

# MERIT SHOP RECRUITMENT AND SELECTION PRACTICES IN ALABAMA

By Roger S. Wolters,<sup>1</sup> and Rebecca C. Burleson<sup>2</sup>

**ABSTRACT:** Despite the fact that the majority of construction workers today are hired by merit shop (nonunion) contractors, little prior research is available on the recruitment and selection practices of such employers. This paper examines the recruitment and selection of skilled and common labor based on mail survey responses from 44 Alabama merit shop (nonunion) contractors. Both the frequency of use and perceived effectiveness of different recruitment sources and selection methods were examined. Sixty-five percent of contractors surveyed did not have a formal written policy covering recruitment and selection procedures. Few firms (<7%) included a specific estimate of recruitment and selection costs as part of project bid proposals. Internal sources (e.g., current employee referral or previous hires) were primarily used to recruit both skilled and common labor. Contractors used an average of seven different sources to recruit skilled labor and six different sources to recruit common labor (e.g., referral from a current employee, previous hires, walk-in applicants). On average, contractors used five different methods to select skilled labor and four different methods to select common labor applicants (e.g., job interview, reference check, written application, drug test). None of the recruitment sources or selection methods used were rated by contractors, on average, as either excellent or very good. Contractors frequently encountered problems recruiting common labor including an insufficient labor supply; inadequate math, technical, and oral or written communication skills; and a poor work ethic or motivation level. Fifty percent of contractors also experienced an inadequate supply of skilled labor. General contractors required significantly fewer days than specialty contractors to hire skilled labor (20 versus 52 days, respectively). General and specialty contractors required, on average, six days to fill a common labor position. These results and recommendations for construction human-resource management practice are discussed in this paper.

## INTRODUCTION

Employee recruitment and selection can affect a contractor's jobsite productivity, work quality and compliance with federal and state equal employment opportunity (EEO) requirements. Effective strategic decisions concerning recruitment and selection alternatives require knowledge of alternative methods' costs and benefits (Cascio 1987). Effective human resource planning of recruitment and selection practices is critical to ensure that the optimum number, type, and quality of personnel are available when needed to complete construction tasks on schedule and within the allocated labor budget.

Because raw materials, technology, and other construction inputs are relatively accessible to all competing contractors in a given geographic area, labor costs often become a key competitive factor distinguishing the low responsive bid on a project. In evaluating labor costs, an effort should be made to quantify the relative costs and benefits associated with a variety of factors including wages and benefits, recruitment and selection, training, productivity, work quality, turnover, absenteeism, materials waste, and job safety. While contractors generally recognize the necessity of recruitment and selection activities, it is also important to regularly evaluate the effectiveness of specific recruitment and selection practices.

Most construction employers engage in a continuous cycle of recruitment and selection activities due to fluctuating contract volume and contractors' desire for flexibility to adjust (hire and layoff) employee payrolls according to job demands. The U. S. Department of Labor ("Union" 1995) estimates that in 1994, only 19.9% of construction employees were represented by unions for purposes of collective bargaining. Thus, the vast majority of construction employees hired today are

not recruited or selected through negotiated union hiring hall procedures. Despite the prevalence and importance of merit shop hiring practices, little prior research has been conducted on recruitment and selection practices or the human resource information needs of merit shop (nonunion) contractors (Bourdon and Levitt 1980; Northrup 1984; Tenah 1986).

Human resource planning decisions are often complicated by the nature of construction industry employment. Characteristics of construction employment include frequent movement of employees between worksites and employers; a relatively large proportion of skilled workers; a significant amount of self-directed work; unstable employment opportunities; multiple employers employing diverse skill types at the same jobsite; and difficult, sometimes dangerous working conditions (Mills 1980). Contrary to the prevailing trend in most private industries, the average age of construction workers actually declined from 37 to 35.7 between 1977-78 and 1989 (Allen 1994). This trend is in part the result of a relatively large decline in construction employment participation once workers reach the age of 45.

