

# TCRP

## SYNTHESIS 40

TRANSIT  
COOPERATIVE  
RESEARCH  
PROGRAM

### **A Challenged Employment System: Hiring, Training, Performance Evaluation, and Retention of Bus Operators**

*A Synthesis of Transit Practice*

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## TCRP SYNTHESIS 40

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# A Challenged Employment System: Hiring, Training, Performance Evaluation, and Retention of Bus Drivers

### *A Synthesis of Transit Practice*

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## TRANSIT COOPERATIVE RESEARCH PROGRAM

The nation's growth and the need to meet mobility, environmental, and energy objectives place demands on public transit systems. Current systems, some of which are old and in need of upgrading, must expand service area, increase service frequency, and improve efficiency to serve these demands. Research is necessary to solve operating problems, to adapt appropriate new technologies from other industries, and to introduce innovations into the transit industry. The Transit Cooperative Research Program (TCRP) serves as one of the principal means by which the transit industry can develop innovative near-term solutions to meet demands placed on it.

The need for TCRP was originally identified in *TRB Special Report 213—Research for Public Transit: New Directions*, published in 1987 and based on a study sponsored by the Federal Transit Administration (FTA). A report by the American Public Transit Association (APTA), *Transportation 2000*, also recognized the need for local, problem-solving research. TCRP, modeled after the longstanding and successful National Cooperative Highway Research Program, undertakes research and other technical activities in response to the needs of transit service providers. The scope of vice configuration, equipment, facilities, operations, human resources, maintenance, policy, and administrative practices.

TCRP was established under FTA sponsorship in July 1992. Proposed by the U.S. Department of Transportation, TCRP was authorized as part of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). On May 13, 1992, a memorandum agreement outlining TCRP operating procedures was executed by the three cooperating organizations: FTA, the National Academy of Sciences, acting through the Transportation Research Board (TRB), and the Transit Development Corporation, Inc. (TDC), a nonprofit educational and research organization established by APTA. TDC is responsible for forming the independent governing board, designated as the TCRP Oversight and Project Selection (TOPS) Committee.

Research problem statements for TCRP are solicited periodically but may be submitted to TRB by anyone at anytime. It is the responsibility of the TOPS Committee to formulate the research program by identifying the highest priority projects. As part of the evaluation, the TOPS Committee defines funding levels and expected products.

Once selected, each project is assigned to an expert panel, appointed by the Transportation Research Board. The panels prepare project statements (requests for proposals), select contractors, and provide technical guidance and counsel throughout the life of the project. The process for developing research problem statements and selecting research agencies has been used by TRB in managing cooperative research programs since 1962. As in other TRB activities, TCRP project panels serve voluntarily without compensation.

Because research cannot have the desired impact if products fail to reach the intended audience, special emphasis is placed on disseminating TCRP results to the intended end-users of the research: transit agencies, service providers, and suppliers. TRB provides a series of research reports, syntheses of transit practice, and other supporting material developed by TCRP research. APTA will arrange for workshops, training aids, field visits, and other activities to ensure that results are implemented by urban and rural transit industry practitioners.

The TCRP provides a forum where transit agencies can cooperatively address common operational problems. TCRP results support and complement other ongoing transit research and training programs.

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The members of the technical advisory panel selected to monitor this project and to review this report were chosen for recognized scholarly competence and with due consideration for the balance of disciplines appropriate to the project. The opinions and conclusions expressed or implied are those of the research agency that performed the research, and while they have been accepted as appropriate by the technical panel, they are not necessarily those of the Transportation Research Board, the Transit Development Corporation, the National Research Council, or the Federal Transit Administration of the U.S. Department of Transportation.

Each report is reviewed and accepted for publication by the technical panel according to procedures established and monitored by the Transportation Research Board Executive Committee and the Governing Board of the National Research Council.

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## **PREFACE**

A vast storehouse of information exists on many subjects of concern to the transit industry. This information has resulted from research and from the successful application of solutions to problems by individuals or organizations. There is a continuing need to provide a systematic means for compiling this information and making it available to the entire transit community in a usable format. The Transit Cooperative Research Program includes a synthesis series designed to search for and synthesize useful knowledge from all available sources and to prepare documented reports on current practices in subject areas of concern to the transit industry.

This synthesis series reports on various practices, making specific recommendations where appropriate but without the detailed directions usually found in handbooks or design manuals. Nonetheless, these documents can serve similar purposes, for each is a compendium of the best knowledge available on those measures found to be successful in resolving specific problems. The extent to which these reports are useful will be tempered by the user's knowledge and experience in the particular problem area.

## **FOREWORD**

*By Staff  
Transportation  
Research Board*

This synthesis will be of interest to transit agency professionals and the consultants who work with them in dealing with bus operator employment processes. It offers a snapshot of public agencies' practices in bus operator hiring, training, performance evaluation, and retention. Each of these areas is uniquely different, but also highly interrelated; therefore, it is necessary to consider all areas for a complete understanding of the subject. The transit industry is experiencing the same stresses on its employment processes as are affecting employers across the country. This tight labor market, combined with changing work-force demographics and difficult transit working conditions, creates a definite staffing challenge. Survey information provided might suggest that transit has not yet adopted an across-the-board, systematic approach to employment systems, where the elements of hiring, training, performance evaluation, and retention are handled in an integrated fashion. The focus in this document is on presenting information reported simply and in such a way as to reinforce the interrelated nature of employment processes and opportunities for transit agencies to realign efforts so that they might work in an integrated fashion.

Administrators, practitioners, and researchers are continually faced with issues or problems on which there is much information, either in the form of reports or in terms of undocumented experience and practice. Unfortunately, this information often is scattered or not readily available in the literature, and, as a consequence, in seeking solutions, full information on what has been learned about an issue or problem is not assembled. Costly research findings may go unused, valuable experience may be overlooked, and full consideration may not be given to the available methods of solving or alleviating the issue or problem. In an effort to correct this situation, the Transit Cooperative Research Program (TCRP) Synthesis Project, carried out by the Transportation Research Board as the research agency, has the objective of reporting on common transit issues and problems and synthesizing available information. The synthesis reports from this endeavor constitute a TCRP publication series in which various forms of relevant information are assembled into single, concise documents pertaining to a specific problem or closely related issues.

This document from the Transportation Research Board integrates information from a literature review of transit and related periodicals and websites, and from survey re-

sponses from 29 transit agencies, as well as with contacts with agencies reporting new and innovative practices.

To develop this synthesis in a comprehensive manner and to ensure inclusion of significant knowledge, available information was assembled from numerous sources, including a number of public transportation agencies. A topic panel of experts in the subject area was established to guide the researchers in organizing and evaluating the collected data, and to review the final synthesis report

This synthesis is an immediately useful document that records practices that were acceptable within the limitations of the knowledge available at the time of its preparation. As the processes of advancement continue, new knowledge can be expected to be added to that now at hand.

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Christopher W. Jenks, Manager, Transit Cooperative Research Program, assisted TCRP staff in project review.

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# **A CHALLENGED EMPLOYMENT SYSTEM: HIRING, TRAINING, PERFORMANCE EVALUATION, AND RETENTION OF BUS OPERATORS**

## **SUMMARY**

The transit industry is experiencing the same stresses on its employment processes as those effecting employers across the United States. Unemployment levels throughout the country have been at their lowest in the past 30 years. As of December 2000, the nation's unemployment rate was 4.0 percent. In 1999, the nation's unemployment rate was 4.2 percent. Labor experts and economists expect that the worker shortage is going to continue.

In addition to the effects of the tight labor market, the American work force has changed in several ways that also impact employment. Today's work force is more mobile and has higher expectations of its' employers. The attitudes of American workers have shifted from their former beliefs about the desirability of life-long employment with a single company to a desire to work in a rewarding environment where they will have the opportunity to develop and succeed.

In 1999, more than 65 percent of surveyed transit managers reported that their agencies were significantly understaffed. Recruitment, retention, and turnover are among their top concerns. This may be due to transit managers becoming increasingly aware of how the working conditions of bus operators effect their ability to compete for workers in today's economy. Many agencies have responded to these staffing challenges by improving operator pay and benefits; however, some are finding that the difficult working conditions for new and part-time operators can outweigh even the higher pay and benefits. There is industry concern that agencies may not have the flexibility to raise entry level and training pay rates high enough or quickly enough to respond to market conditions.

Transit managers are concerned about attracting and retaining quality applicants, about the ability of new hires to successfully complete training programs, and about how new bus operators will provide quality customer service. They are finding that they must implement different kinds of outreach and put more effort into marketing the bus operator position. There is a need to continue to provide competitive pay and benefits, and to create a corporate culture focused on retaining employees once they are hired. Effective selection processes that are predictive of future job success, effective training programs, periodic refresher training, and other skill development opportunities are important considerations. In addition, agencies appear to be looking for new, better, and fairer ways to assess the performance of their operators. This may be due to a management perception that the performance feedback operators receive and the quality of their interactions with mentors, trainers, and supervisory staff could reduce dysfunctional turnover and raise the quality of service provided to the public.

Although there is some interest and appreciation of quantitative approaches to selecting and monitoring the performance of bus operators, it does not appear from this review that transit agencies are routinely pursuing methods of quantification and measurement as part of their decision making. For example, this survey found only a few agencies identifying and quantifying the success factors of the bus operator position and collecting information about selection ratios, a potential indicator of recruitment technique productivity. Exit interviews are not routinely performed, and when they are performed, it is not clear that they are assessed for patterns and/or trends. This survey did find, however, that approximately one-half of the surveyed agencies did collect turnover statistics and that some did use those statistics to measure the quality of their selection process or their retention efforts.

There appear to be opportunities for agencies to realign their hiring, training, development, and retention efforts so that they work in an integrated fashion. The general impression is that for a variety of reasons not identified by this synthesis, the transit industry has available recruitment, selection, training, and retention tools that are not being used. This general impression, however, must be reviewed within the context of a national labor shortage and that each transit organization is unique, with its own demographics, labor rules, and restrictions. This synthesis does not address those differences or other constraints facing the transit industry or individual agencies.

## INTRODUCTION

### BACKGROUND

Despite recent economic changes, the United States has experienced six consecutive years of economic growth combined with historically low unemployment levels. The tight labor market has made it difficult for employers to find qualified applicants, and has made it easier for workers to leave for better opportunities. Transit agencies are increasingly rating the recruitment and retention of employees among their highest priorities. According to survey respondents, staffing has been and continues to be a serious challenge. More than 65 percent of survey respondents noted that understaffing was a serious problem for their agencies in 1999. Fifty percent of respondents stated that getting enough applicants and enough quality applicants was their primary bus operator selection concern. These agencies are struggling to generate adequate pools of quality applicants and want to learn more about how to hold onto their bus operators, particularly the new hires.

Because labor costs constitute a major portion of the transit operating budget, the hiring, training, performance evaluation, and retention of employees have always been critical issues. Competition in the labor market for quality workers is intensified by a changing culture that has evolved around long-term job tenure. Organizational loyalty, where employees sought lifetime career employment, has diminished significantly. The breakup of the traditional family, ease of travel, and the connecting influence of high technology communication has changed the way people work, where they live, and how they view employment. Workers are more mobile, shifting geographically both within their communities and the nation. Human resource experts and employee satisfaction survey results suggest that today's employees place higher value on the type of work they do, how they are treated, and other aspects of their work experience than they place on compensation. Employees are now looking for a healthy balance between work and family.

Transit costs are directly impacted by the industry's ability to hire and retain bus operators. Transit managers are seeking selection processes that identify high-quality applicants with a commitment to customer service and organization goals. Organization costs may be reduced by hiring quality operators with a lower risk for accidents, better customer service skills, better compliance with procedures, and good attendance. In addition, fully staffed agencies are potentially better able to reduce and control scheduled and unscheduled overtime.

This survey found little activity by transit agencies in researching and identifying success criteria for the position of bus operator. Examples of measurement and quantification in all areas of employment practice seem to be the exception rather than the rule. Measurement of the quality of new hires has the potential to improve selection methods, training programs, and retention when grounded to measurements of the quality of the customer's experience, and to measurements of the organization's ability to stay within budget while meeting agency expectations that may provide a path for improving transit performance.

The transit systems surveyed provided information that might suggest that transit has not yet adopted an across-the-board, systematic approach to employment systems, where the elements of hiring, training, performance evaluation, and retention are handled in an integrated fashion. It appears that many transit organizations may be operating in a reactive mode, with too few quality applicants funneled into more frequent, if less full, training classes and being phased into service as quickly as possible. New hires are faced with traditionally challenging entry-level working conditions of split shifts, variable work schedules, and stressful daily working conditions.

Survey respondents report that performance management is typically through exception-based reporting systems (i.e., missouts, attendance, and accidents) and guided by extensive policy and work rule guidelines. With annual turnover at about 11 percent, specific retention efforts tend to be highly focused on pay and benefits. This turnover may result from challenging working conditions and a robust economy, which has provided workers with dramatically more employment opportunities. A large percentage of transit bus operators continue to come from a non-skilled, nontransit background, and extensive skills training for new operators seems to be the norm. Only a few efforts to determine the impacts of pay, benefits, job fit, training, or other retention activities on turnover were found. Exit interviewing and subsequent analysis was reported only in a few instances.

### PURPOSE OF THE SYNTHESIS

This synthesis is intended to provide a snapshot of public transit bus operator practices. The report is organized by

the following topic areas: hiring, training, performance evaluation, and retention. Each of these four areas is uniquely different, but also highly interrelated; therefore, it is necessary to consider all areas for a complete understanding of the practices.

This synthesis was prepared using data gathered from a literature review of transit and related periodicals and websites, and from a survey conducted in May 2000. The survey was sent to a random sample of 75 transit agencies with bus operations of at least 100 employees. The 71-item questionnaire was distributed to agencies throughout the United States and Canada. Responses were received from seven large agencies (1,000 or more operators), nine medium agencies (450–1,000 operators), and 13 small agencies (0–449 operators) for a 26 percent response rate, with a representative distribution of all geographic sectors of the United States.

The synthesis consultants reviewed the survey responses and made several contacts with agencies reporting new and innovative practices. Those agencies able to participate in these follow-up conversations were more likely to have their practices reported in this synthesis. Examples of specific agency efforts and experience are presented in the body of this report to provide the reader with the information necessary to explore his or her own particular interests in more detail. Some examples presented in this synthesis come from the consultants' own work and knowledge of agency practices. Although every effort was made to identify innovative and successful practices, it is possible that some good examples are not included in this report, because of the inherent limitations of random sampling and literature reviews, and the mechanics of compiling large amounts of information.

## **ORGANIZATION OF THE SYNTHESIS**

Chapter 1 introduces the major employment concerns transit managers face today and some of the reasons for those concerns. Chapter 2 describes the hiring practices of surveyed properties, including work-force planning, recruitment techniques and opportunities, trainee and bus operator pay, job success criteria, selection processes, and validation. Chapter 3 describes the training practices of surveyed properties, including length, content, delivery, and measurement. Practices related to transition to work and to remedial and refresher training are reviewed and discussed. The impacts of new and rapidly advancing technology in the training area are examined and innovative applications are highlighted. Chapter 4 describes the performance evaluation practices for surveyed properties, including formal and informal evaluations, how evaluations are used, what is measured, who conducts evaluations, satisfaction levels with evaluation processes, and identification of critical performance indicators. Pay for performance is also examined. Chapter 5 describes the retention practices of surveyed properties including strategic retention planning, use of exit interviews, retention statistics, retention techniques, and integration of retention practices with hiring, training, and performance evaluation processes.

The synthesis closes with conclusions based on the survey data, suggestions about areas where further exploration may help agencies build on successful industry practices, and recommendations for further research or further synthesis of targeted areas.

The survey questionnaire appears in Appendix A. Agencies are listed in Appendix B by geographic location. A complete summary of survey data is provided in Appendix C.

## HIRING OF BUS OPERATORS

### PLANNING

The hiring process for bus operators begins with work-force planning. For many agencies, this is a matter of staffing to a board-approved number of full-time equivalents. This method of planning may not take operating needs into consideration, may increase scheduled and unscheduled overtime, and could build operator dependence on overtime. Another approach is to estimate the number of new bus operators needed by reviewing the upcoming run cut or by responding to operations staff when they are consistently challenged in filling work assignments or when they are paying overtime. Although this is a fairly straightforward approach, it can be short-term or reactionary. In a reactive mode, it could be months before new operators have been trained and hired, and by then the need may have intensified.

San Diego Transit and the Utah Transit Authority are two examples of agencies that use proactive models for staffing. Such models forecast staffing levels from the agency's historical experience. Work-force staffing models might take attendance and turnover experience and couple it with a work-force demand model driven by transportation service hours. By using these models, future staffing needs can be predicted by assessing operating requirements, service changes, and service variability; historical employee absenteeism; vacations; turnover; training and transition-to-work turnover; trainer "absences"; selection time-frame; and training duration. A disadvantage is that these kinds of models often require regular maintenance and updating. For a more thorough explanation of one work-force model, see Appendix D.

### RECRUITMENT

Fifty percent of survey respondents stated that their main concern in the area of bus operator recruitment and selection was attracting enough applicants, particularly good quality applicants. Better quality applicants included those with improved customer service performance and better attitudes. One agency sought to hire applicants with improved map reading and routing sense skills. Another agency indicated that they wanted to increase the screening process, and one wanted to screen out applicants with "attitudes." At least one agency indicated that a primary recruitment concern was their fear of Americans with Disabilities Act (ADA) lawsuits.

Efforts to supply the organization with the right quantity and quality of bus operators begins with the choice of techniques for attracting qualified individuals to the agency's application and selection processes. The agencies surveyed use several recruitment options. To better understand whether the use of multiple options affected recruitment performance, a comparison was made of the number of recruitment sources with the total number of applicants, and also with whether an agency was understaffed in 1999. No statistically interesting results were obtained from that line of inquiry, although there was one statistically significant relationship found between agency staffing and recruitment resources. Specifically, agencies that were not understaffed were significantly more likely to have an in-house recruitment process and to have tried recruitment over the Internet. A complete table of all identified recruitment resources, and the number and percent of respondents who indicated they utilized each resource, is provided in Table 1.

TABLE 1  
RECRUITMENT RESOURCES RANKED BY  
PERCENT OF USE

Resource	No.	Percent
Newspaper advertising	28	97
Walk-ins	25	93
Employee referral	22	81
Internet	18	62
Ethnic newspaper	17	59
Job fair	15	52
In-house	10	34
Ad/fly bus	9	31
Union referral	8	28
On bus	7	24
Community referral	7	24
Employment agency	6	21
Recruiter	5	17
Job service	5	17
Trade publication	5	17
Welfare	5	17
Radio	4	14
Open house	4	14
Political referral	4	14
Temp agency	4	14
Special interest groups	3	10
Shelter flyer	3	10
Sign-on bonus	3	10
Television	1	3
Pass outlet	1	3

Note: Percentages based on 29 responses.

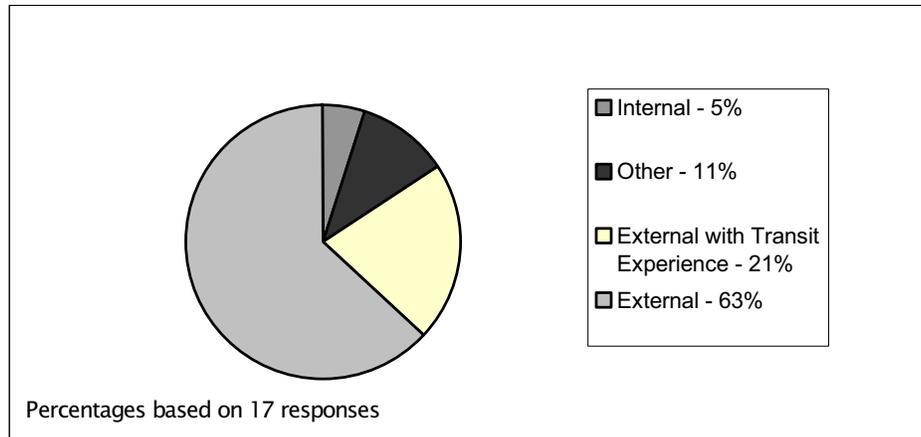


FIGURE 1 Applicant sources for surveyed agencies.

### Recruitment Sources

Sixty-three percent of bus operator applicants at surveyed agencies come from outside the agency and have a non-transit background. Twenty-one percent of bus operator applicants from surveyed agencies are hired with a transit background, and 10 percent are internal applicants coming from somewhere within the transit agency. Approximately 11 percent of bus operator applicants from the survey group come from “other” sources. Through follow-up, it was learned that most of these “other applicants” are external applicants, with or without driving experience. More specifically, one agency classified all of their applicants as “other” because they came from civil service examinations. Some agencies used “other” to identify applicants from trucking or other driving industry, and from a variety of other professional (nondriving) backgrounds. Figure 1 summarizes each of the bus operator applicant origination categories.

Agencies that were not understaffed in 1999 were more likely to have hired applicants from a greater variety of backgrounds than agencies that were understaffed. Specifically, agencies that hired more internal (in-house) applicants and external applicants with transit experience were significantly less likely to have been understaffed in 1999 (see Figure 2). Conversely, understaffed agencies relied more heavily on external applicants with no transit experience. Although the sample size was small, this finding may have some research merit for agencies that are looking for ways to address their staffing challenge.

