should <u>not</u> be a reason for forced retirement. The report recommends physical performance testing (unspecified) as the alternative.

The Penn State study, as well as the current data emerging on aging and human performance, indicates that physical performance dimensions such as physical fitness should be the measurement applied for hiring and retiring standards. Research is suggesting that lack of physical activity and resultant decline of physical fitness are the causes of much of the performance declines seen as early as the fourth decade - not the aging process per se. In fact, some researchers conclude that fitness is a 20-year

factor. In other words, a healthy and fit 65 year-old can perform at the level of an average 45 year-old.

Implications for standards validation

The majority of litigation prior to the Penn State study tended to support age alone as a valid retirement standard because of the cost and risk of physical performance testing in older officers. However, the current research on aging suggests that with proper safeguards, agencies can provide physical performance testing safely and economically.

Future litigation is expected to clarify the Penn State study recommendations regarding physical performance standards being substituted for age-alone standards. Regardless, the essential physical demands of a particular job are the same for 45 year-olds as they are for 25 year-olds. One job would imply one standard. The key focal point must be on the establishment of job-relatedness for any standard that is applied, with or without age considerations.

ISSUE # 3-DISCRIMINATION BASED ON DISABILITY

A major issue that has emerged from the Rehabilitation Act of 1973 and the 1991 Americans With Disabilities Act (ADA) is the concept of reasonable accommodation. This concept requires an organization to attempt to accommodate otherwise qualified incumbents or new applicants if there is a medical disability present. Agencies must make accommodation unless it causes an undue hardship on the employer or seriously detracts from the safe performance of essential job duties. A critical area to address when considering hiring disabled individuals is to what extent the disability poses a health and safety risk to the individual and to others. To address

this issue, the agency must define in a logical and empirical manner, the essential job requirements to see if an individual can meet those requirements.

The ADA requires that an employer must focus only on the essential functions of the job when determining whether a person with a disability is qualified with or without reasonable accommodation. The issue hinges on the job-relatedness of standards measuring the individuals' capability to perform essential functions. An agency has the authority to set standards that may discriminate against a disabled person if: 1) the person cannot perform essential functions even with an accommodation, or 2) the person's disability poses significant risk of substantial harm to him/herself or others, or 3) if any necessary accommodation would cause the agency "undue hardship". The ADA has raised many controversies that have not yet been resolved.

- 1) The ADA does not allow the gathering of medical information (through a screening or examination process) prior to a conditional offer of employment. Yet the ADA allows the application of "agility" tests prior to a conditional offer for hire. Any type of agility or physical testing without screening violates the standard of "ordinary care" put forth by the American College of Sports Medicine and the American Heart Association. Complying with the ADA implies implementing a negligent screening process. Some agencies are dealing with this issue by requiring a physician approval or clearance to participate in agility or fitness testing.
- 2) Some lawyers have expressed opinions that fitness tests are not appropriate because of the ADA. While the ADA uses the terminology "agility" testing, the EEOC has rendered an opinion that fitness tests are acceptable as, and meet the criteria of, "agility" tests. Fitness tests are not made unlawful by the ADA.
- 3) Another aspect of the ADA with implications for fitness standards is the connotation that there should be continuity between selection, training and incumbent standards. In other words, a selection standard is more defensible if incumbent officers must also meet a similar standard on an ongoing basis.

Implications for standards validation

The ADA does not really say anything different than the original Civil Rights legislation of 1964. A medical or fitness standard can be applied and discriminate

against the handicapped, if it is defensible as being job-related. The ADA does reemphasize that job-relatedness needs to be well documented to support a claim for validity.

ISSUE # 4-THE AGENCY LIABILITY ISSUE

This is of utmost importance for a public safety agency. Due to the public safety function, an agency must insure a performance capability of its personnel or face the possibility of negligence. The specific areas of negligence could be:

- negligent hiring of "risky" personnel
- negligent training to minimize risk
- negligent supervision and management of risk
- negligent assignment and retention of staff with known risk
- negligent compliance with the federal government's goals and objectives to reduce health risk

A major consensus conclusion from a Legal Issues Conference sponsored by the Illinois Local Government Police Training Council was that the decade of the 1990s will have increased liability litigation against law enforcement agencies involving four areas: 1) use of force and defensive tactical skills, 2) firearms use and policy, 3) driving, and 4) physical fitness. Presenting physical fitness as a potential area of negligence strengthens the contention that it is job-related.

Based upon a relevant court case (<u>Parker v. District of Columbia</u>, 1988) a law enforcement agency can be held liable for deliberate indifference to officers' inability to perform certain kinds of essential functions (i.e., safely and effectively controlling someone with less than lethal force where the circumstances do not allow deadly force).