Merit shop contractors enjoy increased flexibility and control in determining recruitment and selection practices, but also bear the primary responsibility for managing the time, costs, and legal compliance of the hiring process. Many smaller and some larger contractors lack the time, trained staff, information, or other resources necessary to effectively manage the recruitment and selection process (Allen 1994; Fryer 1990). The primary responsibility for recruiting, selecting, and training workers is often given to field managers overburdened with other job duties. Some services to aid member contractors' recruitment efforts (e.g., computerized job bank, training programs) may be available from local contractor associations such as the Associated Builders and Contractors (ABC).

This exploratory research study examined several questions concerning merit shop recruitment and selection practices. What recruitment sources do merit shop contractors use to inform and attract potential job applicants to available openings? What type of selection methods do merit shop contractors use to screen the suitability of available job applicants for employment? How effective do contractors perceive their current recruitment and selection practices to be? Finally, what types and with what frequency do merit shop contractors en-

<sup>1</sup>Assoc. Prof., Dept. of Mgmt., 415 W. Magnolia, Auburn Univ., AL 36849-5241.

<sup>2</sup>Instructor, Dept. of Build. Sci., 119 Dudley Hall, Auburn Univ., AL. Note. Discussion open until November 1, 1996. To extend the closing date one month, a written request must be filed with the ASCE Manager of Journals. The manuscript for this paper was submitted for review and possible publication on April 3, 1995. This paper is part of the *Journal of Construction Engineering and Management*, Vol. 122, No. 2, June, 1996. ©ASCE, ISSN 0733-9364/96/0002-0152-0157/\$4.00 + \$.50 per page. Paper No. 10446.

counter problems in the recruitment and selection of new hires?

## RESEARCH METHODOLOGY

A written questionnaire was constructed and mailed to a random sample of 172 member firms of the Alabama ABC. A stamped, self-addressed return envelope was included along with a cover letter explaining the purpose of the survey. All responses were confidential. The questionnaire was directed to a person who was knowledgeable about the responding firm's recruitment and selection practices. Individual firm responses were combined for purposes of data analysis and reporting results.

Forty-four questionnaires were returned for a response rate of 25.6%. Data was gathered during a traditionally busy construction period from May to September (1994), which may have reduced the survey's response rate. The 44 firms responding were comprised of 20 (45.5%) general contractors and 24 (54.5%) specialty subcontractors. The median annual dollar volume of contract business per respondent was \$4,500,000. Total employment per firm (regular + temporary hires) ranged from seven to 5,017, with a median employment level of 47. Regular, full-time employees per firm ranged from five to 1,017, with a median employment level of 27.

## RECRUITMENT AND SELECTION POLICIES

The majority (65%) of responding firms did not have a formal, written policy covering recruitment and selection procedures. Firms handling \$5,000,000 or more gross annual contract dollar volume were significantly ( $p = 0.03$ ) more likely to have a written policy than lower contract-dollar-volume firms. Still, only 50% of higher contract-dollar-volume firms had a written recruitment and selection policy.

Only a few firms (6.8%) included any estimate of recruitment and selection costs as a relevant factor in preparing specific project bids. Only 25% of responding firms provided any specific training in recruitment and selection practices to individuals directly responsible for making hiring decisions within the firm. Of those firms which did provide such training, 73.5%, on average, of individuals responsible for making the firm's hiring decisions actually received such training.

## RECRUITMENT SOURCES

Contractors' use of 15 different potential recruitment sources was surveyed. Respondents were asked to rate the effectiveness of each source used by their firm to recruit skilled and common labor on a 5-point Likert-type scale ranging from poor = 1 to excellent = 5 (Robson 1993). These results are presented in Table 1.

Respondents used an average of seven different sources to recruit skilled labor and six different sources to recruit common labor. The most commonly used recruitment sources for skilled labor were referral from a current employee (98%), previous hires (91%), walk-in applicants (89%), internal promotion (89%), and referral from another employer (84%). The most frequent sources used to recruit common labor were referral from a current employee (95%), walk-in applicants (93%), previous hire (93%), and referral from another employer (79%). At least 60% of respondents also used the state employment service and newspaper advertisements to recruit common labor.