According to an American Public Transit Association (APTA) diversity survey, conducted in December 1999, males account for approximately 74 percent of the transit work force, a proportion that is substantially higher than the 54 percent male representation in U.S. households found in the Bureau of Labor Statistics Household Surveys (1). This may indicate that additional recruitment efforts targeting women could be a recruitment opportunity.

The bus operator position in many transit organizations is a “port of entry” job, where people begin their transit employment. Some proportion of the bus operators will eventually apply for other jobs within the organization, as they become available. This internal movement may be a point of consternation for those responsible for maintaining bus operator staffing levels, but it may also represent an opportunity for the rest of the organization to hire internal applicants who have “front line” service delivery experience.

### Newspaper Advertisements and Other Types of Recruitment

Newspaper advertising is the most common method of attracting bus operator applicants. To compete in today’s labor market, transit help-wanted advertisements need to be at least as compelling as those of the competition. Recruitment is an opportunity for the agency to sell itself to potential employees who are looking to “buy into” a job and quite possibly, an organization. All but one small agency (62 employees) cited help-wanted classified ads as their major source of applicants. Large advertisements typically produce more applicants, as do ads that are run more frequently. Creative, compelling, or noticeable graphics and powerfully written advertisements have the ability to grab the attention of applicants, some of whom have never previously considered a career in public transit. Conversely, transit help-wanted ads that are overly wordy, are written in transit-specific language that applicants may not recognize, are compressed into small amounts of space, and that lack interesting graphics or headlines elicit fewer responses.

After grabbing an applicant’s attention and interest, help-wanted advertisements need to be informative, telling applicants exactly what is expected of them, the job’s qualifications, and how they should apply.

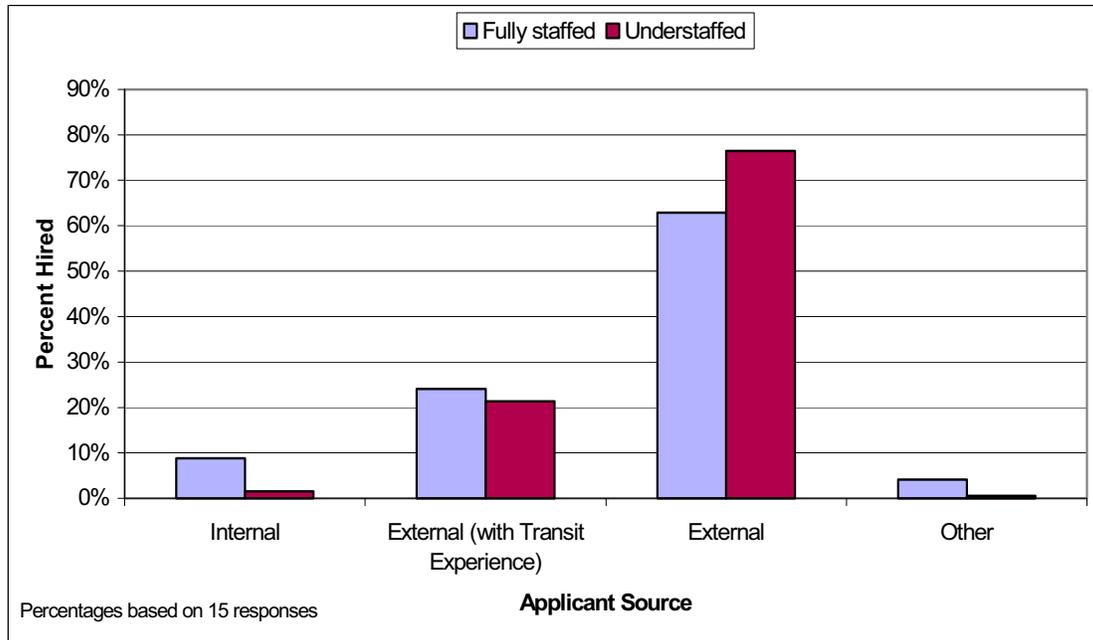


FIGURE 2 Comparison of applicant sources and staffing level in 1999.

Twenty-four percent of survey respondents indicated that they were concerned about the job conditions of bus operators. These respondents reported that many of their applicants and some of their newly trained bus operators declined job offers or quit soon after training because they didn't like the work schedules and hours.

Working conditions for bus operators are undeniably challenging, but there may be other aspects of the job that can be marketed: excellent pay, benefits, job security, working with people, opportunities for advancement, organizational excellence, working towards a better environmental solution, and the ability to work independently. Efforts to create as much of a realistic job profile as is possible could help applicants make good job decisions before they apply.

One agency with an eye-catching bus operator recruitment advertisement was Tri-Met in Portland, Oregon. They combine a provocative headline, interesting graphics, some good benefit information, brief job requirements, and then provide three different ways for applicants to contact them or learn more (Figure 3).

One surveyed agency found that it was helpful to have a system for verifying that their help-wanted classified ads were running as scheduled, and that the content is exactly what was ordered. This system was developed after some painful experiences with placing ads that did not run as scheduled or discovering that the ads appeared in the wrong section of the paper, or that some critical information was absent or incorrect.

Although, placing help-wanted advertisements is clearly the most common choice for recruiting applicants (and typically the most productive), there are many other options that can be tried when attempting to attract the elusive best-qualified applicant. At Montebello Bus Lines in California, magnetic advertisement signs are placed on supervisor's cars promoting "Bus Operator Openings" and providing contact information. Applicants have actually flagged down these supervisors to get information and often an application. Bus operators are also encouraged to talk with customers about job opportunities. The transit operations manager noted that the program had been in place for about 6 months at the time of the survey, and that it had definitely increased the number and quality of their applicants, and possibly improved retention. Another agency places their bus operator job announcements at the local Department of Motor Vehicles (DMV) office. More specific recruitment innovations and successes are presented throughout in this chapter.

Applicants can also draw impressions about a potential employer from the steps they must complete and how the process is handled as they consider and are in turn considered for employment. During the application process the applicant may interact with staff handling the paperwork, human resources staff, operations staff and/or management, actual bus operators, and other employees participating in orienting the applicant to the position or the agency. The behavior of each transit employee encountered during the process can be included in an applicant's evaluation of the job, pay, and working conditions and be reflected in the applicant's subsequent decision.

*Tri-Met is hiring bus drivers.*

# COME FOR THE BENEFITS STAY FOR THE OPPORTUNITIES



Fully paid medical, dental and vision benefits after only one month of employment. Start with part-time and progress to a full-time career, \$10.32/hour to start, \$12.17 in 6 months, \$18.76 in three years.

**Requirements:**

- Two years strong customer service skills
- Five years good driving record
- Solid work record

Or for application details call 503-962-7635, stop by Tri-Met, 4012 SE 17th, or visit our website at [www.tri-met.org/jobs](http://www.tri-met.org/jobs).



**How we get there matters.**

*Tri-Met is an equal opportunity employer and drug-free workplace employer.*

FIGURE 3 Tri-Met's (Portland, Oregon) effective help-wanted advertisement.

At least one transit agency found that their application takers (members of the same agency, but from a different department than human resources) resented the time they were required to spend helping applicants. As a result, prospective applicants found themselves faced with unhelpful company representatives.

Indirect recruitment can occur when an applicant is exposed to the organization through personal experience with the transit system, through contacts with operators, while on board buses, and through hearing about the organization from the media or other third parties.

Although increasingly applicant flow produces more applicants, it does not guarantee better quality applicants. Some agencies have noticed that an increase in applicants causes more applicant processing than it does improvements in overall applicant quality. To gauge whether certain types of recruitment techniques are producing better quality applicants some agencies calculate selection ratios, which measure by source the number and success of applicants selected as a percentage of the number processed.

CT Transit in Hartford, Connecticut, was not understaffed in 1999. CT Transit staff report that the booming

economy has created some recruitment problems, but that there are still plenty of good quality candidates available. Because their agency is adequately staffed, they can implement an idea that can save everyone time. Interested applicants fill out interest (or registration) cards instead of completing pages-long applications. Then, when openings occur, the postcard-sized cards are mailed back to the applicants requesting them to contact human resources if still interested.

### **Good Applicants Are Highly Perishable**

In a tight labor market, potential applicants will not wait around during a long, drawn-out selection process. In transit, the hiring of bus operators, the time between recruitment and the first day of training, can often take weeks and sometimes, even months. According to some experts, serious applicants who are ready to make a job change are going to do it within 5 to 7 days (2). The United Parcel Service holds a weekly visit and orientation for prospective new employees, with selection decisions following within several days.

One way of speeding up the selection process was found at the Orange County Transportation Authority. They developed an agreement with the state of California that allows them to run an applicant's DMV reports, thereby eliminating the inconvenience of applicants waiting at the DMV for driving records. They have also adopted a 1-page Bus Operator Application to take the place of the previous multiple-page application (see Appendix E).

Another way of making it easier to apply for bus operator positions has been undertaken by Montebello Bus Lines. They have changed their recruitment practice from one requiring applicants to already possess a commercial driver's license (CDL) to one of "no driving experience required," focusing instead on customer service skills. They feel that this has increased their applicant pool and also believe that their trainee quality has improved.

### **Hiring Policies and Documents**

Fifty-six percent of surveyed agencies reported having a hiring policy, while 81 percent have a job description. Those agencies with written hiring policies had more applicants and tended to be the larger agencies. Forty-one percent of survey respondents have a recruitment package, 71 percent have a standard recruitment advertisement, 78 percent have a job posting/announcement for bus operator, and 56 percent have a mission/vision statement.

The recruitment process begins with an agency's policies about applicants and employees. These policies can

help to guide, standardize, and maximize recruitment process effectiveness. These same policies, however, have the potential to constrain recruitment effectiveness by relying upon past practice and, possibly, by inadvertently constraining unique, creative approaches for each recruitment.

### **Recruitment Packages**

Recruitment information packages for applicants are offered by 41 percent of agencies surveyed. These packages contain a range of information from the structure of the selection process to job descriptions; working conditions; pay and benefits information; information on pre- and post-employment requirements, including drug and alcohol testing requirements; and organization and system information. The recruitment package is an opportunity for the agency to present itself in the best possible light and also to provide realistic preview information about what the position entails. Typically, recruitment packages are made available at those agency locations with public access, during open application sessions, at career fairs, through the mail, and through job service agencies. Some agencies also make them available on busses and in operations supervisor cars.

### **Referral Bonuses**

In transit, the practice of giving referral bonuses has grown. Of the surveyed agencies, 81 percent use an employee referral process. In addition, 31 percent of respondents said that their referral program was one of their most successful programs in the area of recruitment and selection, and two agencies reported success with their sign-on bonuses.

Although cash is a common incentive, employees making referrals are also inexpensively rewarded with transit memorabilia (t-shirts, mugs, etc.), movie passes, and discount passes to shows and other events. The smaller the incentive, the more likely it is used to increase applicant flow. The larger the incentive, the more likely it is to be tied to demonstrated job tenure. Most cash referral bonuses tie the payment of bonuses to steps in the referred employee's tenure, such as completion of training, completion of probation, or a specified retention period, usually of 6 to 12 months. These contingent referral bonuses are structured so as to discourage gratuitous hires and to increase the likelihood that the quality of referrals is high.

Referral programs can serve organizations in several ways. As employees sell the organization to others, they are reminded of the good things about their job; and if the person is hired, that new operator has a ready-made support system in their referrer. Although employers may save

on recruitment costs, experts suggest that the real incentive comes from better quality applicants. This has been the experience of one agency, which has been using employee referral bonus systems for almost 10 years. This agency tracked employee referrals for 2 years and found that referrals outperformed nonreferrals with fewer avoidable accidents; fewer negative observations, tickets, or disciplines; fewer unexpected absences (sick outs plus missouts); fewer absences; and more commendations. They also compared total recruitment costs and found applicants recruited through newspaper ads cost about 74 percent more than applicants referred by employees, even when referring employees were paid \$250 referral incentives. That same agency is currently offering a \$350 referral incentive.

The Ann Arbor Transit Authority in Ann Arbor, Michigan, uses referral bonuses to increase their applicant flow. Their referral program uses phased payments (\$100 when a new hire completes probation and \$800 at the end of the referral's successful completion of the first year of employment). To be eligible for these incentives, the person making the referral must also serve as a mentor to the referral. Ann Arbor believes that this added commitment helps to enhance the quality of referrals, enhance the success rate of the mentored individuals, and helps build commitments on the part of both employees.

One recruitment expert recently provided three suggestions for additional ways of finding transit applicants (3).

- Contact past employees—Set up a system for regularly contacting people who have left the agency under positive circumstances (good work record, voluntary separation). Optimally, make the contact about a week after separation and ask them if they would like to return. On average, about one-fifth will.
- Employee referrals—Update or implement an incentive program where employees help find quality applicants and are recognized or rewarded in some fashion.
- Applicant referrals—Ask applicants to provide the names of two other potential applicants that they would recommend.

Referral programs are not universally accepted as a good form of recruitment. There exists a substantial body of research that cautions against the use of contingent reward systems (such as referral bonuses), saying they are “one-size-fits-all,” short-term solutions and arguing instead that contingent rewards actually lead to less motivation, decreased creativity, and some degree of alienation. A book by Alfie Kohn, *Punished by Rewards* (4) summarizes the research and this interesting psychological finding. Another way of thinking about this from the employee's perspective is “if this job is so good, why do they need to bribe me to refer people to it?” An interesting question is

whether recruiters could get the same or better results if they just asked current employees for referrals.

Some agencies have found that sign-on bonuses, a recruitment technique of offering incoming applicants rewards or incentives just for hiring on, have the potential to offend senior operators. At one staffing-challenged agency, tenured operators saw sign-on bonuses as a reward to people who have not yet “paid their dues.”

### **Use of Ethnic Newspapers**

Fifty-nine percent of survey respondents use ethnic newspapers as part of their recruitment process. In a comparison of help-wanted advertising in ethnic newspapers with number of applicants, it was found that agencies that used ethnic newspapers were slightly, but not significantly, more likely to have more applicants than agencies that did not use this form of advertising.

The targeting of ethnic populations for recruitment is not new, and the use of newspapers serving ethnic communities has widespread use. Such use occurs in all size agencies, although slightly more in the medium and large agencies (6 of 7 users in large agencies and 6 of 9 users in medium agencies compared with 2 of 13 users in small agencies).

The Ann Arbor region has large populations of Middle Easterners, Hispanics, Poles, and Russians, and the Ann Arbor Transportation Agency has been advertising for the last 3 to 4 years in each community's weekly newspaper, although results have not been tracked. Ann Arbor also provides information on how to read and understand bus schedules in Spanish, Russian, Chinese, Korean, and German. To facilitate better customer service, they are in the process of putting together a training program to teach operators basic phrases in the languages most often spoken by their passengers. This outreach is designed to ensure broader and better service to the ethnic community and to attract a diverse work force to the agency, thereby better serving the agency's recruitment efforts and community needs.

### **Welfare to Work**

Seventeen percent of the agencies surveyed use Welfare to Work programs as a recruitment tool. On a 5-point scale, where 1 is the lowest and 5 is the highest, these agencies rated their programs as having “low” effectiveness (average = 2.0) and “low” cost savings (average = 1.8). They did not have relatively more applicants, lower turnover, or better staffing experiences than agencies that did not use the program. One agency that rated the program as having above average effectiveness and average cost savings was Capital Metro in Austin, Texas.

Welfare to Work programs have received focused attention in the transit industry and were anticipated to be an effective method for enlarging the applicant pool. It may be that entry level operator jobs with their long work weeks, split shifts, and variable schedules present a particular challenge for those attempting to escape welfare because they themselves often rely on public transit to get to work and frequently have difficult child scheduling issues. San Diego Transit has attempted outreach with the GAIN Program, a county job development program for Aid to Families with Dependent Children recipients. They report being pleased with the quality of 26 GAIN referrals in entry-level operator positions in 1999, most of whom were women. Overall, however, they reported a below average experience with Welfare to Work efforts.

### Internet Recruitment

Transit agencies using Internet recruiting were significantly less likely to be understaffed. Internet recruiting is used by 62 percent of surveyed agencies, with larger agencies being more likely to have used it. Some of these transit websites are very promising. According to Internet recruitment experts, interviewed at the 52nd Annual Society for Human Resources Management Conference, there is huge potential for employers who create Internet recruitment pages. They suggest that employers can gain an advantage in the competition for quality applicants by creating effective, easy-to-use employment websites to appeal to future applicants. The speed, ease, and pervasiveness of the Internet and the fact that more applicants are increasingly comfortable with the Internet make electronic recruiting a potentially significant opportunity (5). These issues will be further addressed for the transit industry through a TRB study of the use of the Internet in transit.

Transit web pages can receive thousands of hits per day, especially at large systems, from riders wanting general transit information. Those transit agencies with a clear and attractive initial menu page with employment, jobs, or career headings have the opportunity to catch the eye of many potential job applicants.

In accessing the web pages of the 18 agencies that reported using Internet recruiting, great variability exists in the degree to which employment opportunities are presented. About one-half provide online applications that can be printed out, with several requiring the downloading of Adobe Reader software (free software available on the Internet).

There is also significant variability in the content of these web pages. Some supply information about the application process but do not contain current job openings. Some provide operator-specific application information,

whereas others are more generic to the organizational application process. None of the sites reviewed allowed for electronic submission of applications. Some transit home page sites could only be accessed through trial and error, because their link required hitting on a fairly precise wording sequence.

None of the agencies surveyed were posting their bus operator positions with on-line recruitment firms. However, a scan of Monster.com, one of the largest and most diverse Internet recruiting sites, brought up a number of paratransit positions and two postings for bus operators, one each from transit systems in Connecticut and California.

Of the employment pages reviewed, perhaps one of the most extensive pertaining to bus operators was that of Tri-Met in Portland, Oregon ([www.Tri-met.org](http://www.Tri-met.org)). This website presents a logical sequencing of information designed to provide any interested party with a broad scope of information and selling points about a number of currently available positions. Applicants can even download and print an employment application. The page is easy to find and well linked. An overview of the site is described here.

- It is an attractive home page with “How We Get There Matters” headline and graphic.
- Selecting the “Job Openings” link on the home page takes the user directly to an updated list of job openings, which in turn are linked to a selection of position information. The bus operator link included:
  - Job duties and responsibilities,
  - Minimum requirements/job requirements,
  - Information about disqualifying motor vehicle record violations,
  - Selection process, criminal record check, and training program,
  - Specifics on pay and benefits, and
  - How to apply.
- From “Job Openings” there are four other links.
  - Application form—General information including how to print an application, how to get to the administrative offices using the bus system, and additional forms required for certain positions.
  - Benefits—A “laundry” style list of company-wide benefits.
  - EEO—Tri-Met’s Equal Employment Opportunity policy statement.
  - Tri-Met Mission and Goals—Includes links to a “Message from the General Manager,” “Organizational Governance,” and “Strategic Direction.”

### OPERATOR PAY

Most of the transit agencies responded that they pay at or above market for training (75 percent), starting (about 90

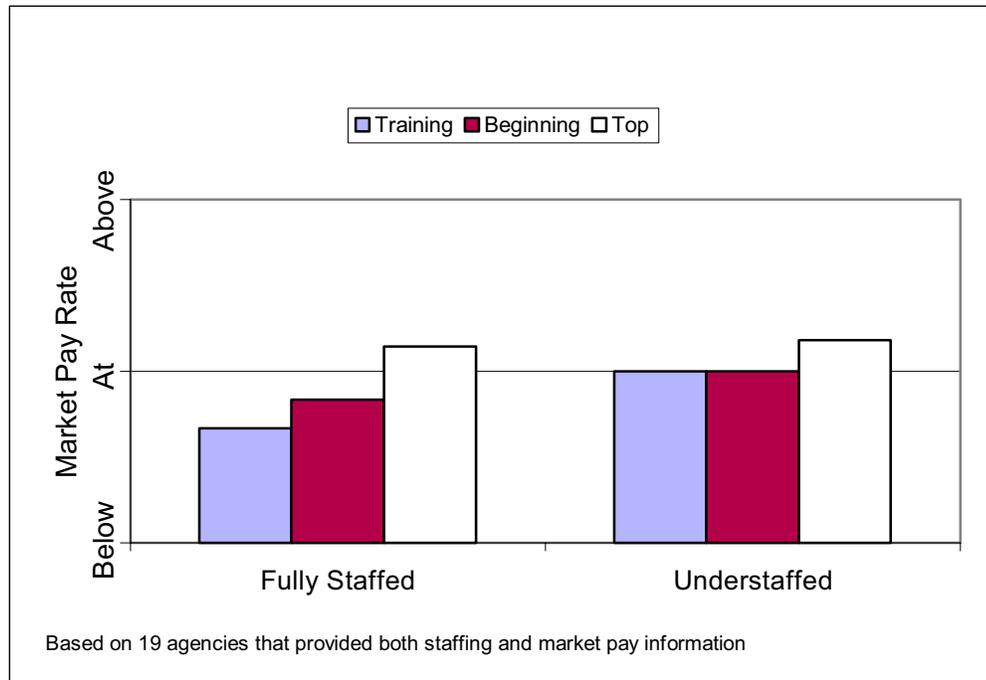


FIGURE 4 Market pay comparison by staffing success.

percent), and top (95 percent) operator pay rates. Montebello Bus Lines in California, Capital Metropolitan Transportation Authority in Texas, Broward County Transit in Florida, and Springs Transit in Colorado were just a few of the agencies that were at or above market for all of the pay rates. There were no statistical relationships found in comparisons of the competitiveness of training pay and the number of applicants, turnover, or understaffing.

