Following a workshop on "Innovations in Employment Testing that Improve Validity and Reduce Adverse Impact," the City of Louisville (Kentucky) implemented a strategy to develop a comprehensive testing and recruiting program for police recruits. To improve candidate expectations and preparation, the following activities were undertaken: intense recruitment of minorities; revision and validation of a Test Preparation Manual (TPM) that provided motivated candidates from a disadvantaged educational background a means of focused study; and test-taking classes, study skills classes, support groups, and classes covering material in the TPM as well as mini-academies to answer questions about the TPM. Practice tests were also used to help candidates prepare. The city addressed the testing format and content by implementing the TPM approach, offering classes over the material in the TPM, and adding an oral examination to the process. The Angoff method was used to establish a cutoff for scores on the written test. The cutoff was set at lower standards of error, and an alternate method was used to establish wider bands of scores to provide more candidates for consideration. Several problems were encountered: getting support from community leaders, loss of large numbers of minority candidates on the polygraph, and sensationalization of problems by the press and community leaders. (Appendixes include a list of methods to increase validity and reduce adverse impact and a list of Louisville efforts to do so.) (YLB)
REDUCING ADVERSE IMPACT: ONE CITY'S EFFORTS

By Jeff Prewitt
Dr. James Outtz presented a workshop entitled "Innovations In Employment Testing That Improve Validity and Reduce Adverse Impact" at the 1989 IPMAAC Conference in Orlando Florida. Attachment #1 outlines the key points covered by Outtz's three point strategy to develop a comprehensive testing and recruiting strategy for Police Recruit. This paper summarizes how the City of Louisville implemented Dr. Outtz's strategy. Attachment #2 summarizes how we are applying each of Dr. Outtz's individual suggestions.

The research efforts for this project started with a review of our current procedures, a review of relevant literature, and a survey of other jurisdictions. The Chief Examiner then attended the 1989 workshop and began plans to implement workshop suggestions which were not already in effect. Several people helped to implement this program. Dr. Outtz visited the City of Louisville and discussed possible approaches with City of Louisville representatives. Richard Biddle of Biddle & Associates also visited the City of Louisville and offered suggestions. The Jefferson County School Board offered classes to interested applicants and the Division of Police helped Civil Service with the mini-academies.

IMPROVING CANDIDATE EXPECTATIONS AND PREPARATION

The first approach to reducing adverse impact involved improving candidate expectations and preparation. The City of Louisville began targeted selection of minorities by conducting intense recruiting at Colleges and Minority Job Fairs. We worked with Biddle & Associates in extensively revising and validating an existing Test Preparation Manual (TPM) for transportability to our area. All examination items were developed from the TPM and subsequently validated by subject matter experts from the Louisville Division of Police. The TPM simulates the types of materials covered in the Police Academy. The TPM provides motivated candidates from a disadvantaged educational background a means of focused study. Since the material in the TPM will not change for several years candidates who do not do well on their first attempt can keep the TPM and study it for an entire year to prepare for the next examination.
While recruitment, test development and validation were underway, the Chief Examiner began working with the Jefferson County School Board and representatives from the Louisville Division of Police in improving candidate expectations and preparation. The Jefferson County School Board provided test taking classes, study skills classes, support groups, and classes covering the material contained in the TPM at the DuValle Education Center. The Chief Examiner attended question and answer sessions at DuValle and set up two mini-academies at the University of Louisville. The Louisville Division of Police provided Subject Matter Experts at the mini academies to answer questions concerning material in the TPM. The Chief Examiner was available at the DuValle Education Center and at the mini-academies to answer questions concerning the testing process.

Practice tests were also used to help the candidates prepare. Five weeks into the study period the Civil Service Board administered a practice test. Correct responses were posted immediately after the exam. Candidates were able to assess their own level of acquired knowledge in each of the areas the exam covered. This immediate feedback enabled candidates to pinpoint their areas of weakness and tailor their studying accordingly. The practice test was administered at the same location and time of day as the actual test in an effort to condition the candidates. The actual exam was administered two weeks after the practice test. The Jefferson county School Board also provided practice tests over each of the areas covered in the TPM.