Implication for standards validation

The decision in <u>Parker</u> implies that physical performance capability is an area requiring ongoing training, as is firearms qualifications (a major area of liability exposure). If an agency does not have valid programs and standards that help to insure the fitness qualifications of officers, it is significantly exposed to the risk of civil liability. Fitness programs and standards can be vehicles for minimizing that liability risk.

ISSUE #5-CONTINUITY WITH SELECTION, TRAINING AND MAINTENANCE STANDARDS

The majority of law enforcement organizations that have developed fitness standards have addressed only selection or hiring criteria. To be hired, an individual often has to meet a standard that an incumbent employee does not. This not only appears to be illogical, but it goes against the **purpose of fitness requirements--that is, to insure a fit work force**.

The concept of job-relatedness necessitates focusing on performing the job - i.e., the incumbents. Demonstrating that applicant standards are job-related necessarily involves incumbents having to eventually meet job related requirements as well.

Implications for standards validation

Fitness status is an issue throughout one's career. Consequently, there is a need to develop a continuity of fitness standards for selection, training, and maintenance. The same fitness tests should be applied for all three purposes. The validation of fitness standards, as a consequence, must proceed from an assessment of what is required of incumbents to perform the physically demanding tasks of the job. Training entrance and exit standards must link to those defined demands.

The issue often raised is about the hardship of applying incumbent standards immediately. Rather than ignoring incumbents or immediately mandating that incumbents comply, the best approach appears to be one of postponing mandatory compliance, while emphasizing programming then, evolving into mandatory compliance to a standard over time.

ISSUE # 6-PAST PATTERNS AND PRACTICES

This refers to the situation whereby an agency applies standards that were not the normal practice for the agency. Special consideration must be given to incumbent officers when new or more stringent standards are set in place for employment. This issue is normally a state law concern that pertains to labor practices. Consequently, it varies as an issue on a state-by-state basis. An agency has the authority to set standards. However, past practices may have implications for the timing for the implementation of standards.

Implication for standards validation

When developing incumbent standards, agencies must consider the "provision of means". The agency must demonstrate a commitment to assist officers to meet standards since an agency is requiring standards in a new area (or the standards were not a condition of hiring). Examples of the "means" that an agency should provide include the following:

- Screening for safe participation
- Fitness leadership to provide assistance
- Education and instruction on how to meet standards
- A time frame for improvement

On duty time to train, facilities, and equipment are apparently not required.

Designing an incentive program does appear valid for facilitating incumbent involvement in fitness training.

ISSUE #7-THE ORGANIZATIONAL ACCOUNTABILITY ISSUE

The Public Health Service and the President's Council on Physical Fitness and Sport have well-defined national goals to minimize the risk and increase the fitness and health status of employees. For example, in the 1990 Public Health Objectives for the Nation, one of the specific goals was that employing organizations should have physical fitness programs.

The National Advisory Commission on Criminal Justice Standards and Goals in standards 20.1 and 20.2 made specific recommendations that standards and programs should be implemented. In turn, the recent law enforcement accreditation effort has, as a specific criterion, that agencies have established physical fitness programs and standards. The FBI's national training needs assessment indicated that stress management and physical fitness were the top two training needs within law enforcement.

Implications for standards validation

It is important to demonstrate that an organization is complying with these efforts. Having fitness standards or having a plan for the development of standards demonstrates the agency is "in line" with these recommendations.

ISSUE # 8-THE ABSOLUTE VERSUS RELATIVE STANDARDS (AGE AND GENDER BASED) ISSUE

Many agencies are using fitness standards based on age and gender. Those are called "relative" standards (because individuals are being compared against their relative norm group) as opposed to "absolute" standards. Agencies have adopted relative standards to accommodate older and female officers and to avoid increasing the possibility of standards demonstrating adverse impact. However, because of recent legislation, that approach may be in violation of the law (one job, one standard - Civil Rights Act of 1991, Section 106).