The weighted average training rate for bus operators in the survey is \$7.35/h, the weighted average starting pay rate is \$12.99/h, and the weighted average top rate is \$19.33/h. According to APTA, 1999 data reported in the *Occupational Outlook Handbook*, published by the U.S. Department of Labor (6), noted that companies with more than 1,000 employees had an average top hourly rate of \$17.90 in large metropolitan areas and between \$12.60 and \$14.70 in smaller metropolitan and rural areas.

Survey respondents that have training, starting, and top pay rates at or above market are actually more likely to have been understaffed in 1999 (see Figure 4). To make this comparison, survey respondents were divided into whether they were understaffed or fully staffed, and then their market pay classifications were averaged (1 = below market, 2 = at market, 3 = above market) for each of their operator pay rates (training, starting, and top pay). Because most of the agencies that were understaffed indicated that they offer competitive pay rates for operators, it would appear that agencies are already using pay as a way to address the issue and/or that agencies might want to consider strategies other than pay to address understaffing.

Conventional recruitment wisdom says that competitive pay and benefits are a prerequisite to an adequate applicant pool. A very high percentage of agencies in our survey reported that their training (75 percent) and starting (90 percent) pay rates were at or above the market, in excess of the pay levels reported by APTA. Above-market training pay levels were reported by 15 percent of respondents and at market by 60 percent. Starting pay was reported to be above market by 10.5 percent of respondents and at market by 79 percent. Of the two agencies that reported starting pay below market, one was understaffed in 1999 and the other was not. Only one property reported training pay below market and that property noted that understaffing was not a problem. Three agencies reported above-market pay rates for entry level or training positions, and all of them also reported being understaffed. It appears that the industry has recognized that competitive pay is necessary in filling jobs that have challenging working conditions. Another interpretation may be that pay has been a top priority, perhaps in labor contract negotiations. The issue of pay is further discussed in the retention section of this synthesis, in chapter 5.

## SELECTION CRITERIA

It has been said that to improve retention, it is necessary to improve the quality of your new hires. This means being able to identify those criteria that are likely to lead to success and identifying whether candidates meet those criteria. Eight survey respondents reported using validated selection tests. One test was validated in 1980, one in 1990,

and the remaining six appear to be relying on validity generalization without property-specific criterion development. Eighty-one percent of surveyed agencies have bus operator job descriptions, and one-third stated that they had identified bus operator success criteria (those used to identify bus operator applicants with the best opportunity for success in the agency's job environment). Of those, two agencies indicated that they had validated their bus operator selection processes. Agencies with more applicants were more likely to use some kind of selection test or to use more validated processes and testing components, and were less likely to use the neatness/completeness of the application as a selection criteria. A complete table of all selection techniques, processes, and criteria, and the number of and percentage of respondents who indicated they used that criterion is provided in Table 2.

## PREDICTORS OF JOB SUCCESS

Survey respondents were asked to indicate what they believed were their best predictors of future job success. Applicant experience such as job stability, driving record, training completion, employment references, and selection tests topped the list. For a breakdown of which kinds of selection information transit managers intuitively believe are their best predictors of future job success, see Table 3.

One transit agency has engaged in a process to identify critical competencies necessary for job success. Their project focused on recruitment and selection, and identified 65 critical competencies and success behaviors necessary for a bus operator to be successful. They then broke down those behaviors into ones that would be used for selection and

TABLE 2  
SELECTION TECHNIQUES USED IN BUS OPERATOR SELECTION

Selection Technique, Process, or Criteria	Percent
Application	100
Drug testing	97
Prior employment reference checking	90
DMV record check	86
Job stability	83
Previous driving experience	72
Minimum age*	72
Court record check	62
Structured (from written items) interview	62
Interviews with two or more interviewers	59
Performance record check (for rehires)	52
Completion of bus operator training	52
Appearance (neat, clean, proper attire)	48
Attendance records	45
Neatness or completeness of application	45
Basic skills testing (reading, writing, etc.)	31
Criterion-referenced (behavior) interview	21
Seattle Metro Video	21
Other work experience**	17
Other***	14
Unstructured, spontaneous interview	14
Cognitive testing	14
BOSS Test	14
Video situation response testing	14
Psychological testing	10
Intelligence testing	10
Personality testing	10
Technical skills testing	7
Credit record information	7
Behavioral inventory (preferences, etc.)	7
Demographic inventories	3
Chicago test	3
Industrial commission records	3
Behavioral testing ("in box," "role playing")	0
Honesty testing	0

Notes: DMV = Department of Motor Vehicles; BOSS = Bus Operator Selection Survey.  
Percentages based on 29 responses.

\*Minimum reported age ranged from 18 to 23 years, with an average of 21 years.

\*\* Comments: 10 years of work experience.

\*\*\* Comments: competitive civil service exam, experience for past 10 years, pre-employment physical, transit operator test, updated videos from Seattle Metro.

TABLE 3  
JOB SUCCESS PREDICTORS (subjectively identified)

Predictor	Percent
Job stability	50
DMV record check	31
Completion of bus operator training	31
Seattle Metro Video	25
Employment references	25
Previous driving experience	25
Other selection tests	18
Drug testing	12
Interview with two or more interviewers	12
Court record check	6
Video situation response testing	6
Neatness or completeness of application	6
Technical skills testing	6
Attendance records	6
Appearance (neat, clean, proper attire)	6
Personality testing	6
Performance record check (for rehires)	6
Structured (from written items) interview	6
Spontaneous interview	6
Criterion-referenced (behavioral) interview	6
Other work experience	6

Notes: DMV = Department of Motor Vehicles. Percentages based on 18 responses.

those they would train. The hiring competencies were built into a competency-based selection system. The competencies that could not be evaluated as part of the selection process were built into the training program.

Two survey respondents have conducted their own test validation studies, and approximately 28 percent of surveyed agencies are using tests that have been validated by a testing company for certain criteria or that appear to work at other transit agencies.

Testing validation is not a simple process, but it can identify the best predictors for an agency, given the agency's particular set of job requirements and environmental factors. It requires that agencies already have in place valid and reliable measures of work performance.

#### EXAMPLE OF A TRANSIT VALIDATION

The Utah Transit Authority (UTA) has validated their selection process tests in adherence with Uniform Guidelines (7) requirements for evidence of criterion validity. Through their validation, they can make an honest (and legally defensible) pass/fail and rank-ordered list of applicants who are more likely to have fewer customer complaints; better policy/procedure adherence; and better measures of customer, professionalism, and safety behaviors.

UTA selected a random sample of bus operators and administered a variety of potential selection tests. These tests included the Seattle Metro Video, the 16 Pf (a personality test), London House's "Employee Safety Inventory,

the Predictive Index" (work style preferences test), an internally developed basic skills test, and a variety of demographic and experience information from the employment application and personnel file. Bus operator test results were then correlated with valid and reliable UTA work experience performance measures: a mystery shopper measure of customer service, professionalism, and safety behaviors; records of valid complaints and commendations; and a composite measure of policy/procedure adherence. In the final analysis, UTA's strongest predictors were their basic skills test, components of the 16 Pf and the Predictive Index, and some simple information from the application blank.

#### SELECTION TESTING

Approximately 69 percent of survey respondents use a selection test as part of their bus operator selection process. Those agencies with a greater number of applicants were more likely to use some kind of a selection test. The most common type of tests, used by 31 percent of respondents, are the basic skills tests, which generally assess an applicant's ability to read, write, and understand basic math. Twenty-one percent of respondents report using the Seattle Metro Video. A new version of this test is forthcoming, which will include video segments designed to predict successful customer and supervisory interactions (8).

Fourteen percent of respondents reported that they are currently using the Bus Operator Selection Survey (BOSS) test, which was developed with funding by a grant from APTA in 1994 (9). The test is comprised of 77 questions, takes about 30 minutes to administer, and scoring by the

test developer is provided within 48 hours. The BOSS validity evidence indicates that it is predictive of available operator days and accident rates. Longitudinal studies at three agencies have indicated similar findings. There are currently more than 40 North American transit agencies using the BOSS.

The Metropolitan Transit Authority (MTA) New York City Transit (NYCT) Department of Buses has been using BOSS since late 1996. Bus operations at NYC Transit are made up of two organizations with different sets of hiring requirements. One organization follows civil service guidelines and then considers BOSS scores later in the selection process. They honor a one-in-three rule; therefore, some applicants that fail the BOSS might still get hired. The second organization begins its selection process with the BOSS, using it as the initial screening procedure. Applicants that do not pass the BOSS do not get hired. All candidates selected from both organizations then go into the same coach operator competency-based training program. MTA NYCT found that the training washout rate of applicants selected using the BOSS as a hurdle was 28 percent, and that the civil service guidelines selections resulted in a 50 percent training washout rate. MTA NYCT also reports that their experience with BOSS has been positive as it relates to its prediction of safety performance, but that they are currently uncertain of its predictive value in customer service and availability (e.g., attendance and missouts).

Bay Metro Transit (Gig Harbor, Washington), uses a validated test from Scheig Associates, Inc. It is a three-part test geared to motor coach operators, and takes about 1 hour to administer. The first section explains the job and asks questions regarding the applicant's likes or willingness to do the job, but is not scored. The second section is a relationship test where the applicant ranks tasks in order of importance and when each task should be done. The third section assesses driving skills by giving scenarios of driving situations and asking which is the best solution. The completed tests are then faxed to Scheig and the results are e-mailed back to Bay Metro Transit within approximately 15 minutes, at a cost of \$25.00 per test. Bay Metro Transit has not yet been able to quantify the success of the test because they have only hired eight new operators since they began using it 18 months ago. To check on the usefulness of the test, they asked their four strongest and four weakest bus operators to take it; the four strongest passed and the four weakest failed.

## INTERVIEWS

All but one agency reported using an interview as part of the recruitment procedure, and of those agencies all but two have made efforts to increase the objectivity of the process. Specifically, 62 percent use a structured interview process and form, 21 percent a criterion-referenced interview,

and 59 percent have two or more interviewers present during interviews. Just two agencies report using an exclusively unstructured/spontaneous interview process, and both have bus operations with fewer than 200 operators.

Research on interviews contains many discouraging conclusions regarding poor interview validities (what is important is not measured) and reliabilities (different interviewers do not usually measure interviewees in the same way). "All too often, the person most polished in job-seeking techniques, particularly those used in the interview process, is the one hired, even though he or she may not be the best candidate for the position" (10). Interviewers have been found to be easily biased in favor of the best looking applicants or those that are somehow similar to the interviewer (11).

In a study on the consistency and decision value of structured and unstructured interview styles, researchers found that under structured conditions, interviewers knew what to ask, what to do with the information received, and had a standard frame of reference for comparing all applicants (12). Semi-structured and unstructured interview formats were less consistent between applicants, sometimes providing very different kinds of responses. Although unstructured interviews have the potential to collect extra information, the study concluded that evaluating that kind of interview is often confusing and difficult.

Six survey respondents reported using criterion-referenced (behavioral) interviews. These interviews rely on the adage that the best predictor of future performance is past performance. In this type of interview, applicants are asked to speak specifically to their past experience in handling situations involving those behaviors that have been identified as core job success criteria. Typical questions take the form, "Think about a time when [something happened or you had to do some type of task]. Tell us what you did." Answers are assessed in terms of relative experience and appropriateness of response.

Mel Kleiman, author of a how-to manual on recruitment and selection (13), recently addressed the United Motorcoach Association during the Motorcoach Expo 2000. He cited research that people take approximately 14 seconds to form an opinion, and warns employers to be careful not to jump to conclusions early in the interview. Selection decision makers need to finish their entire selection process and not be overly influenced at the interview stage. Many applicants are better at interviewing than the interviewers and have become skilled during their job hunting process in saying just what an employer wants to hear.

## BACKGROUND INVESTIGATIONS

Forty percent of responding agencies believe that background investigations produce some of their best selection

decision information. Background information is collected from the application, interviews, past employers, and from a variety of public records. It includes information about job stability, employment references, driving record, court records, attendance, and performance.

If past performance is truly predictive of future performance, as many authorities would agree, then checking an applicant's job stability record is a good start. Job stability is considered at 83 percent of surveyed transit agencies. At the Duluth Transit Authority, past employment records are reviewed using a common sense approach to determine if there is a pattern of frequent job changes. VIA Metro (San Antonio, Texas) reviews stability by considering both the number of jobs and the reasons for leaving. If an applicant had five jobs in 5 years and left each in good standing and for a good reason, such as better pay, VIA considers that applicant's stability to be acceptable and would consider hiring them. If an applicant had multiple jobs in a short period of time with questionable reasons for leaving, such as they did not like the hours, their boss, or a fellow worker(s), the application can be considered suspect. CT Transit determines job stability by reviewing the job application and/or resume and then dividing the number of jobs by the total number of years listed. They also look for any gaps in employment.

Approximately 20 percent of bus operator applicants at one western transit agency are rejected at the background investigation stage, primarily because of employment reference problems. Most references are checked prior to interviews, with some completed after that stage. Final employment decisions are made only after a complete check

of all references, with special attention paid to cumulative evidence of performance problems.

Ninety percent of the agencies surveyed indicated that they check employment references of bus operator applicants. This process may be more productive when applicants authorize release of information, provide specific supervisor names and contact numbers, and when reference checkers promise to maintain professional confidentiality.

Employment references can be standardized through a customized list of questions designed to determine whether prospective applicants have good performance records. Broward County Transit (Florida) finds that they eliminate about 10 to 15 percent of applicants by checking references covering a 10-year employment period. Both Madison Metro Transit (Wisconsin) and MTA Long Island Bus (New York) have standardized reference-checking forms. Both forms verify dates of employment and reasons for leaving, and inquire about attendance records and whether the applicant would be eligible for rehire and, if not, request an explanation. Madison Metro also asks about the applicant's quality and quantity of work; their cooperation, initiative, and attitude; the amount of supervision required; and whether the applicant presented proper appearance. MTA Long Island Bus includes questions about accident records and whether those accidents were chargeable or nonchargeable, and they have a similar, standardized form for verbal reference checks.

Several industry practitioners have suggested assigning costs to each of the steps in the selection process and then trying to move the more expensive steps to the latter part of the process.

## TRAINING OF BUS OPERATORS

New bus operators routinely receive basic training in vehicle operation, customer service, and system knowledge. Experienced operators may also receive periodic refresher training or organizational development training and many operators are given remedial training as needed.

### NEW HIRE TRAINING

With 63 percent of all new hires coming from a nontransit background, entry-level training constitutes a significant concern for all transit organizations. In addition to the organizational orientation required for all new hires, transit operators must frequently be taught professional driving skills from the ground up.

Survey respondents indicated that their new hire training programs last anywhere from 10 to 60 days, with the average being 32 days. Factors influencing the length of training time include the size of the system, scope of equipment, an individual’s transit and/or driving experience, scope of organizational curriculum, and the organization’s choice of focus on training elements. Pressing operator staffing concerns can sometimes lead agencies to shorten training by focusing solely on key driving and customer service skill areas. In this survey, bigger agencies were less likely to adjust the length of training than smaller agencies, but were also less likely to have indicated that they had a written training curriculum.

Of the agencies that do adjust training length, Bay Metro Transit finds that they provide the most adjustment in helping trainees to get their CDL and in helping them to acquire the requisite driving skills. Previously, Montebello Bus Lines required that trainees learn and drive every route, but more recently they have been able to trim their training down to 4.5 weeks by requiring trainees to learn and drive the major routes they would be likely to first drive in service. The Transit Authority of Northern Kentucky considers their bus operators to be trainees until they’ve completed their probationary period, which is another 150 to 210 days.

Agencies that provided longer time on in-bus service training were less likely to provide interpersonal relationships training in communication or in conflict resolution. This might imply a trade-off between vehicle-focused service training and other skills training in the classroom.

During survey analysis, it was found that training duration is significantly related to voluntary turnover, but not to involuntary or overall turnover. Specifically, it was found that agencies with longer training duration were more likely to report higher voluntary turnover rates. This finding may simply be an anomaly due to the small number of survey respondents or it could be indicative of a real effect. Perhaps the longer training period creates a more realistic job preview for trainees, so that they are more likely to self-select than are trainees in shorter programs. Another potential explanation for this finding could be that trainees become frustrated with longer training programs (discomfort with classroom training, concerns with relatively lower pay, etc.). It is possible that longer training duration, by virtue of its length or its lack of job guarantee, might correlate with trainees receiving alternate job offers.

### TRAINING COMPETENCIES

All agencies reported having training competencies for safe driving practices, and the majority (over 90 percent) indicated that they had competencies dealing with policy, procedure, customer support, and system knowledge. A listing of training competencies by the proportion of agencies that reported them is shown in Table 4.

TABLE 4  
COMPETENCIES TRAINED FOR

Competency	No.	Percent
Safe driving practices	28	100
Knowledge of and adherence to policy and procedure	27	96
Radio communications	27	96
Schedule adherence	27	96
Interpersonal interactions with customers	26	93
Knowledge and handling of fares	26	93
Serving customers with disabilities	26	93
System (area) knowledge	26	93
Customer support	23	82
Interpersonal interactions with peers and staff	20	71
Personal health and fitness for duty	17	61
Written communication	17	61
Organizational knowledge	16	57

Note: Percentages based on 28 responses.

Eighteen percent of respondents do not train for customer support, interpersonal interactions with peers and staff, personal health and fitness for duty, written communication, and organizational knowledge competencies. According to one general manager, customer service skills are critical. He believes that customers and future customers

may appreciate improved bus technologies to some degree, but what will draw and keep customers is ultimately the service delivered by the person operating the vehicle. He meets with every new operator training class and tells them, “You probably told your friends this weekend that you were going to start training on Monday as a Bus Operator. Well, you’re partly right. It’s not about driving the big vehicle. It’s about customers” (14).

**HOW ARE THESE COMPETENCIES MEASURED?**

Traditional measurement tools (observation checklists, paper and pencil tests, and peer assessment) are still the norm and are used by more than half of respondents; however, computer-based training, simulators, and computer tests are now being used by 15 to 22 percent of respondents. Table 5 shows the standard tools used to measure training impacts and the proportion of agencies that reported using each of the techniques.

TABLE 5  
USE OF STANDARD MEASUREMENT TOOLS FOR TRAINING EFFECTIVENESS

Type of Measurement	Percent
Observation with checklist	92
Paper and pencil tests	81
Peer assessment	59
Probationary operator statistics	52
Observation with pass/fail criterion	41
Training turnover	26
Computer-based training	22
Computer tests	18
Simulators	15
Other (jeopardy, closed course driving)	7

Note: Percentages based on 27 responses.

**HOW IS TRAINING ACCOMPLISHED?**

All respondents reported using classroom and on-the-bus (not-in-service) time for their new hire bus operator training. Ninety-six percent of respondents indicated that their training includes time on buses in service, and 31 percent reported using some kind of simulation method such as computers, simulators, or other mechanical training aids.

Figure 5 presents the training methods as reported by survey respondents, along with the agency personnel responsible for administering that training method. Classroom training is handled mostly by a full-time, professional training staff member (trainer), although as many as 20 percent of respondents indicated that classroom training was also provided by bus operator trainers, in-service operators, and other agency personnel. Classroom training appears to be the domain of the full-time professional training staff, whereas on-the-bus (not-in-service) training is primarily delivered by a professional trainer, a bus operator assigned to training, or a combination of the two.

In-service bus training is handled mostly by in-service operators; however, 20 percent of respondents reported using trainers (either separately or in combination), and 10 percent of respondents also used operators assigned to the training department. For the 30 percent of the agencies that did offer simulation training, all indicated that it was provided by trainers.

San Diego Transit has developed and implemented three interactive CD-ROM driver training programs and replaced a seniority-based system with an employee performance and competence program. Each of the interactive

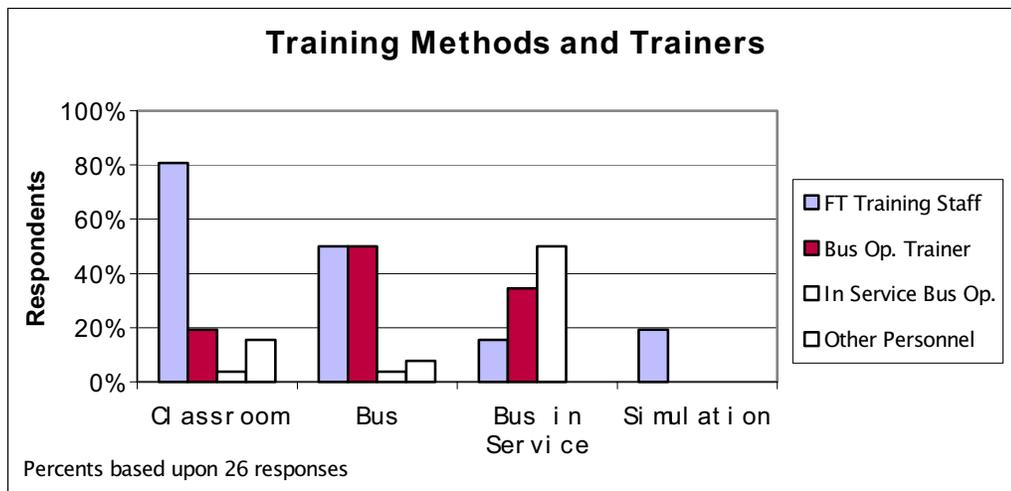


FIGURE 5 Training method use and type of user.