None of the 15 recruitment sources for skilled and common labor included in the survey were rated as very good or excellent in effectiveness. Referral from a current employee, internal promotion, and previous hires were rated as good recruitment sources for skilled labor. Referral from a current

**TABLE 1. Mean Use and Effectiveness of 15 Recruitment Sources For Skilled and Common Construction Labor\***

Recruitment source (1)	Skilled labor trades		Common labor	
	Use (2)	Effectiveness rating (3)	Use (4)	Effectiveness rating (5)
Referral from current employee	43 (98%)	3.33	40 (95%)	3.35
Previous hire (former employee)	40 (91%)	3.33	39 (93%)	2.97
Internal promotion	39 (89%)	3.64	19 (45%)	3.21
Walk-in applicant	39 (89%)	2.21	39 (93%)	2.49
Referral from another employer	37 (84%)	2.73	33 (79%)	2.64
Newspaper advertisement	29 (66%)	2.38	25 (60%)	2.16
Vocational/technical/trade school	24 (55%)	2.54	16 (38%)	2.00
State employment service	23 (53%)	2.00	27 (64%)	2.19
Private employment agency	10 (23%)	2.40	10 (24%)	2.40
Nonunion hiring hall	8 (18%)	1.88	8 (19%)	2.13
Employee leasing firm	8 (18%)	2.50	14 (33%)	2.71
Trade/professional journal	7 (16%)	2.00	4 (10%)	1.75
Union hiring hall	5 (11%)	2.80	3 (7%)	3.00
College or university	3 (7%)	1.67	2 (5%)	2.00
Radio/television advertisement	3 (7%)	1.67	2 (5%)	1.50

\*Rating scale: 1 = poor, 2 = fair, 3 = good, 4 = very good, 5 = excellent. The effectiveness rating of each recruitment source is based on data from respondents who used that source. Due to missing data,  $n$  for recruitment sources varies from 42 to 44.

**TABLE 2. Mean Use and Effectiveness of Nine Selection Methods For Skilled and Common Construction Labor\***

Selection method (1)	Skilled Labor Trades		Common Labor	
	Use (2)	Effectiveness rating (3)	Use (4)	Effectiveness rating (5)
Job interview	43 (98%)	3.70	38 (90%)	3.55
Reference check	43 (98%)	3.30	38 (90%)	3.03
Written application	38 (88%)	2.97	36 (86%)	2.81
Drug test	32 (73%)	3.81	31 (74%)	3.81
Written proof of education or skills certification	26 (59%)	3.23	13 (31%)	2.23
Work performance test	15 (35%)	3.47	10 (24%)	2.60
Medical exam	13 (30%)	3.39	12 (29%)	3.33
Standardized personality or motivation test	7 (16%)	2.71	5 (12%)	2.80
Standardized ability test	6 (14%)	3.00	6 (14%)	2.67

\*Rating scale: 1 = poor, 2 = fair, 3 = good, 4 = very good, 5 = excellent. The effectiveness rating for each selection method is based on data from respondents who used that method. Due to missing data,  $n$  for selection methods varies from 41 to 44.

employee, internal promotion, and a union hiring hall were rated as good recruitment sources for common labor (although only 7% of respondents reported using the last source). A college or university, nonunion hiring hall, and radio/television advertisement were each rated as a poor recruitment source for skilled labor. This poor effectiveness rating is consistent with the low usage rate reported for each of these three recruitment sources.

## SELECTION METHODS

Nine different selection methods for skilled and common labor applicants were included in the survey. Respondents were asked to rate the effectiveness of each selection method used by their firm on a five-point Likert-type scale ranging from poor = 1 to excellent = 5. These responses are presented in Table 2.