The recent Civil Rights Act of 1991 reiterates the importance of avoiding adverse impact and requires the application of standards that are neither **adjusted nor altered** based on race, color, gender, religion, or national origin. It further prohibits using different cutoff scores (based on any of those five factors) for employment-related decisions. Many agencies are using the Cooper Institute for Aerobics Research ageand gender-based norms. The legality and validity of such standards is currently unknown and may be in doubt. The interpretations of this legislation have raised considerable controversy. For example:

- 1) Some argue that the intention of the Act was to address cognitive tests only. However, others have expressed opinions that the stipulations against race and gender norms are for all tests.
- 2) There are conflicting opinions whether the Civil Rights Act of 1991 applies only to applicant selection standards or only to incumbent standards. There is a view that since "trainability" is the objective of applicant standards, an agency has more latitude to use relative standards for selection purposes. While there are differing opinions on the interpretation of the law, the CR Act of 91 itself, clearly suggests that single standards should be applied for all classifications (applicants as well as incumbents).
- 3) The EEOC has, in the past, supported age and gender based norms as standards. Recent presentations by the U.S. Department of Justice (DOJ) has even suggested that the DOJ may not initiate litigation against agencies that use age and gender based norms for selection purposes. However, individuals may still be likely to challenge such standards under Civil Rights Act of 1991. The

law as written is very specific about prohibiting separate tests and standards for employee testing.

4) The Cooper Institute norms have undergone court scrutiny in the past (U.S. versus the City of Wichita Falls, Tx. U.S. District Court of Texas, 1988) and have been accepted as job related and valid. However, in light of the current legislation it would appear that the court precedent may no longer be valid.

Several years ago recommendations were provided for the XXXXXXXXX Police

Department to use age and gender standards. In light of the recent legislation and

data, that recommendation is no longer appropriate.

The ideal situation

Absolute standards that are job-related are the fairest standards, in that everybody in that job or seeking that job must meet the same level of performance. If all officers must do the same basic job, then they should meet the same minimum standards, regardless of gender or age (or height or any other factor). Those standards should be reflective of the physical demands of the job. If the agency quantifies specific physical demands through a validation study, then an absolute standard can be readily applied.

The historical situation

Absolute physical standards (i.e., the same for all) have tended to cause adverse impact. As a consequence, strong data are required to document the specific cut points for a test standard. There are data to document that fitness is job-related and predictive of performing essential job functions. Few would disagree that the more fit the officer, the higher the probability of adequately and safely performing critical physical tasks. However, until recently, it has been difficult to support the definition of an absolute cut point (i.e., the minimum performance level that is acceptable). In the absence of strong data to support the definition of a specific cut point on fitness tests,

some agencies have applied, in the past, relative standards as a compromise. By having relative standards (age- and gender-based) individuals are having to meet the identical standard (in terms of percentile) for their norm group. This does follow the scientific convention used within the fitness field for defining norms. In turn, it also guarantees a minimum level of fitness and minimizes the problem of adverse impact.

However as noted previously, there is no apparent "job related" validity basis in research, law or logic for the utilization of different standards for groups of people doing the same job. In fact, past validation data have shown that relative standards are not very predictive of performing law enforcement physical job tasks when compared to absolute standards. If the jobs are the same and if the standards are job-related, then the implication would be for the standards to be the same. Implications for standards validation

Unfortunately, there may not be any definitive answers to these controversial issues until there is litigation. However, there is considerable agreement in the field that any incumbent standard must be job related and must be a single absolute standard since the "same job same standard" applies.

ISSUE # 9-STANDARDS COMPLIANCE AND SANCTIONS/INCENTIVES

When goals are established for voluntary compliance, the issue is one of incentives as opposed to sanctions. Agencies have employed recognition awards, extra leave days, and pay incentives for compliance with voluntary fitness goals.

Offering positive incentives is of value, even with mandatory compliance to the fitness standards.

The sanctions that agencies employ for failure to comply with standards must be consistent. While some agencies have required passing the fitness test as a condition for promotion or assignment, there are some who question the legality of such an approach. The soundest approach is to make compliance with any fitness standard that can be shown to be job-related a minimal condition for the job. Because job status is affected by such personnel decisions, we suggest a careful, reasoned process that takes into account employee concerns, management concerns, and legal concerns. Implications for standards validation

Standards should eventually apply to all sworn officers. Likewise, a sanction system should be developed as a separate step from the setting of the standards. The agency must apply both incentives and sanctions in a consistent and fair manner for incumbents.

CURRENT STATUS OF THE FITNESS STANDARDS AND PROGRAMS WITHIN THE 19 AGENCIES

The 19 agencies involved with this project have had either no standards or programs in the past or have only had voluntary fitness programs serving a minority of officers. All agencies have recognized the need for standards and programs that are valid and defensible that would apply to all sworn officers.

RATIONALE FOR FITNESS PROGRAMS AND STANDARDS

Physical fitness standards measure an individual's physiological: 1) <u>readiness</u> to perform <u>essential</u> and <u>critical</u> physical tasks, and 2) <u>status</u> relating to minimizing <u>risk</u> to

oneself or the public. Task performance has priority, but minimizing the health risk has benefits as well.