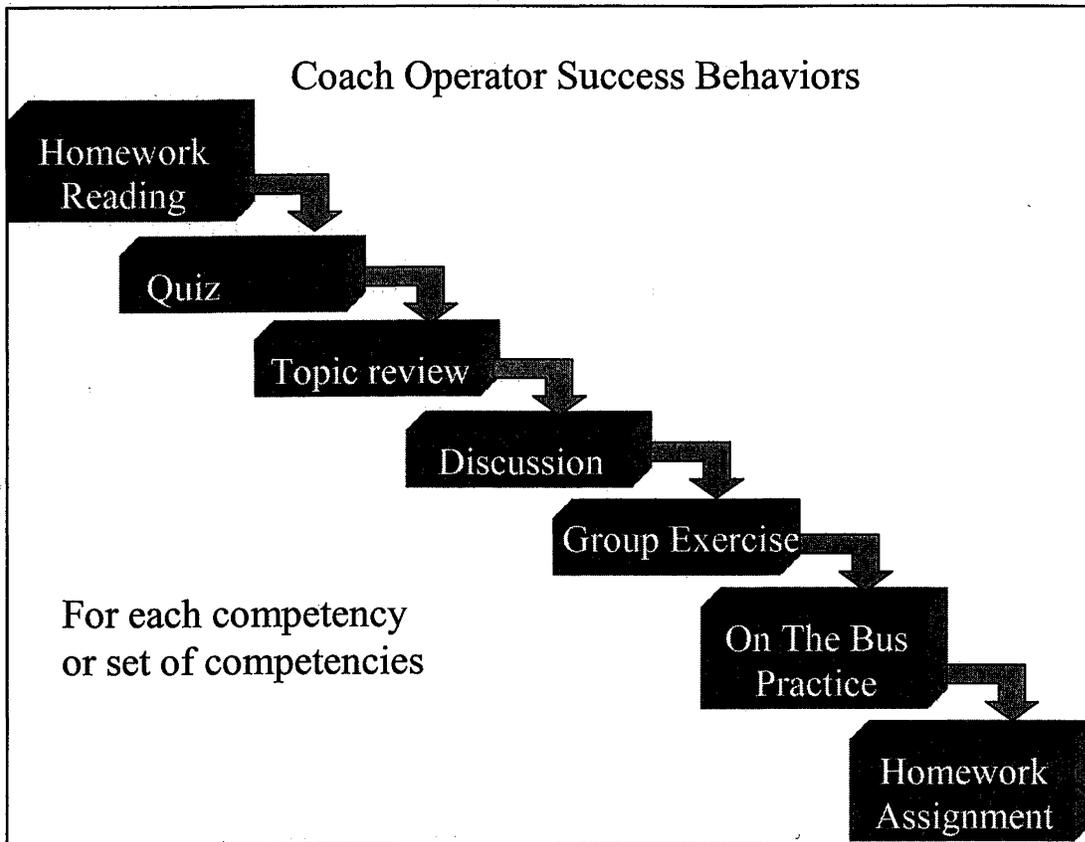


FIGURE 6 The Orange County Transportation Agency's training competency program.

modules in each program concludes with required comprehension test questions. When questions are answered incorrectly, the program loops the student back through a review of the module until the student achieves 100 percent comprehension and can go on to the next module.

The first program, "Have A Nice Day," is a four-module interactive, customer service training program, developed to help operators learn how to deal with difficult people and avoid violence while on duty. This program includes tips for operators before and after they begin their rounds on how to be more completely aware of their environment. It covers what constitutes an attack and provides some self-defense strategies. Other programs include a CD entitled "Smart Driving," which is a comprehensive defensive driving training program covering pre-trip to actual on-the-road driving and another CD, "The Professional," which includes training on bus inspections and customer service, and even includes some stretching exercises. These programs are currently available through the National Transit Institute (NTI). More than 150 transit agencies are using these computer-based training programs as a part of their training programs. Madison Metro Transit in Madison, Wisconsin, has recently implemented the bus operator training program available on a CD format from the U.S. Transportation Safety Institute.

In conjunction with NTI, San Diego is currently developing a program to help individuals train for their CDLs. San Diego plans to use this as a recruitment tool and also intends to provide the program to applicant-flow agencies like Job Service to be used as a screening tool for evaluating interest and ability.

The Orange County Transportation Authority recently revamped its training program to ensure consistency between training and the real expectations from operators on the road. To this end, a cross-functional team that included trainers, operations staff, coach operators, and union representatives was assembled to review the competencies and training design. Two members of this team (representing the operations and training departments) rewrote the "Coach Operator Handbook" so that it would serve the dual purpose of being the training manual and the policy manual. The agency's training program also incorporates adult learning research, which adults seem to learn in many different ways, including linguistic, logical-mathematical, spatial, musical, kinesthetic, interpersonal, and intrapersonal. They developed a training design with which to approach the delivery of each competency or set of competencies trained for. Their design for a typical training day (see Figure 6) was developed in an attempt to address each of the different learning modes on every set of competencies to be trained.

## Simulators

The New Jersey Transit (NJT) system and agencies in Cleveland, Ohio; Orange County, California; and Atlanta, Georgia, are using simulator technology to enhance training effectiveness and impact training costs over time (16). The first type of equipment is fully interactive. Called the Vehicle Maneuvering Trainer, the system is installed in a two-room configuration with a driver console in one room and a 1/16th-scale model of the driving course in another. The technology allows the driver to move along streets while practicing driving skills such as turning, using mirrors, backing up, and maintaining lanes. Operators are able to practice specific maneuvers on a repetitive basis until proficiency is achieved.

The second type of equipment is a semi-interactive system that uses multiple computer stations, each with its own operator cab, in a classroom setting. Trainees simultaneously observe a real-life driving course that is projected at the front of the room and they proceed through the course as if they were driving a real bus. As they do this, the computer tracks their performance. This system allows for multiple operators to be trained at the same time under varying road conditions and situations that would be impossible or dangerous to reproduce under real conditions, such as reacting to another vehicle running a red light or slamming on the brakes to avoid a fixed object.

NJT reports a two-day reduction in training time, training cost reductions of \$37/per hour for equivalent road training, and an annual overall training cost savings of approximately \$375,000. They have also observed a much quicker learning curve, a more timely weeding out of unsuitable operators, and a better ability to target specific skill needs in individual trainees and remediate them more efficiently. Additionally, they've found a substantial decrease in accident rates in service. NJT's Deputy General Manager of Operations noted that, "Traditional defensive driving instruction is typically based on showing films and expecting Operators to identify with hazardous situations . . . often, the response from trainees is 'that will never happen to me.' By using the simulators however, drivers learn that bad things can happen to anybody" (16). Operators who use the system testify to its realism and effectiveness.

The total installation costs for the two systems is approximately \$1 million. NJT reports that the system is rapidly paying for itself in reduced training costs and through providing access to the systems to third party operators for a fee.

Training simulators have the potential to reduce costs and improve the effectiveness of training and training measurement, and will most certainly come into wider use by transit agencies. At the same time, however, there may

be some disadvantages to simulators. Some agencies have found that simulators require substantial maintenance to keep them running, and that they are still labor intensive because training staff are required to be present during the simulations. In addition, some agencies have found that driving situations, environment, or weather conditions peculiar to their area are not consistently or accurately represented in the simulator's repertoire. Occasionally, some trainees have reported that they suffered from motion sickness from being in the simulator.

In 1996, the MTA NYCT Department of Buses wanted to use simulators but was unable to find any that met its needs. MTA NYCT had identified the disadvantages noted previously, plus it required simulators that operated in real time (not pre-recorded video and dioramas), were interactive with the students and provided immediate feedback, were specific to the type of environment bus operators would be working in, and used computer-generated imagery. To accomplish these objectives, MTA NYCT worked with a company with a long track record of military simulators and a bus manufacturer.

The simulator they developed was unveiled at the 1999 APTA Transit Expo. It has eight channels, which provides a 315-degree wraparound display, including real bus mirrors reflecting rear traffic displays. The traffic in the simulator is intelligent (meaning it interacts in real time with the bus) and the simulator has a driving station that allows an instructor (or another student) to control one of the other vehicles in the simulation. MTA NYCT uses this "part task driving station" to create real-time traffic situations to which the bus operator must respond.

In a study designed to test the effectiveness of the simulators, MTA NYCT trained 1,000 bus operators. All student drivers received exactly the same training and curriculums, except that 250 of these students were given simulator training in place of some of their on-the-bus training. They then measured the accident rate of those students in their first 90 days of driving following training and found lower accident rates with the simulator-trained group. Another interesting result of this study was that the simulator-trained students had an 18 percent washout rate in training, whereas the control group (nonsimulator trained) had a 28 percent washout rate. MTA NYCT has historically experienced a 28 percent training washout rate. The agency is looking forward to new applications of their simulator technology, which includes reconstruction of accidents and remedial training of operators who have had accidents. The accident rate findings of the MTA NYCT study are presented in Table 6.

At the April 2001 NTI meeting, MTA NYCT presented their study findings and recommendations to the industry. They recommended forming an Industry Advisory Group

TABLE 6  
RESULTS OF MTA NYCT DEPARTMENT OF BUSES SIMULATOR STUDY

Type of Accident	Trained Without Simulator (%)	Trained Using Simulator (%)
Right-side	6.4	0
Left-side	7.1	1.2
Fixed-object	7.9	2.4

on simulator training, developing a full range of simulator products, augmenting current training curriculums, developing a train-the-trainer curriculum, implementing software upgrade programs, and advising the FTA to standardize regional training sites for simulator training. The Transit Cooperative Research Program at TRB has recently completed a study of simulators.

Other users of bus simulation systems, whose experiences will be valuable to examine over time, include: the Southeastern Pennsylvania Transportation Authority, Philadelphia; Delaware Transit Corporation in Wilmington; Greater Cleveland Regional Transit Authority; Hampton Roads Transit, Hampton, Virginia; CT Transit in Hartford (Connecticut), Transit District; Broward County Transit in Fort Lauderdale; Orange County Transportation Authority in Orange County, California; PACE in Chicago (17); and MTA NYCT Department of Buses (15).

### Refresher and Update Training

Just 36 percent of surveyed agencies reported that they require their applicants to participate in annual refresher training. One of the descriptors of a career professional is the requirement for periodic update training to enhance skills and expand the depth of professional knowledge. For operators this includes updates to keep safety and service skills honed, introduction to and familiarization with new equipment, system enhancements, regulatory changes, and organizational development. The number of agencies and the types of required refresher training are provided in Table 7. Customer service and safe bus operations top the list followed by regulatory types of internal and external training. The small number of systems offering refresher training programs may indicate that agencies do not see a positive benefit-to-cost ratio in providing this type of training. The state of California mandates 8 hours of required training per year for each bus operator, but does not specify curriculum.

### Remedial Training

In response to performance problems, bus operators may receive instruction in skill deficiencies. Table 8 lists the skill deficiencies that surveyed agencies report they most commonly address. Customer service and safety concerns again top the list. This is an area of training where some

TABLE 7  
AREAS OF REQUIRED REFRESHER TRAINING

Subject	No.
Customer service/working with the public	6
Safety and safe bus operations	5
Policy/procedure	2
Sexual harassment	2
ADA/diversity/sensitivity	2
Skill review	1
Post-accident procedures	1
Commercial driver's license	1
Train the trainer	1
Wheel-chair lift and restraining procedures	1
Radio communications	1
Dealing with injuries (blood-borne pathogens)	1
Update, operation and new vehicles, new routes, fares	1

Note: Based on 8 responses.

TABLE 8  
INDIVIDUAL SKILL AND KNOWLEDGE AREAS TYPICALLY REQUIRING REMEDIAL TRAINING EFFORTS

Subject	No.
Customer service/interactions/PR/difficult customer	17
Defensive driving/safety/accident prevention	11
Accidents and post-accident behavior	6
ADA and ADA announcements	4
Turning and backing	4
Driving skills	3
Schedule adherence	3
Route retention	2
Operation of vehicle	1
New vehicle	1
Knowledge of daily function	1
Rules and procedures	1
Wheelchair restraints	1

Notes: ADA = Americans with Disabilities Act. Based on 24 responses.

practitioners are reporting success with computer-based training. Efficiencies may be gained by having students work through relevant skill modules on the computer, then reviewing or practicing the skills with an instructor. This type of training design might be an efficient use of the instructor's time and an effective, alternative learning model for the student.

### TRANSITION TO WORK

The methods used by the surveyed agencies to transition operators from training to work are summarized in Table 9. The four choices, showing the highest perceived effectiveness and lowest cost, are those that involve personal interaction. The next four relate to work assignments. The use of mentors is perceived to be the most effective, least

TABLE 9  
TECHNIQUES FOR TRANSITIONING OPERATORS TO WORK

Technique	Percent	Effectiveness	Cost	Effectiveness/ Cost
<b>Assigned to mentor</b>	<b>35</b>	<b>4.00</b>	<b>1.71</b>	<b>2.34</b>
Graduation transition ceremony	11	4.00	2.00	2.00
Assigned to supervisor	39	3.73	2.20	1.70
Probationary evaluation	92	3.73	2.30	1.62
Required session with training staff	20	4.13	2.56	1.61
Assigned to a senior bus operator	22	4.00	2.50	1.60
Assigned to extra board	74	3.58	2.39	1.50
Bid available work	59	3.33	2.25	1.48
Assigned to specific work designed for new bus operators	17	3.60	2.60	1.38
Follow-up or observation by training staff	77	3.72	2.88	1.29
Supervisor or trainer ride-alongs	42	3.73	3.00	1.24

Notes: Ranked beginning with most effective, least costly technique. Effectiveness scale ranges from 1 to 5, with 5 being the most effective. Based on 28 responses.

costly method of transition, and yet was used by only 35 percent of respondents.

MTA Long Island Bus has a mentoring program they believe is especially beneficial. They report that new operators appreciate having someone more experienced to communicate with. MTA Long Island Bus believes that their mentoring program has helped reduce turnover. More mentoring programs are highlighted in the discussion of retention section of this synthesis. A number of agencies also provide a graduation ceremony with light refreshments, individual recognition, and training completion certificates. MTA Long Island Bus believes that their graduation program helps trainees feel a sense of accomplishment and helps to mentally prepare them for the job.

Spouse or “significant other” training is offered by the UTA. During training, these individuals are invited to learn more about the job, the company, and its benefits. The program has helped spouses and significant others, the key nonwork support persons for a bus operator, to understand the expectations of the job and the reasons that the work hours are so variable. They are given to understand that the variable shifts are generally temporary and that more benefits and better work schedules will come with time. Bus operators benefit greatly from a supportive home environment and it is speculated that over time this support may help reduce trainee and new hire turnover. UTA believes that after receiving this training, trainee families are more supportive and can assist the new operator in dealing with challenges of the job.

## EVALUATING BUS OPERATOR PERFORMANCE

Measurement of bus operator performance begins with the evaluation of skills and effectiveness during and following the training period. As previously described, competencies measured during the training period are primarily evaluated through the use of paper and pencil tests, and observation with a checklist. Agency evaluation processes of in-service performance is a formal step often designed to ensure that job performance is adequate to meet organization goals and serve the public.

### FORMAL PERFORMANCE EVALUATIONS

Formal performance evaluations are those that are structured, scheduled, expected, and defined. The primary objective of performance evaluation is to determine whether operators are performing their jobs safely, serving the customer adequately, and following work rules, policies, and procedures that ensure efficiency and cost-effectiveness. Following new hire training, competencies are measured to determine an individual's current skills, ability, and knowledge and are used to predict the operator's future performance on the job. Formal performance evaluations measure that performance in real time. Fifty-eight percent of surveyed agencies give bus operators a formal performance evaluation. The majority of these evaluations are administered every 12 months (80 percent) with the remainder occurring regularly at 6-month intervals or between 6 and 12 months. Performance feedback may be helpful in several ways.

- Formal data may allow the agency to assess its' overall performance. Agency data can highlight areas where the organization may need to apply additional resources, perhaps identifying training needs, maintenance problems, or organizational cultural issues.
- Operators can use developmental feedback for self-improvement, to avoid potential consequences of uncorrected poor performance, and to request support or training in performance areas that are causing personal stress.
- Organizational culture and performance can be enhanced by providing evaluators with the opportunity to share and reinforce the ways in which individual performance serves the goals of the organization. Areas of specific concern to the organization, especially safety and customer service delivery, can be reinforced. In a TRB Synthesis report on operator availability, it is suggested that, "It is difficult to motivate if one does not communicate" (18).

The Ann Arbor Transit Authority (125 operators) conducts formal performance evaluations that are computerized using a commercial software package. These evaluations set and track an individual's goals and progress towards meeting them. The end result is a hard copy document that summarizes strengths and weaknesses and includes an action plan to address the weaknesses. According to Ann Arbor Transit, because the program is computerized, these evaluations can be done in less time, enabling supervisors to track employees more often. This way small problems don't develop into larger ones and are solved more easily. Evaluations can be done weekly, monthly, quarterly, semi-annually, or annually. Current job descriptions are incorporated into the review.

Of agencies that conduct formal evaluations, 41 percent use them for discipline or termination, 32 percent for advancement, 27 percent for reward and recognition, and 17 percent for pay increase decisions. For a summary of these statistics, see Figure 7.

### PAY FOR PERFORMANCE

At Montebello Bus Lines, bus operator performance evaluations are tied into the processes for pay increases and advancement by basing pay raises and progression on customer service compliant files, ride alongs, interaction with others, and performance evaluation.

Oahu Transit Services (The Bus) has implemented a negotiated workers compensation program under the provision of a new state law allowing unionized companies to include workers' compensation within the terms of the labor agreement. The new program, generically known as a "carve-out," removes workers' compensation from state administration. This program emphasizes safety in the workplace and sets up a coordinated medical care system for insured workers. Contested claims are adjudicated through a program of Alternative Dispute Resolution rather than hearings conducted by the State Disability Compensation Division. The new program includes incentives for union workers, including an improved pension program as a reward for their employee's lowered workers' compensation costs. In a recent satisfaction survey, approximately 85 percent of agency employees approved of the new program. Their new contract provides for an additional 5 cent per hour pension benefit after a year when hourly employees have less than 3 percent lost work time. The program

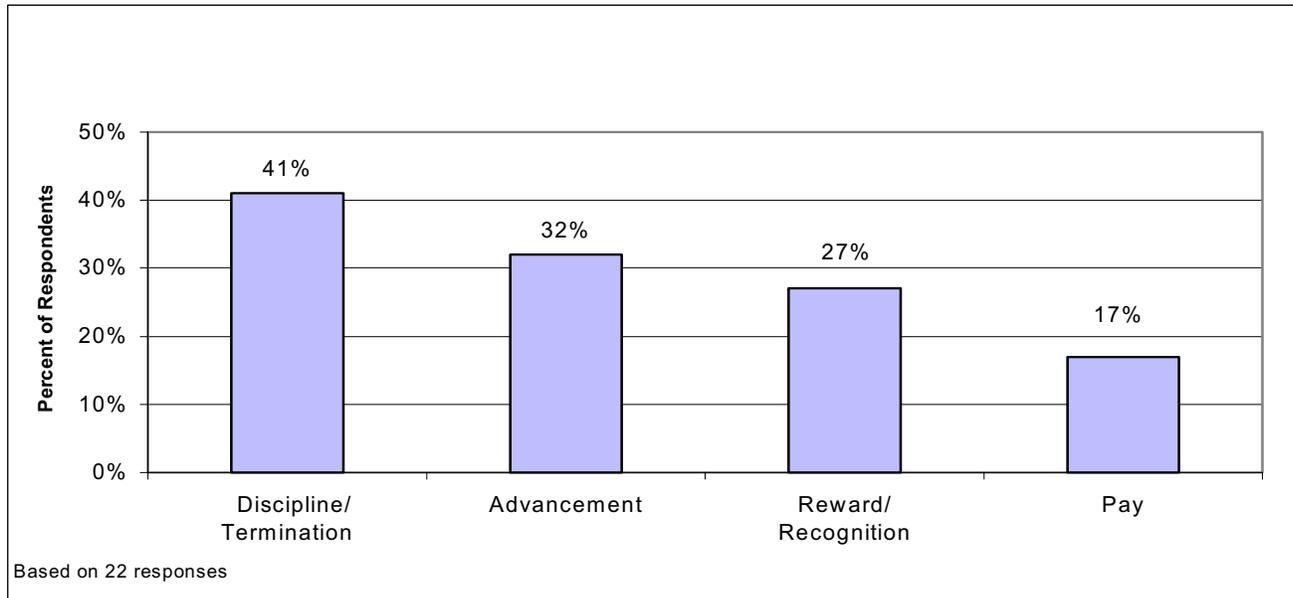


FIGURE 7 Performance evaluation uses.

has been more than funded by the reduction of worker's compensation expenses, which decreased from \$6.6 million in 1992 to \$3.2 million in 1999. The additional annual pension cost is approximately \$125,000 (19).