On average, contractors used five different methods to select skilled labor and four different methods to select common labor. More than 70% of respondents used a job interview, reference check, written application blank, and drug test to select both skilled and common labor. In addition, 59% of the contractors require written certification of an applicant's education/skills to select a skilled laborer.

Methods used to select skilled labor were generally rated more effective than methods used to select common labor. Seven of the nine methods surveyed were rated as a good selection tool for skilled labor, while only four methods received a similar rating as a selection device for common labor.

Selection methods for skilled labor receiving the highest ratings were a drug test, job interview, and a work performance test. A job interview, drug test, medical exam, and reference check were each rated as a good selection method for common labor. Other selection methods surveyed were rated as fair for selecting common laborers.

## RECRUITMENT PROBLEMS

The survey also measured the frequency with which merit shop contractors encountered 10 specific problems in the recruitment of skilled and common labor. Respondents were asked to indicate for each labor type separately, the frequency with which each recruitment problem occurred using the following scale: never = 0, sometimes = 1, quite often = 2, frequently, if not always = 3, and always = 4. The responses of participating contractors are summarized in Table 3.

High recruitment and selection costs was the only item not reported to be a problem at least sometimes. A physical or medical deficiency was a problem encountered sometimes in recruiting common labor, but not skilled labor. The other eight problems surveyed were all encountered at least sometimes in the recruitment of both skilled and common labor.

The most serious problems reported involved the recruitment of common labor, although 50% of respondents quite often experienced an inadequate supply of skilled labor. Many respondents frequently or always encountered the following problems when recruiting common labor: inadequate oral or written skills (47%), inadequate math skills (43%), inadequate technical job skills or knowledge (37%), and a poor work ethic or motivation level (37%).

## WORK PERFORMANCE PROBLEMS

The study also sought to determine the frequency with which Alabama merit shop contractors experienced jobsite work problems with skilled and common laborers. For each labor type, respondents were asked to indicate how frequently each of 11 different work performance problems occurred on the jobsite using the following scale: 0 = never, 1 = sometimes, 2 = quite often, 3 = frequently, if not always, and 4 = always. The results of this analysis are presented in Table 4.

Respondents reported that all 11 work problems surveyed sometimes occurred involving both skilled and common labor.

**TABLE 3. Mean Frequency of Problem Occurrence in the Recruitment of Open-Shop Skilled and Common Labor<sup>a</sup>**

Recruitment problem (1)	Skilled Labor Trades		Common Labor	
	Mean (2)	Standard deviation (3)	Mean (4)	Standard deviation (5)
Inadequate labor supply	2.41	0.99	1.65	1.31
Poor work ethic or motivation	1.76	0.88	2.34	0.94
Inadequate oral or written skills	1.66	0.85	2.21	1.18
Inadequate math skills	1.37	0.88	2.06	1.28
Inadequate technical job skills or knowledge	1.62	0.82	2.06	1.08
Poor prior work history	1.44	0.72	1.80	0.87
Physical or medical deficiency	0.89	0.46	1.11	0.68
High wage costs	1.50	0.97	1.03	0.64
High benefit costs	1.36	1.15	1.09	1.07
High recruitment and selection costs	0.63	0.77	0.50	0.67

<sup>a</sup>Rating scale: 0 = never, 1 = sometimes, 2 = quite often, 3 = frequently, if not always, 4 = always. Due to missing data, *n* varies from 32 to 42.