The physiological literature provides much data to support the notion that physical fitness is an underlying dimension of physical task acquisition and performance as well as health risk status. Likewise, specific research with law enforcement officers has documented a variety of physical tasks that are essential police job functions, with physical fitness being job-related to the performance of those tasks. What is required with that rationale is validation documentation for standards and programs.

FITNESS TEST AND PROGRAM VALIDATION

Any type of standard must have demonstrable validity. Validity is the degree to which inferences based upon test scores can be accepted as a basis for discriminating among individuals or groups. The fitness test, the procedures for measuring test results, programming procedures, and the interpretation of the data are all addressed in the concept of validation. The validity of a fitness standard or requirement hinges on three key questions: Is the inference (based upon a specific test, procedure, and interpretation) made about an individual or group appropriate, meaningful, and predictive, at some level, of job performance?

Program validity refers to the content, process, and procedures for improving or maintaining officer physical fitness levels. The validity of screening, assessment, and exercise prescription procedures as well as the validity of the organizational structure and program implementation are components. Of related importance are the qualifications of staff responsible for program implementation. A key element of all

aspects of program validity is that the components of the program are fairly and evenly applied.

The 19 Utah law enforcement agencies served by this project demand a physical performance test battery and standards that serve two functions: 1) The test battery should be predictive of physiological readiness to perform essential and critical physical tasks, and 2) The test battery and standards should identify those who are not physically capable of performing required job functions(s). In turn, the incumbent physical fitness program should assist officers to meet the standards.

VALIDATION MODEL

The model employed for this project is based upon our staff's prior experience with the following:

- a) research on the physical fitness/health requirements of the human body
- b) research on the structure and analysis of physical performance and physical performance testing
- c) research on the physical and health status of public safety officers
- d) implementation of public safety officers medical standards, physical fitness and health promotion programs in over 100 settings
- e) provision of expertise in the areas of court testimony, union bargaining agreements, and court consent decrees

The model formulated has the following assumptions:

- a) There are too many specific tasks to measure them all. It is more practical to measure the underlying dimensions of physiological readiness to perform that variety of physical tasks. The underlying physical performance abilities, status, traits or constructs should be addressed. As such, construct validity is important.
- b) A program and standards should be based upon an assessment of underlying physical capabilities or constructs that are predictive of specific job-task acquisition and/or performance. As such, <u>criterion-related validity</u> is an issue to be addressed.

- c) Programming is necessary to insure maximum compliance to standards for both recruits and incumbents.
- d) Having trained leadership within the agency to provide expertise for fitness testing and programming is a necessity.
- e) Physical fitness should be an issue throughout an officer's career.

 Consequently, there is a need to develop a continuity of fitness standards and programs for selection/training and maintenance.

While the direct focus of the validation was on fitness tests and standards, we recognize that standards must be viewed in the context of an overall fitness program.

The criteria for demonstrating job-relatedness of a standard or program must be determined by a professionally acceptable procedure. There are three basic acceptable validation procedures. The <u>Uniform Guidelines</u> (1978) note that content, criterion, and construct validation methods are all acceptable for demonstrating job-relatedness of a test.

- 1. Content validation. The test measures the actual job-task and the program teaches that task.
- 2. Construct validation. The test measures an underlying fitness factor for performing job-task(s) and the program trains that factor.
- 3. Criterion validation. The test measures a predictive fitness factor for performing job-tasks and the program trains that factor.

Thomas and Means applied a <u>construct validation</u> approach to validate physical fitness tests and standards. The validation process also contained elements of <u>content validation</u> in that essential job-task functions were identified and utilized to establish a criterion measure of job performance.

REFERENCES

1. Collingwood, T., Hoffman, R. and Sammann, P. (1995) <u>FitForce Administrator</u> Guide Champaign, IL: Human Kinetics.

- 2. Department of Justice. (1973) <u>Police</u>, National Advisory Commission and Criminal Justice Standards and Goals. Washington, D.C.: U.S. Government Printing Office.
- 3. Equal Employment Opportunity Commission. (1978) <u>Uniform Guidelines for Employee Selection Tests</u> Washington, D.C.: U.S. Government Printing Office.
- 4. Federal Bureau of Investigation. (1988) <u>Law Enforcement Training Needs Assessment Quantico</u>, VA: F.B.I. Academy.
- 5. Landy, F. (1992) <u>Alternatives to chronological age in determining standards of suitability for public safety jobs</u>. University Park, PA: Center for Applied Behavioral Sciences, Pennsylvania State University.
- 6. U.S. Dept. of Health and Human Services. (1990) <u>Promoting Health/Preventing Disease: Objectives for the Nation, Year 2000</u> Washington, D.C.: U.S. Government Printing Office.