#### SATISFACTION WITH PERFORMANCE EVALUATION PROGRAMS

Surveyed agencies that conduct formal evaluations were asked to rate their satisfaction with their evaluation systems on a scale of 1 to 5, where 5 represents the highest satisfaction level. The evaluator's satisfaction ratings averaged 3.2 on the 5-point scale. Respondents gave their evaluation systems average ratings (from 3.0 to 3.2) on similar 5-point scales when asked whether the evaluations were able to impact performance, how satisfied bus operators were with the evaluation system, and with cost-effectiveness. Larger agencies were less likely to give bus operators a formal performance evaluation, but if they did, they believed that their evaluating staff was only marginally satisfied with the system. Performance raters are trained to give performance feedback at 53 percent of surveyed agencies.

None of the agencies in this survey reported having performed any statistical reliability or validity checks of their evaluation system, although two mentioned using operator feedback to make ongoing improvements to their systems. One agency noted that they measured the effectiveness of their system by the lack of lawsuits related to its use.

One agency that is pleased with its bus operator evaluation process is the Duluth Transit Authority. Over time they

developed their own performance criteria, using their *Standard Operating Procedure Manual*, operating standards, ADA compliance requirements, customer service criteria, fare procedures, and security ride checker feedback. The Safety Ride Check program has been in place for 12 years. It records and measures a number of observations about the operator, including fares, traffic law, observation skills (watching and being aware of other vehicles, pedestrians, and passengers), customer service, vehicle operation, passenger stops, and on-time performance.

Duluth is pleased with their program for a number of reasons. First and most importantly, it is perceived as being fair. The criterion is clear to all employees so that everyone understands what is expected. In addition, the bus operator does not view the evaluation process as a negative experience. The evaluation is conducted on the bus, in the operator's office, and not in the supervisor's office. The evaluation is perceived as an opportunity to improve skills and service, not as a punishment. Time is spent on questions and/or support on real-life situations, and the exchange with the supervisor is viewed as a development opportunity. All employees understand that Safety Ride Checks are used for improvements both individually and system wide. A copy of the Safety Ride Check is included in Appendix F.

One transit authority reported that, "Bus Operators have been concerned that their evaluations are not equitable in that the operations and safety checks are done randomly and therefore, statistics vary from Operator to Operator which results in different ratings. Some Operators will get checked more often than others which affects the points/grades." For example, one operator may get checked

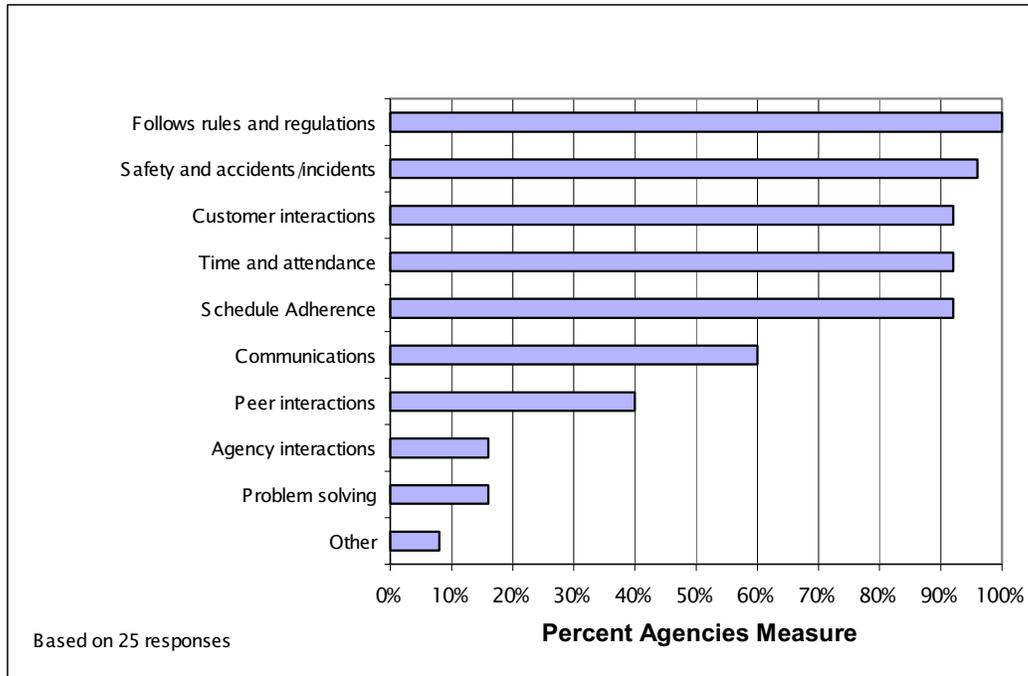


FIGURE 8 Behaviors used to assess operator performance.

once a month on an easy route, whereas another operator may get checked three times on hard routes. Differences in weather, time of day, nature and number of passengers, and type of equipment are all variables that can effect the scoring on a safety check.

Performance evaluation programs have come under fire by some researchers, who suggest that performance appraisal and pay for performance may be more harmful than helpful for organizations. W. Edwards Deming, the father of total quality management (TQM), goes so far as to state that the system by which merit is appraised and rewarded is “the most powerful inhibitor to quality and productivity in the world” (20). “[Pay for performance] nourishes short-term performance, annihilates long-term planning, builds fear, demolishes teamwork, nourishes rivalry and . . . leaves people bitter” (21).

### INFORMAL PERFORMANCE EVALUATIONS

Forty-two percent of responding agencies conduct informal performance evaluations. These processes are often ad hoc, unscheduled, and unexpected. Informal evaluations are primarily a matter of gathering data on many facets of individual performance. Statistics on attendance, punctuality, on-time performance, customer commendations and complaints, safe driving practices, and adherence to policy are routinely gathered for individuals in almost all agencies. For a summary of which operator behaviors are measured to assess performance, see Figure 8. In this figure, there were two “other” comments: (1) uniform appearance/equipment

inspection, operation of bus and (2) ADA procedure compliance. In looking at Figure 8, it is interesting to note the across-the-board attention to “rule following.” This focus on rule following may stem from efforts to provide consistency in service across a geographically dispersed labor group that operates with little direct supervision. This may also be because the work force operates under highly defined labor contracts and accompanying progressive discipline policies. It appears that it is often exception management (when a rule is violated) that provides the route for an interaction to occur between an operator and administrative or management staff. Customer complaints or observation by supervisors in the system are the most common vehicle for bringing performance issues to the attention of management.

Several agencies are using supervisory teams as another way to share performance feedback with operators. In this team setting, each supervisor is responsible for and has a set number of contacts per month with their team of operators. Individual supervisors determine the types of information, and the structure and settings for these contacts. These meetings serve to develop relationships in which performance data can be shared and responded to, and provide the opportunity for operators to ask questions and keep in touch with the organization. Supervisors interact with operators who have experienced recent changes in behavior to see if the supervisor can help the employee before the behavior becomes a problem.

In an attempt to get an indication of the balance between what is measured and what is important, survey respondents

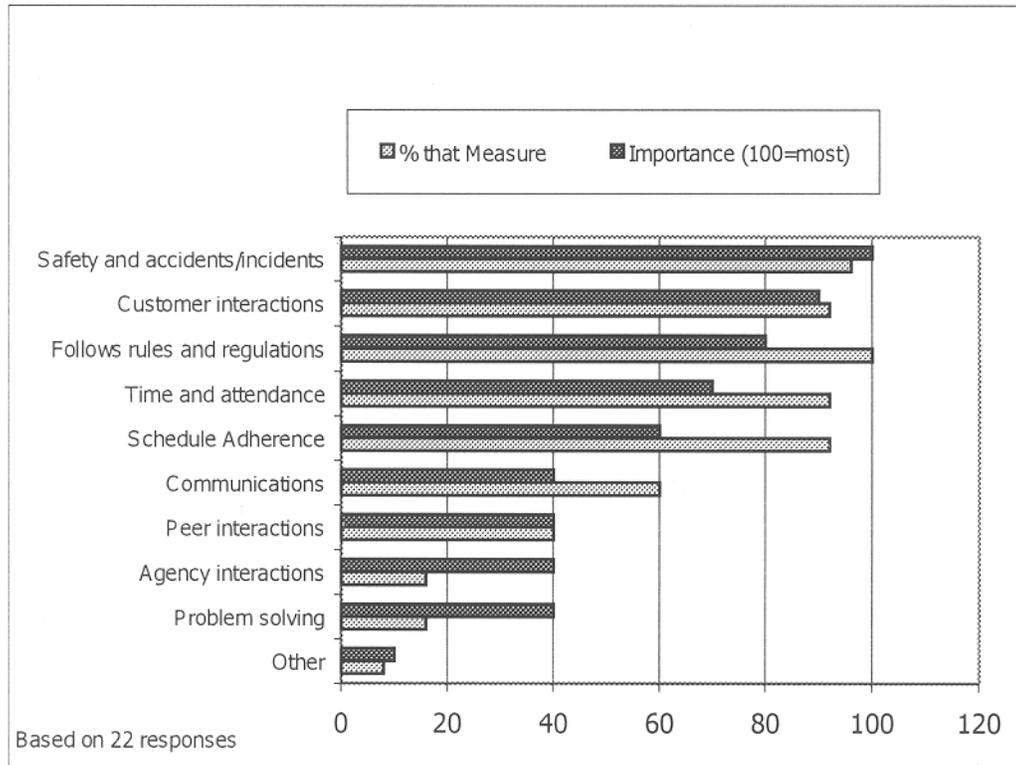


FIGURE 9 Behaviors used to evaluate operator performance and their perceived level of performance.

were asked to indicate what they measure and what types of bus operator behaviors they believed were most important. A comparison of those two scales is presented in Figure 9. Given this comparison, the two most important performance criteria, safety/accidents/incidents and customer interactions, appear to receive about as much attention as they should. Specifically, the bar lengths that measure the percentage of perceived importance for safety/accidents/incidents and for customer interactions are fairly similar. It was also observed

that a number of criteria rated as having less relative importance to the agency were found to be measured by a high proportion of survey respondents. From this comparison, it would seem that rule following, time and attendance, schedule adherence, and communications are receiving a disproportionate amount of effort in comparison to their perceived value in evaluating bus operator performance. This may be because of the ease of measurement and the tradition driving these measurements more than their actual, current level of importance.

## RETENTION

The robust economy with historic and continued low levels of unemployment has and will most likely continue to create a competitive market for all types of employees, including public transit bus operators. Changing ideas around company loyalty, the transience of the American worker, rapid advancements in technology and ready access to information have also affected the ability of transit agencies to retain qualified workers. Add to this the traditionally challenging aspects of bus operator jobs such as split shifts, environmental working conditions, traffic, and the potential for interactions with the public, and the retention of qualified bus operators can become a challenge.

Many of the surveyed transit agencies reported that they needed ways of reducing the loss of employees to other employment opportunities, and believed that was ultimately going to happen through improving the working conditions of bus operators. Some of the job conditions they thought could affect retention included improving schedules, increasing pay, offering growth opportunities, adding more short-term rewards such as safety awards, and employee recognition programs. A number of respondents indicated that the need to address probationary turnover and turnover in the first year of employment was critical.

### TURNOVER

Average turnover across all agencies was 10.9 percent. Most of that turnover (6.9 percent) was voluntary. Smaller agencies (those that have 67 to 258 operators) were characterized by lower overall turnover (9.4 percent) in

comparison to larger agencies (those having 472 to 2,150 operators, 11.1 percent). For a graph of these findings see Figure 10.

Several comparisons were made between turnover and various factors to identify potential relationships. In one comparison, agencies with higher turnover rates were found to be more likely to have measurement-of-performance documents and were also more likely to use their performance evaluations for discipline or termination. Agencies with performance evaluators trained to give feedback were also likely to have higher voluntary turnover, perhaps speaking to the ability of evaluators to coach poor performers into self-separation decisions. Agencies with higher turnover rates were found to be less likely to use a structured type of interview. Less structured interviews may imply a less objective selection process, which investigators suggest would be more likely to select weaker candidates.

### TWO VIEWS OF TURNOVER

Turnover can be viewed as either functional (it serves the interest of the agency) or dysfunctional (it does not serve the interests of the agency) (22). Voluntary and involuntary turnover can be viewed as functional when an operator who terminates has not been able to develop, apply, or maintain the skill and will necessary to serve the agency's interest. Turnover is functional when an operator's performance has placed the agency at risk, incurred inappropriate costs, resulted in actual or potential loss of ridership,

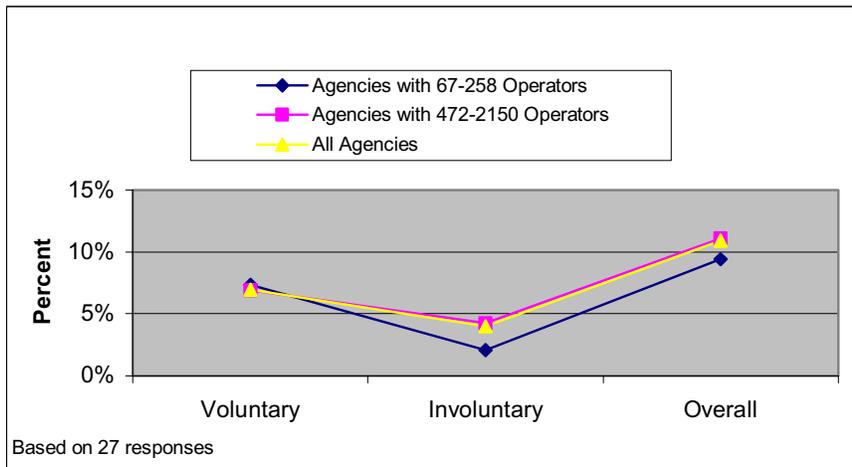


FIGURE 10 Bus operator turnover in surveyed agencies.

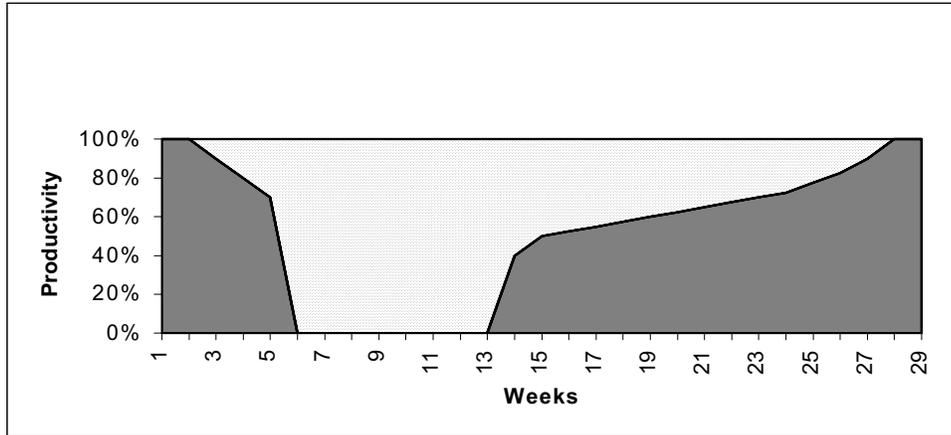


FIGURE 11 Hidden cost of turnover; lost productivity from decision to leave until replacement is hired and proficient.

reduced customer satisfaction, raised safety concerns, impacted operational efficiency, incurred actual or potential legal or benefit liability, or created an actual or potential negative impact on the agency culture.

Voluntary and involuntary turnover can be viewed as dysfunctional when the separated operator's performance quality enhanced the organization's ability to meet its mission. Adequately performing bus operators who leave an agency create a loss of institutional knowledge, a loss of "sunk" recruitment and training costs (those employees responsible for recruitment, selection, and training), the necessity of incurring new recruitment and training costs, and actual or potential interruption to the quality of service to customers. Additionally, turnover can be dysfunctional when it results from the organization's failure to meet realistic employee expectations about adequate training, competitive pay and benefits, working conditions, fair and equitable treatment, opportunities for advancement or personal development, or responsiveness to employee needs outside the workplace. This kind of information can often be deduced from summaries of exit interviews or surveys of terminated employees.

### REAL COST OF REPLACING OPERATORS

U.S. Department of Labor statistics put the cost of replacing an employee in the \$3,000 to \$7,000 range, and that does not include training (3). Given the current worker shortage, this amount could increase. In transit, the typical interpretation of the cost of replacing a bus operator begins with recruitment and ends with training, and includes all costs in between, such as newspaper advertising and sunk payroll costs. Costs are also sustained through lower productivity from the time an operator decides to leave until their replacement has been hired, trained, and brought up to speed (see Figure 11). Other costs are incurred when an

agency is understaffed and requires unscheduled overtime to cover scheduled work. If operators are pressed into working too many hours, an organization might also begin to experience more human errors related to fatigue. Employee morale could suffer, and performance problems, higher absenteeism, and poor customer service might result (23). Employees leaving the organization could also produce costs to the organization in terms of the outflow of COBRA payments, unemployment insurance, and lost investments in operator support items such as uniforms.

### RETENTION STRATEGIES AGENCIES USE

In an effort to better understand the balance between perceived effectiveness and cost of retention strategies, agencies were asked to identify strategies they used as a specific part of their retention efforts and to estimate their effectiveness and cost using two 5-point scales, where 5 indicated the highest effectiveness or the highest cost. A comparison of these rankings is shown in Figure 12. The first row of each strategy indicates its perceived effectiveness in improving retention and the second row indicates the strategy's perceived cost. According to this comparison, survey respondents indicated that some of their most effective retention strategies are also their most costly, such as competitive pay and benefits, and working conditions and environment.

Those techniques that were perceived as highly effective for the least cost have to do with practices that demonstrate focus on the individual and all deal with interactive process issues rather than tangible rewards. Respect for employees tops the list, and is the only one of the practices that is also in the top four most frequently used retention techniques. Equity and fairness, autonomy, opportunities to collaborate, opportunities to be creative, and exit interviews are the other effective, low-cost retention techniques. These

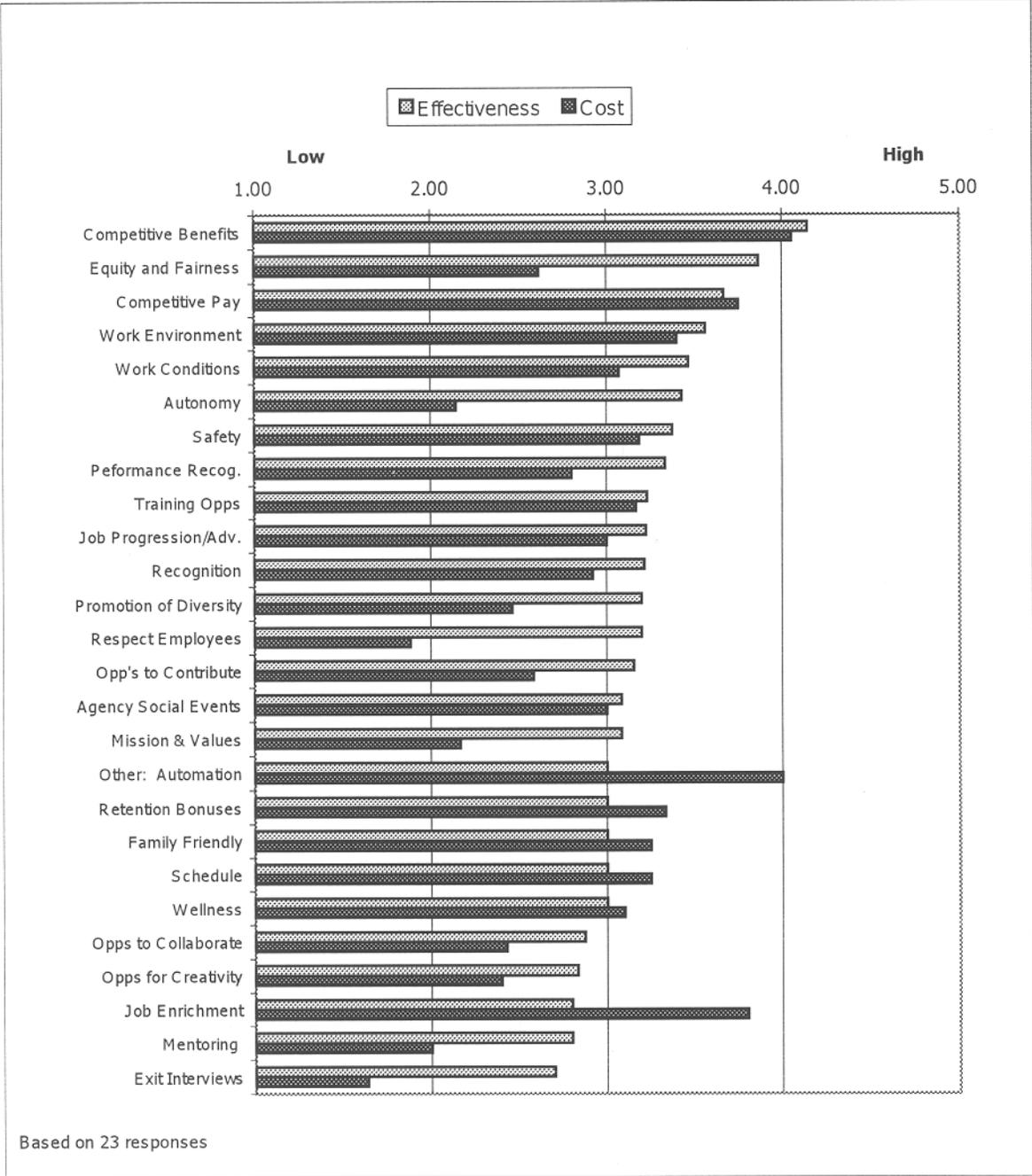


FIGURE 12 Retention strategies by effectiveness and perceived cost.

retention strategies are also shown in Table 10 rank-ordered by their perceived effectiveness.