**TABLE 4. Mean Frequency of Work Performance Problems Involving Open-Shop Skilled and Common Construction Labor<sup>a</sup>**

Work performance problems (1)	Common Labor		Skilled Labor Trades	
	Mean (2)	Standard deviation (3)	Mean (4)	Standard deviation (5)
Requires too much supervision	1.95	0.91	1.33	0.64
Excessive absenteeism	1.83	0.91	1.24	0.66
Excessive tardiness	1.79	0.90	1.14	0.47
Inability to adopt key company values	1.73	1.01	1.41	0.80
Poor work quality/craftsmanship	1.68	0.92	1.33	0.65
Poor job safety work habits	1.64	0.91	1.30	0.64
Voluntary turnover rate too high	1.62	1.01	1.26	0.76
Excessive waste or spoilage of work materials	1.58	0.75	1.29	0.56
Poor teamwork skills	1.55	0.80	1.33	0.64
Difficulty following directions	1.52	0.67	1.07	0.46
Too many discipline or discharge problems	1.39	0.89	1.14	0.68

<sup>a</sup>Rating scale: 0 = never, 1 = sometimes, 2 = quite often, 3 = frequently, if not always, 4 = always. Due to missing data, *n* varies from 40 to 43.

However, no work problem included in the survey was reported by a majority of respondents to occur more frequently than sometimes. More than 20% of contractors did report frequently or always experiencing the following work problems with common labor: require too much supervision (29%), inability to adopt key company values (28%), excessive absenteeism (21%), and voluntary turnover rate too high (21%).

## GENERAL CONTRACTOR AND SUBCONTRACTOR DIFFERENCES

A separate t-test analysis was conducted to identify significant differences ( $p < 0.05$ ) between the recruitment and selection practices of general contractors and specialty contractors. There was no significant difference in the number of recruitment sources or selection methods used by general contractors and specialty contractors. General contractors did rate previous hires significantly higher ( $p < 0.01$ ) as a recruitment source for skilled labor than did specialty contractors. General contractors also rated a private employment agency significantly higher ( $p < 0.05$ ) than specialty contractors as a recruitment source for common labor.

Owners or top managers retained significantly greater control ( $p < 0.05$ ) over hiring decisions in specialty contractor firms compared to general contractor firms. General contractors granted significantly more control ( $p < 0.01$ ) over hiring decisions to jobsite managers compared to specialty contractor firms. Differences in the degree of decentralized hiring authority reported may simply reflect the tendency of general contractors to have larger professional staffs and more employees while conversely, specialty contractor firms are often smaller in size with more direct ownership involvement in the daily-management operating decisions of the firm.

General contractors required significantly fewer days (11 versus 25 days,  $p < 0.05$ ) than specialty contractors to fill skilled labor positions. This may have contributed to general contractors' significantly higher ( $p < 0.05$ ) degree of satisfaction with skilled labor recruitment and selection procedures compared to the satisfaction level reported by specialty contractors.

Specialty contractors reported skilled labor problems with poor motivation or work ethic and high wage and benefit costs

significantly more often ( $p < 0.05$ ) than such problems were reported by general contractors. General contractors did encounter excessive waste or spoilage of work materials by skilled and common laborers significantly more frequently ( $p < 0.05$ ) than did specialty contractors.

## ANALYSIS AND RECOMMENDATIONS

Recruitment and selection (R&S) practices among merit shop contractors in Alabama appear to be relatively informal in nature. The informality of the process is illustrated by the high proportion (65%) of firms lacking a written policy covering R&S procedures, the lack of specific R&S training provided to individuals directly responsible for hire decisions, and the minimal use of R&S cost estimates as a factor in determining project bid proposals.

Informal practices in the construction industry are not necessarily ineffective. Study results suggest that contractors relying on traditional construction R&S practices generally perceive them to be reasonably satisfactory and cost-effective. Without specific quantitative measures of R&S costs/benefits and reliable estimates of their ability to predict future employee job success, it is difficult to determine whether contractors' perceptions are correct or merely a self-fulfilling prophecy. Certainly quantitative data concerning the validity and reliability of R&S practices would be crucial if such practices were to withstand a court challenge under EEO laws (Gatewood and Feild 1994).

Consistent with the national study findings of Northrup (1984), merit shop contractors' in Alabama primarily rely on recruitment sources within their own company knowledge and control (e.g., referrals from current employees, previous hires, walk-in applicants). This pattern is also similar to construction recruitment practices found in Great Britain (Bresnen et al. 1985). Based on the results of the present study, it appears this pattern has become even more entrenched over the years since the Northrup study. Merit shop contractors appear to use external recruitment sources (e.g., state or private employment services, schools, trade journals), much less frequently than many other private U.S. industries to recruit skilled and common labor (*Recruiting* 1988).