TESTING FORMAT/CONTENT AND ADVERSE IMPACT

We addressed the testing format and content by implementing the TPM approach, offering classes over the material in the TPM and adding an oral examination to the process. As stated earlier, differences in educational background can be overcome by increased studying of the material in the TPM. Motivated candidates can increase their chances of being selected by investing extra time in studying the TPM. The motivated candidates can also increase their chances of success by attending the classes and the mini-academies. The classes offered by the Jefferson County School Board and the mini-academies provided another media to communicate the TPM material to the candidates. This process provided tools for motivated candidates to use to increase their preparation for the examination and support groups to help them with their expectations. The process also closely simulates the way Police Recruits will go about doing their job of learning and training to be Police Officers.
INTERPRETING TEST SCORES

The Angoff method was used in establishing a cut-off on the written test. We set the cut-off at one standard error of measurement below the cut-off recommended by the Angoff method. There was no cut-off on the oral test. A final score was obtained by combining the standardized written and standardized oral scores. Instead of using the standard error of measurement in setting the bands an alternate method was used that would establish wider bands and therefore, provide more candidates for consideration. Bands were created by starting at the mean score and moving in both directions one standard deviation at a time making each band width one standard deviation. This method resulted in the certification of 286 candidates. Normal use of the rule of three would have only resulted in 90 candidates for the 30 available positions. This new approach also included everyone with a score at or above the mean.

PROBLEMS TO OVERCOME

Getting support from the leaders in the community was difficult. Critics were skeptical and preferred to sit back and blame tests rather than help systematically address the problems and try to solve them. The Jefferson County School Board helped us by offering training to everyone, but we were unsuccessful in finding mentors to make themselves available to interested African American applicants. The person we contacted to help us with a videotape on test taking also failed to assist us. We are attempting to contact minority leaders again and the Chief Examiner has contacted a new person to help with the test taking videotape.

Another problem which has caused some concern is the loss of large numbers of minority candidates on the polygraph. The major problem for African Americans on the polygraph is the section of questioning concerning drug use. The Louisville Division of Police does not accept anyone who has smoked marijuana in the last three years or taken narcotics in the last six years. Drug testing of probationary Police Recruits may be a less onerous alternative than the polygraph in insuring a drug free workforce.

The frustration that we have found hardest to overcome is that the Press and Community Leaders sensationalize the problems, lay blame on the easiest target, and look for quick fixes. Nobody seems to realize that we are faced with complex problems that need to be addressed systematically. Leaders must step forward and provide assistance and training to African Americans in preparing them to compete in the workplace. Instead of looking for scapegoats, we need to be looking for answers!
Methods to Increase Validity and Reduce Adverse Impact  
(Notes from all day workshop with Dr. James Outtz*)

I Reducing Adverse Impact by Improving Candidate Expectations and Preparation.

A) Spend your time selectively recruiting QUALIFIED minorities and preparing them for the test instead of the usual shotgun approach of trying to get as many minorities as possible to apply.

B) Give pre-test study manuals and/or orientation sessions to describe the testing process, how to prepare for the test and test taking strategies. This should increase the knowledge base of the applicants and reduce differences due to test wiseness and familiarity with the testing process.

C) Give pre-test physical fitness training.

D) Conduct pre-test mini-academies.

E) Administer sample tests as a part of the selection process. This procedure gives applicants realistic expectations, causes inferior candidates to self select themselves out of testing and helps the marginal applicants determine the areas in which they need help.

F) Video presentation of pre-test information can accommodate more candidates at varying times and also insures that all candidates get consistent pre-test information.

II Testing Format/Content and Adverse Impact

Open book tests, visual interactive tests, written tests based on visual information, oral boards, and job simulations tend to have less adverse impact than standard multiple choice tests.

III Interpreting Test Scores

A) Setting cutoffs is a value judgement and is usually a moot issue when a large number of candidates are listed from the top down in order of their scores.

B) Banding has less adverse impact than strict rank ordering especially if affirmative action referrals are made within each band.
CITY OF LOUISVILLE EFFORTS TO ADDRESS DR. OUTTZ’S METHODS TO INCREASE VALIDITY AND REDUCE ADVERSE IMPACT

I Reducing Adverse Impact by Improving Candidate Expectations and Preparation

A) We are conducting intense recruiting at Colleges and Minority Job Fairs throughout the State.

B) A study manual (TPM) is used for our entry level Police Recruit examination. All questions come directly from the manual. Candidates can overcome weaknesses by studying longer and harder.

The Jefferson County School Board provided test taking classes, study skills classes, support groups, and classes covering the material contained in the Test Preparation Manual.

The Chief Examiner attended a couple of classes for the Jefferson County School Board to describe the testing process and answer questions.

D) We conducted pre-test mini-academies to answer questions concerning material in the TPM.

E) We administered a sample test and posted the correct responses on walls outside of the test room to provide immediate feedback to the candidates.

The Jefferson County School Board gave practice tests over the TPM.

F) We contacted someone to present a study and test taking presentation for video recording, but she did not provide the service. We plan to attempt this again with another person.

II Testing Format/Content and Adverse Impact

-- The TPM Process was used.

-- Classes and mini-academies over the material in TPM

-- An oral testing component was added to the selection procedure.

III Interpreting Test Scores

A) We set a cut-off using SME input and then lowered the cut-off to reduce adverse impact.

B) We used banding. Very large bands were created in order to get further down on the list.