In 1998, the Hay Group, a human resource management consulting firm, surveyed more than 300 companies, identifying employees that were committed to remaining with their employer for more than 5 years and the key factors that motivated the employees to stay (24). The following table (Table 11) compares the Hay study results of what employees value and what transit managers (from this survey) believe operators value as the most important.

Although there are some overlaps (shown in bold), the comparison illustrates potential benefits from determining what committed transit agency employees consider most important to their decisions to remain with a transit agency. Surveying current employees on what satisfies them and how it influences their intention to stay or leave the organization could be helpful in realigning agency retention efforts and resources. “An investment in mutual respect, good manners, good humor, and genuine concern for an employee creates the positive morale that builds companies. Positive morale pays dividends in safety, service, and employee loyalty” (25).

TABLE 10  
RETENTION STRATEGIES RANKED BY THEIR PERCEIVED EFFECTIVENESS

Percentage of Respondents Using Strategy	Strategy	Rated Effectiveness	Rated Cost
96	Competitive benefits	4.14	4.05
70	Equity and fairness	3.87	2.62
74	Competitive pay	3.67	3.75
74	Work environment	3.56	3.40
61	Work conditions	3.47	3.07
30	Autonomy	3.43	2.14
83	Safety	3.38	3.19
78	Performance recognition	3.33	2.80
57	Training opportunities	3.23	3.17
39	Job progression/advancement	3.22	3.00
70	Recognition	3.21	2.92
61	Promotion of diversity	3.20	2.46
83	Respect employees	3.20	1.88
57	Opportunities to contribute	3.15	2.58
52	Agency social events	3.08	3.00
57	Mission and values	3.08	2.17
4	Other: automation	3.00	4.00
13	Retention bonuses	3.00	3.33
35	Family friendly	3.00	3.25
22	Schedule	3.00	3.25
57	Wellness	3.00	3.10
35	Opportunities to collaborate	2.88	2.43
22	Opportunities for creativity	2.83	2.40
17	Job enrichment	2.80	3.80
30	Mentoring	2.80	2.00
52	Exit interviews	2.70	1.64

Note: Based on 23 responses.

TABLE 11  
COMPARISON OF NATIONWIDE EMPLOYEE WORK PREFERENCES SURVEY WITH TRANSIT MANAGER PERCEPTIONS OF BUS OPERATOR PREFERENCES

What Employees Value*	What Transit Managers Believe Bus Operators Value**
Type of work	Competitive benefits
<b>Respect</b>	Safety
Ability of top management	<b>Respect</b>
Coaching and feedback from boss	<b>Performance recognition</b>
Opportunity to learn new skills	<b>Competitive pay</b>
Training	Work environment
<b>Recognition</b>	Equity and fairness
<b>Pay</b>	<b>Recognition</b>

\*Hay Survey.

\*\*This Survey.

Note: Overlap is shown in bold.

In similar research, to quote one author, “numerous studies have shown that when people are asked what is most important to them about work, money ranks well behind such factors as interesting work or good people to work with. (Interestingly, when managers are asked what matters most to their employees, they tend to rank money at the top of the list then proceed to manage on the basis of that error)” (26). This is not to say that pay is not important or that it doesn’t matter to bus operators. Bus operators aren’t likely to want to drop their standard of living, so it’s important that the combination of pay rate times hours worked is both acceptable and dependable (27). “When

people move on, nine times out of 10 it’s not because they’re dissatisfied with the money they’re being paid” (28).

**Communication**

In a recent survey of more than 4,000 human resource professionals across many professions, the majority (71 percent) were trying to improve retention primarily by facilitating better communication throughout their organizations. This represents a near doubling of that approach from what these professionals were trying the previous

year (29). Steve Tarnoff, managing editor of a human resource website, suggests that this substantial increase is due to “research showing that when salary and benefits are equal, employees gravitate to workplaces where they feel valued, have good working relationships with the managers, and understand how their work contributes to the organization’s objectives” (30).

A number of survey respondents are making efforts to improve communications within their agencies. For example, Montebello Bus Lines feels that their open door management policy works. Operators know they can come and vent about problems or just talk about bad days. There’s an open channel of communication and mutual respect between managers and operators, which sends an important message that bus operators are valued.

SunLine Transit Agency in Palm Springs, California, has made open communications with labor a standard operating procedure. Their general manager indicates “I began to try to put the union in the context of my job, which was to manage the organization. In that sense, I understood that the union plays a very important role” (31). The organization developed a practice of working with the union on any issue, on the premise that there are always two sides to any story. Although they have a ground rule that there is no negotiating when it comes to customer service, the agency and the union have worked through and resolved some difficult challenges, and are building a lasting trust. SunLine’s union partnership supports the interests of the union in some unusual ways, including letting the union actively solicit members at the annual company barbecue and posting the union newsletter in the lobby. Management attends union meetings, and although there are some criticisms, the end result is one of mutual understanding rather than antagonism.

Communications between bus operators and maintenance staff have been improved at Madison County Transit in Granite City, Illinois, through their new Driver Inspection System. This is an easy-to-use interactive computer system where bus operators can request specific maintenance, which is automatically prioritized and scheduled around regular routines. After performing any repairs, mechanics update the system records with repair status and any notes regarding those repairs. When bus operators return to work, they can log onto the system and get accurate, timely information on the status of their request and know that their requests have been received and are being acted upon (32).

## Benefits

According to a year 2000 Arthur Andersen survey of the health and welfare benefit plans of over 450 U.S. organizations, employers are providing more medical coverage to

part-time employees, and are finding that employees are selecting more flexible Preferred Provider Option plans over Point-of-Service and Health Maintenance Organization options (33). Employers are also enhancing their fringe benefits, with two of the most prominent changes for 2000 being increased long-term care and childcare services (including childcare reimbursement). Some employers are offering extremely flexible benefit plans, where employees earn “benefit credits” (based upon their family situation), which they can spend as they please. This kind of program is especially responsive to employees of different ages, with different sizes of families, and different lifestyles. Employees with families will value a particular kind of benefit package that might not be as attractive to employees anticipating retirement. These kinds of programs allow employees to select individual benefit options to create unique, customized benefit plans.

Elsewhere, some organizations have demonstrated the value they place in retaining good employees by offering benefit coverage for same sex life partners.

Bay Metro Transit in Bay City, Michigan, was one of the few transit agencies not understaffed in 1999. They believe that their benefits have a significant role in retaining employees. That, and because it is a nice city to drive in. Instead of sick leave, they offer up to 30 days off per year for operators (new operators receive 20 and build up to 30), which can be used for sick leave or for any reason. They also feel that their medical benefits are a major factor. They offer a Blue Cross plan that is 100 percent employer paid with only a \$5 prescription co-pay and a \$10 office co-pay. The medical insurance follows employees through retirement, up to 65 years of age. Bay Metro also offers life insurance that goes with the employee upon retirement. This retirement program is employer-paid through the Michigan Employee Retirement Program, although employees may also make contributions.

## Recognition

The degree to which employees perceive that they are appreciated can play an important role in an employee’s retention decision. The options for recognizing employees are literally endless and can range from informal efforts, such as regular contact and information sharing, to more formal or structured efforts, such as award presentations or gifts of value. Safety awards, Bus Roadeo involvement, agency barbecues, and annual banquets are among the ways that transit agencies apply their resources in an effort to send the message to bus operators that their quality service is needed and appreciated.

One agency recognized the achievements of an employee by placing an article in *Metro Magazine* (34). It fea-

tured a Charlotte Transit bus operator with 51 years of service, who never had an accident over more than 1.2 million miles of driving, during which he carried more than a million customers. In the article, this operator gave the following seven tips on how other operators might be safer, better drivers: (1) don't make gutsy moves, (2) block out distractions, (3) love your bus, (4) never accelerate through an intersection, (5) don't argue with passengers, (6) if it smells bad, it is (yield the right-of-way as necessary), and (7) shape up (as in sleep and exercise) or ship out.

### Work Environment

Work environment is a broad term that includes the facilities, equipment, and other job tools that are part of an employee's work day. Drivers spend some time at their facilities each day, preparing for their shifts, relaxing between shifts, and transitioning after work. Facility design and maintenance can be a tangible indicator of an agency management's willingness to support a career investment by operators. Providing equipment that is well-serviced, comfortable, and reliable can be an important consideration for an operator; poorly maintained or marginal equipment makes the operator's job less pleasant and in some cases more difficult. Coaches are the main tools of the operator's job and their quality could be an important factor in a driver's decision to remain with the agency. Having realistic schedules with some time for breaks and personal relief can also be important. Other tools of the job, such as accurate and plentiful route schedules, readable and up-to-date block sheets, reliable radios, and on-bus security features can also be elements of bus operator satisfaction.

At Montebello Bus Lines there is now a new, state-of-the-art facility that they believe has contributed to improved operator retention. The new facility includes a fitness center, pool table, big screen television, individual lockers, showers, a quiet room, and new and/or well-maintained vehicles to drive.

### Mentors

Mentors are both friend and shepherd at the Duluth Transit Authority. Their very successful mentor program has been in place for 18 months. It begins with a group of mentors/bus operators meeting with a group of trainees for a free-flowing discussion period. The mentors give real job information and scenarios and the trainees are free to ask any questions. For a period of time, mentors "shepherd" the new employee. According to the director of operations this is important because the new employees are on their own on the bus and do not always feel supported. The mentor and new employee are in ready communication.

This mentoring relationship makes it easier for new employees to feel like they have a friend whom they can rely upon, ask questions, and get ideas about where to find resources. In turn, the mentor periodically calls and checks on their new employee. The mentors are tenured employees with excellent service records. Duluth has found their program to be very successful in providing a dependable resource for new employees, and it has also allowed Duluth to recognize outstanding operators with additional responsibilities, trust, and respect. For more discussion of mentoring programs in this synthesis, see the Transition to Work subsection of Training, in chapter 3.

### RETENTION GOALS

Eleven percent of survey respondents have set specific retention goals as part of their strategic plan. Capital Metro in Austin, Texas; San Diego Transit in California; and the Utah Transit Authority in Salt Lake City, Utah, have set bus operator turnover reduction goals. Staffing has frequently been part of transit's strategic outlook and these properties are going one step further and emphasizing that reduction of turnover is a key element in meeting staff planning goals.

### DATA USED IN PLANNING RETENTION EFFORTS

Just under one-half of all respondents use statistics or exit information in measuring the effectiveness of their retention strategies. A summary of those findings is found in Table 12.

TABLE 12  
STATISTICS AND TURNOVER INFORMATION USED IN  
RETENTION PLANNING

Type of Statistic or Information Used	Percent Respondents
Voluntary and involuntary turnover	46
Exit interviews (reasons for termination and feedback)	30
Turnover differences between operator classifications	22
Average length of service	22
Current operator feedback	22

Note: Percentages based on 23 responses.

Some of the ways that transit can measure their retention efforts include (1) measuring the per person cost of voluntary and involuntary turnover, (2) differentiating turnover between bus operator classifications, (3) determining if there is a relationship between length of service and turnover, and (4) determining if there are certain times when the number of terminations is higher.

## EXIT INTERVIEWS

Survey results found that 67 percent of properties conduct exit interviews and 30 percent use the exit interview data to inform their retention planning. Larger agencies were more likely to use these statistics in their retention efforts. Most exit interviews (80 percent) are handled in human resources, typically by a representative, analyst, or officer and sometimes by a director or manager. About one-third of respondents indicated that they forwarded their exit interviews to a third party for use, one-third documented them, and one-third used them in general statistics describing operations or organizational turnover.

The exit interview, if done well, can be a rich source of data about the effectiveness of organizational efforts to retain

quality people. There are many reasons why individuals leave agencies; some are personal and others may have no relevance to what an organization does or does not do to keep its employees (for example, a spouse being transferred). However, individual motivators to resign, as well as what can be aggregated from the data, can provide immediate and effective data over time, that can be constructively used to proactively address future turnover. Additionally, these data can be used to test the organization's assumptions about what factors influence retention. For example, whereas an organization may believe it has recognition and reward practices that are valued by employees, they may find that exiting employees find these practices misdirected or insufficient. Some experts suggest that exit interview surveys administered weeks after separation allow former employees a chance to reflect.

## CONCLUSIONS

It seems clear that the transit industry will continue to struggle with the employment challenges brought on by a booming economy and the changing nature of the work force. The focus of the industry will be on improving the competitiveness of bus operator jobs primarily through improvements in working conditions, organizational culture, and better feedback processes. Effective recruitment, adequate training programs, and productive evaluation efforts both lead to and must in some way be measured against retention. The return that an agency gets on investments in attracting and training quality bus operators is significantly tied to its ability to retain them. All aspects of human resource management, including hiring, training, performance evaluation, and retention are critical to an agency's ability to adequately and effectively acquire and maintain a quality work force. Although there is a linear nature to how these processes are handled in real time, they should not be developed or administered in isolation. At any given point in time, all factor into the retention and success of a bus operator and the agency being served.

Beginning with work-force planning, agencies must continue to develop better ways to anticipate short- and long-term staffing needs. The majority of transit properties surveyed too often found themselves in a reactive mode. The pressures to fill open positions from a more limited applicant pool compromises efforts to attract and hire better quality applicants, provide comprehensive training, and retain their services. The fierce competitiveness of the current job market does not allow agencies the luxury of ad hoc planning. Sophisticated staffing planning models have been developed that are transit-specific and have proven useful in hiring and training processes.

Broader and more effective recruitment efforts are necessary as transit agencies compete for scarce workers. Because the majority of applicants come from nontransit backgrounds, agencies are not restricted in their recruiting to a limited, specialized pool. This also means that a wide variety of employers are actively recruiting those same potential applicants for bus operator positions. Agencies are recognizing the need to expand their recruiting efforts to a more general population and to reach this population using multiple, targeted recruitment techniques. Recruitment materials and tools need to be updated and fine tuned so that applicants are compelled to consider a job in transit at the same time they are bombarded with a dizzying array of alternate employment opportunities. Attractive and comprehensive recruitment packages that inform and sell the or-

ganization seem to be fundamental recruitment tools. The survey for this synthesis found that agencies that had taken advantage of Internet technology to attract (and potentially process) applicants were less likely to have been understaffed. The highly perishable nature of applicants in a competitive market calls for faster and more efficient application and selection processes, in addition to hiring policies and documents that facilitate smoother applicant processing. Agencies appear to be aware of and continuously responsive to the need to provide adequate pay and benefit packages that will both attract candidates and serve as incentives for bus operators to stay with the organization.

Transit managers are continuing to struggle with the challenge of selecting quality individuals who will succeed both in training and on the job. There is a need to identify the specific success criterion against which performance will be measured and to improve methods for identifying those individuals who are most likely to perform successfully against those specific job criteria. Success criteria need to be developed and reinforced through entry level, refresher, and remedial training efforts. Regular, constructive feedback systems could serve to develop and support operators in their challenging work environments.

Selection processes run the gamut from basic application review and unstructured interviewing to validated selection processes that use multiple sources of input, including structured testing, criterion-referenced interviewing, and background and reference checking. Transit managers continue to be concerned with their capacity to select bus operators who will be most likely to complete training and then go on to provide quality customer service. Testing has become the norm, with agencies recognizing the potential of tests, but with only a few reporting performing good measurement to ensure they are using the right tools for their organization.

Training plays a critical role in the success of candidates on the job and on their retention in both training programs and in service. Transit agencies rely heavily on traditionally structured training programs, but there is significant variability in the length, content, and delivery methods. The length of training may be a factor in trainee retention. Hard competencies (e.g., driving ability) receive more consistent attention than soft competencies, such as interpersonal and customer service skill training. Identification of critical competencies may be based more on intuition and tradition than on a process that identifies valid performance cri-

teria. This makes measurement of the success of training efforts more difficult and it can effect an agency's ability to improve its' training processes. Delivery methods are also changing, with the role of advancing training technology both an ongoing challenge and an opportunity to increase efficiency and effectiveness. Processes for transitioning trainees to work are beginning to receive much needed attention. Improvements in how trainees are supported and monitored during transition to work have the potential to improve the learning curve, performance level, and retention of new hires. Mentoring programs are seen as a highly effective, low-cost method for helping new operators through their first challenging months on the job.

Surveyed agencies displayed only a moderate attention to evaluation of bus operator performance. Formal appraisal systems were reported by just over one-half of respondents; of those agencies, satisfaction with the processes is moderate. Less than one-half of the agencies used an informal system. Performance management across all agencies is largely by exception; that is, performance, which falls outside of policy or work rule guidelines. Indeed, rule following was reported as the primary evaluation measure. Data gathered through a formal feedback process can be helpful in identifying and responding to issues around the efficacy of selection processes, training programs, and retention efforts. Furthermore, performance feedback systems can build in lines of communication between bus operators and the people who support them in their work. Performance management is an area where agencies appear to have a significant opportunity to enhance their efforts in providing quality service and in supporting and retaining quality employees.

Retention of operators is a significant concern of the surveyed agencies, yet fewer than half of surveyed agencies are using turnover statistics to guide their retention efforts. Successful retention strategies mitigate the challenges of a competitive recruitment environment and allow selection and training efforts to be less pressured and more proactive. More analysis of the reasons for dysfunctional turnover could be pursued. One clear finding was that exit interviewing is under-utilized. Exit interviews should be standard procedure, and be used as a way of learning how expectations were not met and about systems that undermine an operator's ability to do the job and about the operator's level of job satisfaction. Some agencies are recognizing the benefits of taking notice of retention research and are making greater efforts to get their employees more involved and to better respond to their needs. A strong area of opportunity is to focus on those retention strategies that have the greatest impact for the least cost. Research into what motivates employees to remain with an organization show that the most effective strategies are also those that

involve higher levels of interpersonal interaction, communication, and individual recognition.

To be competitive, public transit is going to need to be adaptable. The survey data suggest that there are areas of great opportunity. Some ideas for further research and sharing of information between agencies that could assist agencies in adapting their employment processes in order to meet the challenges of the new millennium are

- Further research and development of a model of employment that better describes and quantifies the integrated nature of hiring, training, performance management, and retention, could assist agencies in enhancing and integrating their practices.
- A synthesis of recruitment advertising and techniques that emphasizes successes and innovation *in any industry* in order to target a broader, more qualified pool of candidates could provide invaluable information that might be used immediately.
- The use of work-force planning models and their adaptation to the special characteristics of transit could help agencies be more proactive.
- Continued research into the validation of selection processes could benefit efforts to select the best applicants for better future performance and retention.
- Research into applied uses of post-employment data (exit interviewing/exit surveying) could assist agencies in implementing the use of these valuable tools for maximum benefit.
- A synthesis of training programs' use of technological advances, hardware, and software, could help agencies with decisions on purchasing and implementing them.
- The uses and benefits of structured performance evaluations could be studied to assist transit agencies in developing effective processes to manage performance.

The forces that are affecting transit bus operator employment are varied. Multiple factors exist regarding any single individual's interest in, commitment to, or performance of work. From the information gathered from the responding agencies it appears that no one single employment strategy has the potential to resolve the issue of attracting and retaining quality employees. Instead, the industry appears likely to benefit most from identifying and implementing multiple techniques for recruitment that reach diverse target groups, multiple selection processes that target a range of predictors, multiple training approaches that target a more comprehensive skill set and employ numerous technologies and, certainly, multiple retention efforts that target a broad range of employee needs. Above all, focused efforts to integrate hiring, training, performance evaluation, and retention strategies are needed.

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# APPENDIX A

## Survey Questionnaire

<p><b>Questionnaire</b></p> <p><b>BUS OPERATOR</b></p> <p><b>Hiring, Training, Performance Evaluation, and Retention</b></p>
--

Your Name \_\_\_\_\_

Your Title \_\_\_\_\_

Organization \_\_\_\_\_

Telephone \_\_\_\_\_

Address \_\_\_\_\_

Email \_\_\_\_\_

**Hire good people. Train them well. Attend to their ongoing professional development. Create a work environment that leads employees to stay.** These are the main elements of staffing in any organization. What is the transit industry doing to hire, train, evaluate, develop and retain productive, professional bus operators? How have agencies worked in these areas in response to changing demographics, high unemployment, a highly competitive job market and a customer service driven culture? Are your efforts in keeping with the norm or have you lagged behind? Perhaps you are on the cutting edge in one or more of these areas and have some successes to share. To hear what the industry is doing to attract and retain the best, take a few minutes and fill out this survey. Your confidential results will be synthesized into a report to be available from the Transportation Research Board. In the interim if you choose to participate we will mail you our preliminary findings before the publication of the final report. Thank you for your contribution.