The fact that none of the 15 recruitment sources surveyed were rated by the majority of respondents as either very good or excellent suggests a need to reexamine traditional R&S approaches in the construction industry. Problems associated with the quality of available common labor and an inadequate supply of skilled labor documented in this study emphasize a contractor's need for effective R&S practices. A starting point for evaluating the effectiveness of R&S practices would be the cost/benefit ratio of continuing to use current recruitment sources for the skilled or common labor infrequently used or rated poorly by other competitors.

Careful consideration of the job content relevance of selection criteria and methods is necessary to enhance their predictive validity and the reliability of an applicant's future job performance. A good example of this is contractors' frequent use of a drug test to screen out job applicants who might represent a potential job safety hazard or demonstrate future impaired work performance. Unfortunately, one of the most commonly used selection methods in construction, a job interview, has been shown not to be a very valid predictor of future job performance (Wanous 1992; Hunter and Hunter 1984). Hiring decisions based on the results of an unstructured interview (i.e., no predetermined set of questions or response scoring scheme applied to all applicants for the same job), conducted by a single individual are particularly susceptible to interviewer bias or applicant faking.

The use of structured interviews are recommended to increase the validity of field job interviews to a level comparable

with many ability tests (Huffcutt and Arthur 1994). Developing a standard set of job-related questions for each job and a standard scheme for scoring applicant responses (e.g., a five-point scale ranging from poor to excellent), can improve the accuracy and consistency of hiring decisions. Proper training of interviewers and the use of multiple interviewers for the same applicant also helps improve the validity and reliability of hiring decisions.

A written application blank and reference check were two other commonly used selection devices found in this study. Each provides a relatively cost-effective means of gathering or verifying general information about an applicant's qualifications to perform specific construction work. However, these methods often pose the greatest risks for possible equal employment opportunity or fair labor practice violations. Any question which disproportionately screens out minority or same sex candidates, cannot be shown to validly predict successful job performance, or is unrelated to a bona fide occupational requirement may represent unlawful discrimination (Gatewood and Feild 1994). It is also generally unlawful to base a hiring decision on an applicant's present or past association with a labor organization.

Despite increased efforts to recruit racial minorities and women in the construction industry, hiring practices remain a sensitive issue in part because there has been little percentage change in the employment of minority or female construction workers during the 1980s (Allen 1994). Employers should carefully review all information gathered about applicants from an application blank or reference check to ensure that questions do not produce any adverse impact or disparate treatment of any protected group.

Although not widely used by respondents in this study, a work performance test was rated by users as a good selection device, particularly for selecting skilled labor. A work performance test is designed to sample an applicant's ability to perform: "A task or set of tasks which are thought (usually on the basis of job analysis) to have direct, central relevance to the job in question." [Robertson and Kandola (1982), p.171].

Many skilled construction trades require substantial training and experience to learn a set of relatively definable skills, which are typically transferable from one construction project (employer) to another. Work performance tests permit selection decisions to be based on an applicant's demonstrated ability to perform relevant job tasks (skills), rather than simply inferring such ability from an interviewer's evaluation or applicant's responses on an application blank. Accurately assessing the current skills and training needs of job candidates is particularly important for a merit shop contractor who often seeks skilled labor capable of performing multitasks, which cut across traditional union craft jurisdictional lines.

Advantages of a work performance test include high content validity, improved ability to predict job performance, compatibility with nondiscriminatory legal hiring guidelines, and high applicant (employee) acceptance level, particularly in comparison to a written test (Cook et al. 1992). In comparison to alternative selection methods (e.g., application blank, reference check, job interview), some disadvantages of a work performance test include the greater time and cost required to develop and administer such a test in situations involving either a large number of applicants or a large number of dissimilar jobs.