### DEMOGRAPHICS

1. Current number of Bus Operators at your transit agency ..... [     ]
2. Number of Bus Operators who voluntarily quit in 1999 ..... [     ]
3. Number of Bus Operators who involuntarily left in 1999 ..... [     ]
4. What was the average number of Bus Operators at your agency in 1999?..... [     ]
5. How many applications for Bus Operator did you receive in 1999? ..... [     ]
6. Was Bus Operator understaffing a significant problem for your agency in 1999? .....  No  Yes
7. Current starting pay rate for a Bus Operator.....[\$         /Hour]
8. Is this starting pay rate **at, above or below** the market? .....  At  Above  Below  
By what percent? \_\_\_\_\_%
9. Current top pay rate for a Bus Operator.....[\$         /Hour]

10. Is this top pay rate **at, above or below** the market .....  At  Above  Below  
 By what percent? \_\_\_\_\_%
11. How long does it take a Bus Operator to get to top pay rate? ..... [ \_\_\_\_\_ Months]
12. How many classifications of Bus Operators do you have (part time, regular, small bus, paratransit)? .....  
 [Number: \_\_\_\_\_]  
 [Titles: \_\_\_\_\_]
13. Are all new Bus Operators required to complete a new hire training program? .....  No  Yes
14. Is that training program length adjusted for student ability level? .....  No  Yes
15. What is the training program pay rate ..... [\$ \_\_\_\_\_ /Hour]
16. Is this training program pay rate **at, above or below** the market? .....  At  Above  Below  
 By what percent? \_\_\_\_\_%
17. What percentage of your students successfully completed the training program in 1999? ..... \_\_\_\_\_%
18. What job titles within your organization are in the same pay range (i.e., pay, pay scale, pay lane) as your top Bus Operators? .....  
 [Titles: \_\_\_\_\_]  
 \_\_\_\_\_]
19. Does your agency have any of the following documents that specifically pertain to or are used for Bus Operators?  
*Check all that apply.*
- |   |  |  |
|---|--|--|
| <input type="checkbox"/> Mission/Vision Statement   | <input type="checkbox"/> Bus Operator Policy/Procedures  | <input type="checkbox"/> Skill Tests           |
| <input type="checkbox"/> Organizational Goals       | <input type="checkbox"/> Measurement of Performance      | <input type="checkbox"/> Other Tests           |
| <input type="checkbox"/> Strategic Plan             | <input type="checkbox"/> Work Success Criteria           | <input type="checkbox"/> Work Rules            |
| <input type="checkbox"/> Organization Chart         | <input type="checkbox"/> Performance Plans               | <input type="checkbox"/> Labor Contract        |
| <input type="checkbox"/> Job Descriptions           | <input type="checkbox"/> Measurement of Success Criteria | <input type="checkbox"/> Recruitment Package   |
| <input type="checkbox"/> Job Posting/Announce.      | <input type="checkbox"/> Performance Evaluation          | <input type="checkbox"/> Evaluation Forms      |
| <input type="checkbox"/> Recruitment (newspaper) Ad | <input type="checkbox"/> Interview Questions             | <input type="checkbox"/> Mystery Shopper Forms |
| <input type="checkbox"/> Training curriculum        | <input type="checkbox"/> Hiring Policy                   |  |
| <input type="checkbox"/> Other _____                |  |  |

- *Note: You will be asked at the end of the survey to forward any of the above documents which you believe are **Effective** and/or **Innovative**.*

**RECRUITMENT AND SELECTION**

20. Your current Bus Operators were hired from which of the following groups? *Check all that apply.*
- |  |  |
|--|--|
| <input type="checkbox"/> Internal                              | <input type="checkbox"/> External–Other Transit Agency |
| <input type="checkbox"/> External–No Transit Agency Experience | <input type="checkbox"/> Other _____                   |
- *Estimate the percentages of applicants that come from each of the above categories, then write that number to the left of each classification, making sure that the sum equals 100%.*
21. What are some of the techniques and processes used to recruit Bus Operators? *Check all that apply.*
- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Walk-ins            | <input type="checkbox"/> Employee referrals     | <input type="checkbox"/> Newspaper advertising  |
| <input type="checkbox"/> Radio advertising   | <input type="checkbox"/> Television advertising | <input type="checkbox"/> On the bus advertising |
| <input type="checkbox"/> Job fairs           | <input type="checkbox"/> Open houses            | <input type="checkbox"/> Community referrals    |
| <input type="checkbox"/> Political referrals | <input type="checkbox"/> Union referrals        | <input type="checkbox"/> In house recruitments  |
| <input type="checkbox"/> Recruiters          | <input type="checkbox"/> Temporary agencies     | <input type="checkbox"/> Job service            |

- Employment agencies       Special interest groups       Internet postings
- Trade publications       Ethnic newspapers       Pass and ticket outlets
- Flyers at bus shelters       Flyers or ads on buses       Welfare to Work
- Sign on bonus/incentive - *If so, please describe* \_\_\_\_\_
- Other \_\_\_\_\_

• *If you have 1999 selection ratios (number of hires divided by number of applicants) for any of the above, please write those ratios to the left of the relevant check boxes.*

22. If you checked the box indicating that you have used the “welfare to work” technique, please indicate your level of **effectiveness and cost savings** with this process on the scale below.

Rate the effectiveness of this technique					Rate the cost savings of this technique				
1 = low effectiveness 5 = high effectiveness					1 = low effectiveness 5 = high effectiveness				
1	2	3	4	5	1	2	3	4	5
low				high	low				high

23. Have you validated your Bus Operator selection process and, if so, what type of validation study did you perform and when was it conducted?

24. Have you identified job success factors (criteria) which are used to identify those Bus Operator applicants with the best opportunity for success in your job environment? If so, please list those criteria (this information will remain confidential).

25. What are some of the techniques, processes, and criteria used in Bus Operator selection? *Check all that apply.*

- Application
- Prior employment reference checking
- Performance record check (for rehires)
- Court record check
- DMV record check
- Psychological testing
- Honesty testing
- Attendance records
- Cognitive testing
- BOSS test
- Video situation response testing
- Seattle Metro Video
- Chicago test
- Intelligence testing
- Basic skills testing (reading, writing, etc.)
- Personality testing
- Behavioral inventory (preferences, etc.)
- Behavioral testing (“In Box,” role playing)
- Technical skills testing
- Unstructured, spontaneous interview
- Structured (from written items) interview
- Criterion-referenced (behavioral) interview
- Interviews with 2 or more interviewers
- Demographic inventories
- Appearance (neat, clean, proper attire)
- Job stability
- Previous driving experience
- Drug testing
- Minimum age (**if so**, please give age: \_\_\_\_\_)
- Industrial Commission Records
- Neatness or completeness of application
- Credit record information
- Completion of Bus Operator training
- Other work experience \_\_\_\_\_



**TRAINING**

29. What is the duration of your Bus Operator training program?.....[\_\_\_\_\_ days]

30. Are all Bus Operators required to complete an annual required (refresher) training program .....  No  Yes

31. In your training for new Bus Operators which of the following competencies do you train for? *Check all that apply.*

- Customer support (answering questions, greeting customers, solving customer problems, etc.)
- Interpersonal interactions with customers (dealing with emergencies, conflict, fare disputes, etc.)
- Interpersonal interactions with peers and staff
- Knowledge of and adherence to policy and procedure
- Knowledge of and handling of fares
- Organizational knowledge (how departments function and operate, key personnel, organization mission, etc.)
- Personal health and fitness for duty
- Radio communications
- Safe driving practices
- Schedule adherence
- Serving customers with disabilities
- System (area) knowledge
- Written communication

32. What are some of the methods used at your agency to measure these competencies? *Check all that apply.*

- Paper and pencil tests
- Computer tests
- Observation with a check list
- Peer assessment
- Trainee turnover
- Simulators
- Computer-based training
- Observation with a pass/fail criterion
- Probationary operator statistics
- Other (please specify)

33. Now look at the methods which you checked and:

- Place a **“T”** to the left of measurements that are done by training department staff.
- Place a **“P”** to the left of measurements that are done by peer trainers (road instructors, LPI’s).
- Place an **“S”** to the left of measurements that are self-administered.

34. In the process of Bus Operator training, which of the following methods do you use and what percentage of the time do you use them? Who performs the training? Please enter the percentage of the total time spent in the various training delivery modes, then identify the primary trainer (*see code definitions just after table*).

Delivery method	Percentage of time spent	Who delivers the training* (See code definitions below table then circle <b>all that apply</b> )
Classroom	%	FT BOAT ISBO O
In bus (but not in service)	%	FT BOAT ISBO O
In bus in service	%	FT BOAT ISBO O
Simulation (computers, simulators, or machines)	%	FT BOAT ISBO O
Other (please specify)	%	FT BOAT ISBO O
Total ( <i>please make sure % sum to 100%</i> )	%	

\***“FT”** = Full-time professional training staff, **“BOAT”** = Bus Operators assigned to training, **“ISBO”** = In-service Bus Operators, **“O”** = Other agency personnel

35. When new Bus Operators have completed training, which of the following techniques, if any, do you use to transition them into the workforce? Please complete the table.

Technique	Do you use this strategy (circle one)		Rate the effectiveness of this strategy 1= low effectiveness 5 = high effectiveness					Rate the cost of this strategy 1= low cost 5 = high cost				
	Yes	No	1	2	3	4	5	1	2	3	4	5
Assigned to Extra Board			low				high	low				high
Assigned to specific work designed for new Bus Operators			low				high	low				high
Bid available work			low				high	low				high
Assigned to a mentor			low				high	low				high
Supervisor or Trainer ride alongs			low				high	low				high
Assigned to a Senior Bus Operator			low				high	low				high
Follow-up or observation by training staff			low				high	low				high
Probationary evaluation			low				high	low				high
Required session with training staff			low				high	low				high
Assigned to Supervisor			low				high	low				high
Other			low				high	low				high

36. Have Bus Operators received the following skills training? Check all that apply.
- Decision Making
  - Employee Empowerment
  - Scheduling and extra board
  - Setting Priorities
  - Team Building
  - Time Management
  - Performance Evaluations
  - Total Quality Management
  - Other \_\_\_\_\_
37. Have Bus Operators received the following interpersonal relationships training? Check all that apply.
- Communication
  - Conflict Resolution
  - Affirmative Action/EEO/Civil Rights
  - Customer Service
  - Difficult Customers
  - Policy and Procedures
  - Coworker Relationships
  - Sexual Harassment
  - Self Defense
  - Negotiation Skills
  - Diversity/Sensitivity
  - Other \_\_\_\_\_
38. Does your state or agency require annual Bus Operator refresher training? .....  No  Yes
39. If the answer to item #38 is yes, what have been the subject areas of these training programs over the last two years?
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
40. Is training offered for individual Bus Operators when they have identified skill problems? .....  No  Yes
41. If skill training is offered, what are the three most commonly identified skill problems you train for.
1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_





69. Please check each of the following strategies that you use as a specific part of your retention efforts.

Strategy	Do you use this strategy (circle one)		Please rate effectiveness of this strategy at your agency 1= low effectiveness 5= high effectiveness					Please rate the cost of this strategy at your agency 1= low cost 5= high cost				
	Yes	No	1	2	3	4	5	1	2	3	4	5
Working conditions (equipment, tools, schedules)			low				high	low				high
Work environment (facilities, safety, comforts)			low				high	low				high
Competitive benefits			low				high	low				high
Job enrichment			low				high	low				high
Performance recognition programs			low				high	low				high
Opportunities to contribute			low				high	low				high
Opportunities for creativity			low				high	low				high
Competitive pay			low				high	low				high
Internal equity and fair treatment			low				high	low				high
Opportunities to collaborate with others			low				high	low				high
Job progression/advancement			low				high	low				high
Family friendly policies			low				high	low				high
Agency social events			low				high	low				high
Autonomy			low				high	low				high
Exit interviews			low				high	low				high
Retention bonuses			low				high	low				high
Training opportunities			low				high	low				high
Recognition programs			low				high	low				high
Mentoring programs			low				high	low				high
Wellness programs			low				high	low				high
Schedule enhancements			low				high	low				high
Safety programs			low				high	low				high
Mission vision and values of the organization			low				high	low				high
Promotion of diversity			low				high	low				high
Management respect for employees			low				high	low				high
Other (please list)			low				high	low				high



## APPENDIX B

### Survey Respondents by Geographic Area

California	Montebello Bus Lines	New York	Long Island Bus
California	Orange County Transportation Authority	New York	New York City Transit
California	San Diego Transit	Ohio	Greater Cleveland Regional Transit Authority
California	South Coast Area Transit	Ohio	Lake Tran
Colorado	Springs Transit	Oklahoma	Metropolitan Tulsa Transit Authority
Connecticut	CT Transit	Oregon	Tri-Met
Florida	Broward County Transit	Pennsylvania	Port Authority of Allegheny County
Florida	Miami-Dade Transit	Pennsylvania	Southeastern Pennsylvania Transportation Authority
Illinois	City Link	Tennessee	Memphis Area Transit Authority
Kentucky	Transit Authority of Northern Kentucky	Texas	Capital Metropolitan Transportation Authority
Massachusetts	Massachusetts Bay Transportation Authority	Texas	Citibus
Michigan	Ann Arbor Transit Authority	Texas	VIA Metro
Michigan	Bay Metro Transit Authority	Utah	Utah Transit Authority
Minnesota	Duluth Transit Authority	Wisconsin	Madison Metro Transit
Missouri	Kansas City Area Transportation Authority		

## APPENDIX C

### Summary of Survey Data

*The following contains summary data for the Bus Operator Hiring, Training, Performance Evaluation, and Retention Survey. Most of the statistics presented are simple averages and percentages, along with the counts of the number of respondents that answered each question. In the case of open-ended questions and comments, individual responses are listed.*

#### Demographics

1. Current number of Bus Operators at your transit agency:
  - **Average = 894, Count = 29**
2. Number of Bus Operators who voluntarily quit in 1999:
  - **Voluntary Turnover (The average of Q2/Q4 for each agency) = 7.4%, Count = 27**
3. Number of Bus Operators who involuntarily left in 1999:
  - **Involuntary Turnover (The average of Q3/Q4 for each agency) = 3.1%, Count = 28**
4. What was the average number of Bus Operators at your agency in 1999?
  - **Average = 536, Count = 27**
5. How many applications for Bus Operator did you receive in 1999?
  - **Average = 1828, Count = 23**
6. Was Bus Operator understaffing a significant problem for your agency in 1999?
  - **No = 35% Yes = 65%, Count = 26**
7. Current starting pay rate for a Bus Operator:
  - **Weighted Average = \$12.99/Hour, Count = 29**
8. Is this starting pay rate at, above or below the market?
  - **At = 79%, Above = 10.5%, Below = 10.5%; Count = 19**
  - **By what percent? At = 100%, Count = 1; Above = No Responses; Below = 18%, Count = 2**
9. Current top pay rate for a Bus Operator:
  - **Weighted Average = \$19.33/Hour, Count = 29**
10. Is this top pay rate at, above, or below the market?
  - **At = 75% Above = 20% Below = 5%, Count = 20**
  - **By what percent? At = 85%, Count 6; Above = 15%, Count = 1; Below = 26%, Count = 1**
11. How long does it take a Bus Operator to get to top pay rate?
  - **Average 51 Months, Count = 27**
12. How many classifications of Bus Operators do you have (part time, regular, small bus, paratransit)?
  - **Number: Average 2.5, Count = 29**
  - **Titles: part time (18), full time, regular, bus operator (27), paratransit part time (2), paratransit or paratransit full time (7), special services operator (1), service worker (1), limited assignment part time (1), small bus (1), reduced hours (1), grade 3/4/5 (1)**

13. Are all new Bus Operators required to complete a new hire training program?  
 • **No = 0% Yes = 100%, Count = 27**
14. Is that training program length adjusted for student ability level?  
 • **No = 60% Yes = 40%, Count = 25**
15. What is the training program pay rate?  
 • **Weighted Average = \$7.35/Hour, Count = 29**
16. Is this training program pay rate **at, above, or below** the market?  
 • **At = 60% Above = 15% Below = 5%**  
 • **By what percent? At = 100%, Count = 2; Above = No Responses; Below = 20%, Count = 1**
17. What percentage of your students successfully completed the training program in 1999?  
 • **Average = 90%, Count = 7**
18. What job titles within your organization are in the same pay range (i.e., pay, pay scale, pay lane) as your top Bus Operators?  
 • **Titles: A Mechanic, account clerk, accountant, accounts payable leader, ADA evaluation office administrator, administrative assistant, apprentice mechanic, automotive repair (Bman), B Mechanic, benefits specialist, claims investigator, cleaner, clerk dispatcher, collecting agent, communication technician I, conductor, customer service representative, dispatcher, employee relations specialist, employment specialist, environmental technician I, executive assistant, fare revenue processor, foreman, GIS technician, help desk, helper, information clerk/teller, legal secretary (2), lithographer duplicating machine operator, LRV apprentice, maintenance mechanic (2), management support specialist, mechanic (3), none (7), part time bus operator, pass sales technician, payroll clerk (2), PC specialist/technician (3), planner IV, rapid transit line train attendant, repair coordinator, repairman, schedule analyst, schedule planner (2), scheduler, service worker, special events coordinator, spotter, staff accountant, staff assistant, station agent, station foreman, streetcar motor person, subrogation/liability adjuster, supervisor (2), tireman, top rail operator, trade worker, Transit Planner 1, unit builder, utility person (2), yard person  
**Count = 23****
19. Does your agency have any of the following documents that specifically pertain to or are used for Bus Operators?  
*Check all that apply.*
- |   |   |                                  |
|---|---|----------------------------------|
| <u>56%</u> Mission/Vision Statement           | <u>85%</u> Bus Operator Policy/Procedures | <u>67%</u> Skill Tests           |
| <u>30%</u> Organizational Goals               | <u>37%</u> Measurement of Performance     | <u>41%</u> Other Tests           |
| <u>26%</u> Strategic Plan                     | <u>7%</u> Work Success Criteria           | <u>74%</u> Work Rules            |
| <u>48%</u> Organization Chart                 | <u>7%</u> Performance Plans               | <u>85%</u> Labor Contract        |
| <u>81%</u> Job Descriptions                   | <u>7%</u> Measurement of Success Criteria | <u>41%</u> Recruitment Package   |
| <u>78%</u> Job Posting/Announcement           | <u>41%</u> Performance Evaluation         | <u>44%</u> Evaluation Forms      |
| <u>70%</u> Recruitment (newspaper) Ad         | <u>74%</u> Interview Questions            | <u>30%</u> Mystery Shopper Forms |
| <u>85%</u> Training Curriculum                | <u>56%</u> Hiring Policy                  |                                  |
| <u>4%</u> Other <b>(No comments provided)</b> |   |                                  |
- Count = 27**

**Recruitment and Selection**

20. Your current Bus Operators were hired from which of the following groups? *Check all that apply.*
- |   |   |
|---|---|
| Internal = <b>90%, Count = 29</b>                       | External–Other Transit Experience = <b>90%, Count = 29</b>  |
| External–No Transit Experience = <b>14%, Count = 29</b> | Other: <b><u>trucking &amp; other; civil service examinations</u></b><br>= <b>15%, Count = 29</b> |

- Estimate the percentages of applicants that come from each of the above categories, then write that number to the left of each classification, making sure that the sum equals 100%.