Adopting a "multiple hurdle selection strategy" (Cascio 1991) may be one means of reducing work-sampling time and costs by eliminating the need to measure every applicant on each selection device used. Selection decisions are often based on applicant responses to a battery of predictors (e.g., application blank, reference check, tests, interview). Time and cost considerations may be used to administer selection devices as

a sequential order eliminating at each step, only those applicants who do not meet the established minimum level necessary to progress forward to the next stage. More time-consuming or expensive selection devices, such as work performance tests or structured job interviews, could be administered to only those candidates who successfully meet minimum job requirements on earlier selection devices. Robinson (1981) has demonstrated the successful application of this approach to the selection of a construction superintendent.

Contractors reporting a problem with an inadequate supply of skilled labor should reevaluate current skilled labor recruitment efforts. This appears to be a particular problem for subcontractors who often must contend with greater resource constraints in performing R&S functions (e.g., trained staff, time, availability of timely labor-market information, smaller recruitment budget). Some time and costs sharing may be achieved by encouraging more local contractor associations or joint private-government agency efforts to provide labor market information, referral, or initial screening services. Some employers may prefer to maintain their own computerized database consisting of each individual's skills, work experience, and means of contact to determine current availability for work. Such a database could reduce the time and costs associated with identifying a relevant applicant pool from which to select individuals needed to fill current job vacancies.

Satisfaction with selection outcomes depends on an adequate supply of qualified applicants from which to select. Many recruitment problems associated with the quality of the available common labor supply appear linked to deficiencies in educational and training systems designed to provide labor-force participants with basic skills competencies. Many contractors today face increasing labor-market competition from manufacturing and service organizations for the best common labor applicants available ("Labor" 1992). Technological innovations in construction materials, equipment, and work processes increase the need for adequately trained and motivated construction workers.

Contractors individually or through affiliated associations need to adopt a proactive response to perceived labor quality problems. Contractors should become more involved in efforts to influence the development and funding of local and regional training programs specifically targeted to job requirements in the construction industry. This may involve joint partnerships with specific educational or training institutions or efforts to provide training/work experience programs through individual firms or local contractor associations.

In the future, recruitment of qualified applicants in increasingly competitive local labor markets may require contractors to focus attention on ways to provide workers with greater employment continuity (e.g., transfer to other projects upon completion of current assignment; reciprocal employee loan-sharing arrangements between employers). Economic factors controlling efforts to provide more job stability to construction workers while maintaining competitiveness should promote cooperative industry consolidation in the future. This will likely result in larger, but fewer construction firms providing general and specialty contracting services to regional or national market areas.

## CONCLUSION

Recruitment and selection practices play a vital role in the success of every construction firm. Merit shop contractors have traditionally relied on relatively informal and internal recruitment and selection practices to ensure adequate supply of qualified labor at a competitive cost. Traditional recruitment and selection practices have allowed merit shop contractors to generally meet labor supply and quality needs while maintain-

ing significant flexibility to adjust payroll size and composition to fit individual project demands.

Many firms appear to use a variety of recruitment sources and selection methods based on perceptions that such practices are adequate. Few firms appear to quantify the costs and benefits associated with current recruitment and selection practices in order to measure their effectiveness, objectively allocate scarce firm resources, or seek to recover legitimate costs through the competitive bid process.

Problems confronted by some merit shop contractors affecting the available pool of qualified labor suggest a need to reevaluate traditional recruitment and selection practices to ensure future competitiveness. Both insufficient employer knowledge of the skills or availability of specific workers and insufficient knowledge of available job opportunities by labor market participants can increase the time and costs of matching qualified applicants with available jobs. This can be a particular problem for many smaller, specialty contractors who lack the internal resources to develop and administer a comprehensive recruitment and selection program. Clearly defining R&S procedures, adequately training personnel responsible for hiring decisions, and development of adequate data collection and assessment techniques can improve the effectiveness of hiring decisions and subsequent jobsite worker performance.

Current merit shop hiring and selection practices highlighted in this study provide contractors with an initial basis for comparing and evaluating their own recruitment and selection practices. The importance of doing so must first become a priority of top management, and then be communicated to other organizational levels. Contractors should give more attention to the importance and benefits of effectively managing the recruitment and selection function. Proactive and creative responses to recruitment and selection needs provide an opportunity for a firm to gain a competitive advantage over similar firms operating in the same market environment.

## APPENDIX. REFERENCES

- Allen, S. G. (1994). "Developments in collective bargaining in construction in the 1980s and 1990s." *Contemporary collective bargaining in the private sector*, P. B. Voos, ed., Industrial Relations Res. Assoc., Madison, Wis., 411-445.
- Bourdon, C. C., and Levitt, R. E. (1980). *Union and open-shop construction*. Lexington Books, Lexington, Mass.
- Bresnen, M. J., Wray, K., Bryman, A., Beardsworth, A. D., Ford, J. R., and Keil, E. T. (1985). "The flexibility of recruitment in the construction industry: formalisation or re-casualisation?" *Sociology*, 19(1), 108-124.
- Cascio, W. F. (1987). *Costing human resources*, 2nd Ed., PWS-Kent Publishing Co., Boston, Mass.
- Cascio, W. F. (1991). *Applied psychology in personal management*, 4th Ed., Prentice-Hall, Inc., Englewood Cliffs, N.J., 289-291.
- Cook, M. F., McClelland, D. C., and Spencer, L. M. Jr. (1992). "Selection." *The AMA handbook for employee recruitment and retention*, M. F. Cook, ed., Am. Mgmt. Assoc., New York, N.Y., 107-112.
- Fryer, B. G. (1990). *The practice of construction management*, 2nd Ed., Blackwell Scientific Publications Ltd., Oxford, England, 161-181.
- Gatewood, R. D., and Feild, H. S. (1994). *Human resource selection*, 3rd Ed., Harcourt Brace & Co., Orlando, Fla., 25-109.
- Huffcutt, A. I., and Arthur, W. Jr. (1994). "Hunter and Hunter (1984) revisited: interview validity for entry-level jobs." *J. Appl. Psychology*, 79(2), 184-190.
- Hunter, J. E., and Hunter, R. F. (1984). "Validity and utility of alternative predictors of job performance." *Psychology Bull.*, Vol. 96, 72-98.
- "Labor letter." (1992). *Wall Street J.* (Nov. 10), A-1.
- Mills, D. Q. (1980). "Construction." *Collective bargaining: contemporary American experience*, G. G. Somers, ed., Industrial Relations Res. Assoc., Madison, Wis., 49-97.
- Northrup, H. R. (1984). *Open shop construction revisited*. Industrial Res. Unit, The Wharton School, Univ. of Penn., Philadelphia, Pa., 375-407.
- Recruiting and selection procedures, personnel policies forum survey No. 146*. (1988). The Bureau of Nat. Affairs, Inc., Washington, D.C.
- Robertson, I. T., and Kandola, R. S. (1982). "Work sample tests: validity,

- adverse impact and applicant reaction." *J. Occupational Psychology*, 55(3), 171–183.
- Robinson, D. D. (1981). "Content-oriented personnel selection in a small business setting." *Personnel Psychology*, 34(1), 77–87.
- Robson, C. (1993). *Real world research*, Blackwell Publishers, Cambridge, Mass., 256–260.
- Tenah, K. A. (1986). "Construction personnel role and information needs." *J. Constr. Engrg. and Mgmt.*, ASCE, 112(1), 33–48.
- "Union members in 1994." (1995). *News*, U.S. Dept. of Labor, Bureau of Labor Statistics, Washington, D.C., 3.
- Wanous, J. P. (1992). *Organizational entry*, 2nd ed., Addison-Wesley Publishing Co., Reading, Mass., 139–141.