**Internal = 8%, Count = 10**

**External = 26%, Count = 14**

**External–No Transit Experience = 77%,  
Count = 14**

**Other: trucking & civil service = 46%, Count = 4**

21. What are some of the techniques and processes used to recruit Bus Operators? *Check all that apply.*

Walk-ins = **86%**

Employee referrals = **76%**

Newspaper advertising = **97%**

Radio advertising = **14%**

Television advertising = **3%**

On the bus advertising = **24%**

Job fairs = **52%**

Open houses = **14%**

Community referrals = **24%**

Political referrals = **14%**

Union referrals = **28%**

In house recruitment = **34%**

Recruiters = **17%**

Temporary agencies = **14%**

Job service = **17%**

Employment agencies = **21%**

Special interest groups = **10%**

Internet postings = **62%**

Trade publications = **17%**

Ethnic newspapers = **59%**

Pass and ticket outlets = **3%**

Flyers at bus shelters = **10%**

Flyers or ads on busses = **31%**

Welfare to Work = **17%**

Sign on bonus/incentive = **10%**

Other = **7%** *Comments:* **Bus Operator jobs are filled via competitive examinations, the above are techniques or processes for recruiting exam applicants; lottery**

**Count = 29**

- *If you have 1999 selection ratios (number of hires divided by number of applicants) for any of the above, please write those ratios to the left of the relevant check boxes.*
  - **No selection ratio data were reported.**
22. If you checked the box indicating that you have used the “welfare to work” technique, please indicate your level of **effectiveness and cost savings** with this process on the scale below.
- On a 5 point scale where 1 = low effectiveness and 5 = high effectiveness: **Average = 2, Count = 5**
  - On a 5 point scale where 1 = low cost and 5 = high cost: **Average = 1.8, Count = 5**
23. Have you validated your Bus Operator selection process and if so, what type of validation study did you perform and when was it conducted?
- **NA (4); no (8); Yes. We conducted a criterion validity study about 10 years ago; Civil service exam validated by "content validity, job analysis, BOSS; PDI testing program which is a validated test; PSI test; The qualified written exam was validated by the test developer; validated in mid to late 80s, before our time in employment; BOSS test (2); Count = 20.**
24. Have you identified job success factors (criteria) which are used to identify those bus operator applicants with the best opportunity for success in your job environment? If so, please list those criteria (this information will remain confidential).
- **NA (2); no (7); No, but for FY 2001 we will be using a selection program that emphasizes customer service, safety (driving), and co-worker skills; ability to resolve conflicts, customer service, success, repetitiveness, able to accept valuable hours w/short notice; applicants who are familiar with the area, applicants who are sensitive to the needs and objectives of management, applicants who are willing to work long varying hours, applicants who have good interpersonal skills; Attendance, Safety, Customer Service; clean driving record; customer service skills, clean driving record, poise in interview, ability to demonstrate good "common sense"; customer service, attendance + punctuality, driving records, conviction records; customer service, public contact, transit experience; job analysis is used to identify major "knowledge, skills and abilities"; On the PDI testing program; Count = 18.**

25. What are some of the techniques, processes, and criteria used in Bus Operator selection? *Check all that apply.*

- Application = **100%**
- Prior employment reference checking = **90%**
- Performance record check (for rehires) = **52%**
- Court record check = **62%**
- DMV record check = **86%**
- Psychological testing = **10%**
- Honesty testing = **0%**
- Attendance records = **45%**
- Cognitive testing = **14%**
- BOSS test = **14%**
- Video situation response testing = **14%**
- Seattle Metro Video = **21%**
- Chicago test = **3%**
- Intelligence testing = **10%**
- Basic skills testing (reading, writing, etc.) = **31%**
- Personality testing = **10%**
- Behavioral inventory (preferences, etc.) = **7%**
- Other = **17%**, *Comments: competitive civil service examination; pre-employment physical; ten-year work history; Transit Operator Test; will start to use the Start People Sense and Start Driving videos in 2001. These are updated videos from the Seattle Metro Video. Count = 29.*
- Behavioral testing ("In Box," role playing) = **0%**
- Technical skills testing = **7%**
- Unstructured, spontaneous interview = **14%**
- Structured (from written items) interview = **62%**
- Criterion-referenced (behavioral) interview = **21%**
- Interviews with 2 or more interviewers = **59%**
- Demographic inventories = **3%**
- Appearance (neat, clean, proper attire) = **48%**
- Job stability = **83%**
- Previous driving experience = **72%**
- Drug testing = **97%**
- Minimum age (average = **21 Years**) = **72%**, Count **19**
- Industrial Commission Records = **3%**
- Neatness or completeness of application = **45%**
- Credit record information = **7%**
- Completion of Bus Operator training = **52%**
- Other work experience = **17%**, *Comments: **Military Experience; Experience for past 10 years.***

- Now look at the items that you checked in Question #25. Of those, which are the 3 best predictors of future job success? Put the numbers 1, 2, 3, to the left of those items.  
*Note: The number of times each category was selected is listed (i.e., application was listed as one of the top 3 by 4 respondents).*

- 4 Application
- 7 Prior employment reference checking
- 1 Performance record check (for rehires)
- 3 Court record check
- 10 DMV record check
- Psychological testing
- Honesty testing
- 2 Attendance records
- Cognitive testing
- BOSS test
- 3 Video situation response testing
- 10 Seattle Metro Video
- Chicago test
- Intelligence testing
- Basic skills testing (reading, writing, etc.)
- 2 Personality testing
- Behavioral inventory (preferences, etc.)
- Behavioral testing ("In Box," role playing)
- 2 Technical skills testing
- 1 Unstructured, spontaneous interview
- 5 Structured (from written items) interview
- 1 Criterion-referenced (behavioral) interview
- 2 Interviews with 2 or more interviewers
- Demographic inventories
- 2 Appearance (neat, clean, proper attire)
- 16 Job stability
- 7 Previous driving experience
- 5 Drug testing
- Minimum age (average age: 21 years)
- Industrial Commission Records
- 3 Neatness or completeness of application
- Credit record information
- 10 Completion of Bus Operator training
- 2 Other work experience: **Military Experience; Experience for 10 years.**

2 Other *Comments: competitive civil service examination; pre-employment physical; ten-year work history; Transit Operator Test; will start to use the Start People Sense and Start Driving videos in 2001. These are updated videos from the Seattle Metro Video. Count = 18.*

26. Which of the following criteria do you use to make Bus Operator selection decisions? Check all of the criteria (job success factors) currently identified by your selection process (from interview responses, previous work experience, testing results, or any information collected). *Check all that apply.*

Check	Criteria	Check	Criteria
79%	The applicant will operate a motor coach safely on a specified route making required stops for passengers at designated terminals and stops	68%	The applicant will diffuse and resolve customer and employee conflicts
75%	The applicant will maintain time schedule, issue transfers and collect fares	82%	The applicant will make effective customer service decisions
71%	The applicant will assist passengers by answering bus service questions	57%	The applicant will prioritize and respond to multiple customer expectations
82%	The applicant will assist persons with disabilities to board and depart the coach	89%	The applicant will interact courteously with customers (greet and smiles during interactions)
89%	The applicant will comply with written policies, procedures, and regulations	25%	The applicant will communicate at multiple levels in the organization
71%	Interview responses or previous work experience that indicates the person can read, write, and speak English	46%	The applicant will identify operational problems and make appropriate solution recommendations for improvement
82%	The applicant will cope effectively with emotionally charged situations	61%	The applicant will listen actively
89%	The applicant will attend work	96%	The applicant will work varying hours and locations
89%	The applicant will come to work clean, groomed, and in proper uniform	75%	The applicant will interact well with peers, supervisors and organization personnel
82%	The applicant will work safely avoiding injury to self and others	68%	The applicant will interact comfortably and appropriately with multi cultural and socio-economic groups
54%	The applicant will learn and perform new technical skills through classroom and on the job training	7%	(Other)

Count = 28

27. Of the criteria which you checked above, which items do you rely on the most in making operator selection decisions?

- NA; 1; 4 (2); 19; 1,2,19; 1,7,9,19; 1,8; 11,16; 15,16,1; 15,19,8; 15,9; 2,8,11,15,16,17; 4,21; 4,8,15,16; 8,1,19,11; 9,1,16,2; all (4); Count = 21

28. In the area of Bus Operator **Recruitment and Selection** please describe the following:

- Any recent concerns or needs
- Successful programs or innovations

Concerns		Successful Programs	
Number	Concern	Number	Concern
11	<b>Recruitment – getting enough applicants and also enough quality applicants</b>	5	<b>Referral programs</b>
		2	<b>Sign-on bonus</b>
		1	<b>Ads</b>
		1	<b>Registering applicants for future hiring</b>

		1	Being more innovative with sources
5	Job conditions – like schedules, hours. Applicants don’t accept job when offered or no show/quit soon thereafter	1	Structuring hours
		1	Increased training salary
		1	Collective bargaining agreement
1	Want to improve customer service	1	Removed CDL requirement and let in apps without driving experience. Seems to have improved customer service skills of this applicant pool
1	Increase screening process	1	Using the BOSS test
1	Want to screen out attitudes	1	Improved panel interview
1	Skills – map reading and mapping out routes		
1	Fears of ADA lawsuits		

**Training**

29. What is the duration of your Bus Operator training program? ..... **Average = 39.5 days, Count = 28**

30. Are all Bus Operators required to complete an annual required (refresher) training program ..... **No = 68% Yes = 32%, Count = 28**

31. In your training for new Bus Operators which of the following competencies do you train for? *Check all that apply.*

- 82%** Customer support (answering questions, greeting customers, solving customer problems, etc.)
  - 93%** Interpersonal interactions with customers (dealing with emergencies, conflict, fare disputes, etc.)
  - 71%** Interpersonal interactions with peers and staff
  - 96%** Knowledge of and adherence to policy and procedure
  - 93%** Knowledge of and handling of fares
  - 57%** Organizational knowledge (how departments function and operate, key personnel, organization mission, etc.)
  - 61%** Personal health and fitness for duty
  - 96%** Radio communications
  - 100%** Safe driving practices
  - 96%** Schedule adherence
  - 93%** Serving customers with disabilities
  - 93%** System (area) knowledge
  - 61%** Written communication
- Count = 28**

32. What are some of the methods used at your agency to measure these competencies? *Check all that apply.*

	T	P	S		T	P	S
<b>81%</b> Paper and pencil tests	90%	5%	5%	<b>15%</b> Simulators	100%	0%	0%
<b>19%</b> Computer tests	67%	0%	33%	<b>22%</b> Computer-based training	40%	0%	60%
<b>92%</b> Observation checklist	55%	45%	0%	<b>42%</b> Observation/pass/fail criterion	75%	25%	0%
<b>59%</b> Peer assessment	0%	100%	0%	<b>52%</b> Probationary Op statistics	100%	0%	0%
<b>26%</b> Trainee turnover	100%	0%	0%	<b>4%</b> Other: Jeopardy game	50%	50%	0%

**Count = 25**

33. Now look at the methods which you checked and:

- i) Place a **“T”** to the left of measurements that are done by training department staff
- ii) Place a **“P”** to the left of measurements that are done by peer trainers (road instructors, LPI’s)
- iii) Place an **“S”** to the left of measurements that are self administered

34. In the process of Bus Operator training, which of the following methods do you use and what percentage of the time do you use them? Who performs the training? Please enter the percentage of the total time spent in the various training delivery modes, then identify the primary trainer (*see code definitions just after table*).

<b>Delivery Method</b>	<b>Percentage of time spent</b>	<b>Who delivers the training*</b> ( <i>See code definitions below table then circle all that apply</i> )
Classroom	<b>26%</b>	FT <b>68%</b> BOAT <b>16%</b> ISBO <b>3%</b> O <b>13%</b>
In bus (but not in service)	<b>37%</b>	FT <b>45%</b> BOAT <b>45%</b> ISBO <b>3%</b> O <b>7%</b>
In bus in service	<b>35%</b>	FT <b>15%</b> BOAT <b>35%</b> ISBO <b>50%</b> O <b>0%</b>
Simulation (computers, simulators, or machines)	<b>1%</b>	FT <b>13%</b> BOAT <b>7%</b> ISBO <b>0%</b> O <b>0%</b>
Other (please specify)	<b>1%</b>	FT <b>0%</b> BOAT <b>0%</b> ISBO <b>0%</b> O <b>0%</b>
Total ( <i>please make sure % sum to 100%</i> )	<b>100%</b>	

**Count = 26**

\*“**FT**” = Full-time professional training staff, “**BOAT**” = Bus Operators assigned to training, “**ISBO**” = In-service Bus Operators, “**O**” = Other agency personnel

35. When new Bus Operators have completed training, which of the following techniques, if any, do you use to transition them into the workforce? *Please complete the table.*

<b>Technique</b>	<b>Do you use this strategy (circle one)</b>	<b>Rate the effectiveness of this strategy</b> 1= low effectiveness 5 = high effectiveness		<b>Rate the cost of this strategy</b> 1= low cost 5 = high cost	
Assigned to extra board	<b>Yes = 74%</b> <b>No = 26%</b>	low	high	low	high
			<b>3.58</b>		<b>2.39</b>
Assigned to specific work designed for new Bus Operators	<b>Yes = 17%</b> <b>No = 83%</b>	low	high	low	high
			<b>3.60</b>		<b>2.60</b>
Bid available work	<b>Yes = 59%</b> <b>No = 41%</b>	low	high	low	high
			<b>3.33</b>		<b>2.25</b>
Assigned to a mentor	<b>Yes = 35%</b> <b>No = 65%</b>	low	high	low	high
			<b>4.00</b>		<b>1.71</b>
Supervisor or trainer ride alongs	<b>Yes = 42%</b> <b>No = 58%</b>	low	high	low	high
			<b>3.73</b>		<b>3.00</b>
Assigned to a Senior Bus Operator	<b>Yes = 22%</b> <b>No = 78%</b>	low	high	low	high
			<b>4.00</b>		<b>2.50</b>
Follow-up or observation by training staff	<b>Yes = 77%</b> <b>No = 23%</b>	low	high	low	high
			<b>3.72</b>		<b>2.88</b>
Probationary evaluation	<b>Yes = 92%</b> <b>No = 8%</b>	low	high	low	high
			<b>3.73</b>		<b>2.30</b>
Required session with training staff	<b>Yes = 20%</b> <b>No = 80%</b>	low	high	low	high
			<b>4.13</b>		<b>2.56</b>
Assigned to supervisor	<b>Yes = 39%</b> <b>No = 61%</b>	low	high	low	high
			<b>3.73</b>		<b>2.20</b>
Other	<b>Yes = 11%</b> <b>No = 89%</b>	low	high	low	high
			<b>4.00</b>		<b>2.00</b>

**Count = 27**

36. Have Bus Operators received the following skills training? *Check all that apply.*

- 54% Decision Making                      29% Employee Empowerment                      88% Scheduling and Extra Board
- 46% Setting Priorities                      33% Team Building                      21% Time Management
- 17% Performance Evaluations                      13% Total Quality Management                      8% Other: **customer service; evaluation each month/6-month probation**

**Count = 24**

37. Have Bus Operators received the following interpersonal relationships training? *Check all that apply.*

- 62% Communication                      58% Conflict Resolution                      65% Affirmative Action/EEO/Civil Rights
- 92% Customer Service                      92% Difficult Customers                      96% Policy and Procedures
- 35% Co-worker Relationships                      85% Sexual Harassment                      15% Self defense
- 19% Negotiation Skills                      85% Diversity/Sensitivity                      8% Other \_\_\_\_\_

**Count = 26**

38. Does your state or agency require annual bus operator refresher training? **No = 64 Yes = 36, Count = 28**

39. If the answer to item #38 is yes, what have been the subject areas of these training programs over the last two years?

NA (2)
CDL, defensive driving, PR, ADA
Customer service, fitness, sexual harassment
Customer service, sexual harassment, policy and procedure, defensive driving, post-accident procedures
Defensive driving, passenger assistance, working with the public, train the trainer
Interaction with the customer, safe bus operation, skill review
Rules & procedures—update, operation & new vehicles, new routes, fares,
Safety, customer service
Wheelchair-lift + restraining procedures - radio communications - dealing with injuries (blood-borne pathogens) sensitivity + diversity

40. Is training offered for individual Bus Operators when they have identified skill problems? **No = 7% Yes = 93%**

41. If skill training is offered, what are the three most commonly identified skill problems you train for.

1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_

Customer service, defensive driving, difficult customers
Accidents
Turning, backing
Accidents, safety on road, customer interactions
Post-accident, customer service
Driving, customer service, ADA
ADA announcements, defensive driving, customer service
Keeping current with all vehicles, current paratransit TU coach
Left-side accident, defensive driving, ADA
Defensive driving, right turns
Bus maneuvering (turns), passenger relations, safe operations
Accident prevention, customer service
Schedule adherence, route retention, specific driving skill deficiencies

<b>Turning</b>
<b>Defensive driving, customer relations</b>
<b>PR, unsafe driving</b>
<b>Dealing w/passengers, wheelchair restraints, schedule adherence</b>
<b>Passenger relations, right-side accidents</b>
<b>Accidents, customer relations, ADA</b>
<b>Operation of vehicle, rules &amp; procedures, knowledge of daily function</b>
<b>Customer relations, schedule, route</b>
<b>Driving, customer service</b>
<b>Customer service safety</b>
<b>Defensive driving, customer service</b>

42. What other training or educational opportunities are available to Bus Operators?

<b>NA (2)</b>
<b>All county employees have access to tuition reimbursement programs</b>
<b>Canyon service and winter driving training</b>
<b>Certified certificate program, tuition reimbursement, defensive driving class</b>
<b>D &amp; A</b>
<b>Disability and sensitivity awareness</b>
<b>Educational assistance &amp; reimbursement (2)</b>
<b>Free Spanish instruction, periodic refresher training</b>
<b>Helping training department which leads to computer training, instruction training</b>
<b>Monthly safety training meeting</b>
<b>New equipment, college, tuition reimbursement</b>
<b>Retraining</b>
<b>Unlimited outside training for those interested</b>

43. In the area of Bus Operator **Training** please describe the following:

- Any recent concerns or needs

Number	Concerns or Needs
4	<b>Update training program and materials (one agency hired a full-time safety and training specialist)</b>
1	<b>Keeping up with advancing technology</b>
2	<b>Improved quality of qualified applicants</b>
1	<b>Trend towards reducing strict rules</b>
1	<b>Low pay</b>
2	<b>Help new employees remember what was taught</b>
1	<b>Retention, especially for paratransit &amp; limited assignment bus operators</b>
1	<b>Purchase simulator</b>
1	<b>Accidents in areas under construction (Big Dig)</b>
1	<b>More time on learning assigned lines (PT)</b>
1	<b>PT Benefits (paid holiday, vacation, retirement)</b>
1	<b>Basic work skills</b>
1	<b>If training is long enough</b>
1	<b>More customer service</b>
1	<b>Equipment, busses</b>
1	<b>Additional staff</b>

- Successful programs or innovations

Number	Programs or Innovations
2	Computer training (post-accident, basic intro PC, Excel, etc.)
2	Computer-based training (one is implementing the bus driving training program on a CD format from the U.S. Transportation Safety Institute)
1	Graduation ceremony during which the individual's achievement is recognized and HR, Training & Development formally transfer the graduate to Operations
1	Implemented new training program to train students from scratch. This six week training program takes the unskilled student and transforms them into a certified Bus Operator.
1	Student coach operator training and annual required training
1	Teams training
1	Self-directed training
1	Safety awards, recognition programs, annual banquet, "Safety pays program," NSL/DDL program
1	Right-angle turns
1	Video on using mirrors
1	Post-accident, return to duty from extended absence, wheelchair restraining training, lift operations
1	Tuition reimbursement for PT education
1	Certified certificate program (Bus Operator/all employees)

**Performance Evaluation and Feedback**

44. Are Bus Operators given a **formal** performance evaluation? ..... No = **42%** Yes = **58%**, Count = **26**

- If you checked yes to this question, please complete questions 45 through 56. If you checked no, go to question number 57.

45. Is this formal evaluation of Bus Operators used for pay increases? ..... No = **83%** Yes = **17%**, Count = **18**

46. Is this formal evaluation of Bus Operators used for discipline or termination? No = **59%** Yes = **41%**, Count = **22**

47. Is this formal evaluation of Bus Operators used for advancement?..... No = **68%** Yes = **32%**, Count = **22**

48. Is this formal evaluation of Bus Operators used for recognition or reward? No = **73%** Yes = **27%**, Count = **22**

49. Who gives the Bus Operator their formal performance evaluation?.....[Title(s):

Supervisors	<b>47%</b>
Managers	<b>18%</b>
Superintendents	<b>12%</b>
Director	<b>6%</b>
Operations Chief	<b>6%</b>
Counseling	<b>6%</b>
Business Management	<b>6%</b>

**Count = 16**

50. Are your performance raters specifically trained to give performance feedback? No = **47%** Yes = **53%**, Count = **15**

51. Please rate the level of satisfaction your performance evaluators have with the formal performance evaluation system. (circle one) Low satisfaction 1 2 3 4 5 High satisfaction

- Average **3.2**, Count = **14**

52. How often do Bus Operators receive a formal performance evaluation?

- Average = **once every 10.5 months**, Count = **12**

53. Please rate the overall success of your formal performance evaluation system in impacting performance. (circle one) Low success 1 2 3 4 5 High success

- Average **3.1**, Count = **14**

54. Please rate the level of satisfaction of your Bus Operators with the formal performance evaluation system. *(circle one)*  
 Low satisfaction 1 2 3 4 5 High satisfaction

- **Average 3.00, Count = 14**

55. Please rate the cost effectiveness of your formal performance evaluation system. *(circle one)*  
 Low cost effectiveness 1 2 3 4 5 High cost effectiveness

- **Average 3.2, Count = 14**

56. Have you performed any statistical reliability or validity checks of your formal performance evaluation and if so, please briefly describe?

**NA (5), no (8). All evaluations are subject to feedback for validity, bus operators have been concerned that the evaluations are not equitable in that the operations and safety checks are done randomly and therefore stats vary from operator to operator which results in different ratings. Some operators will get checked more often than others, which affects the points/grades**

**Count = 15**

57. Whether or not you conduct a formal performance evaluation, which of the following behaviors are monitored by your agency for specific use in assessing an operator's performance? *Check all that apply.*

**92% Schedule adherence**

**40% Peer interactions**

**96% Safety and accidents/incidents**

**92% Customer interactions**

**60% Communications**

**Count = 25**

**92% Time and attendance**

**16% Problem solving**

**100% Following rules and regulations**

**16% Agency interactions**

**8% Other: ADA, uniform appearance/equipment inspection, operation of bus**

58. Of the behaviors you checked, which are the most important in evaluating operator performance?

Safety and accidents/incidents	<b>77%</b>
Customer interactions	<b>59%</b>
Follows rules and regulations	<b>50%</b>
Time and attendance	<b>32%</b>
Schedule adherence	<b>23%</b>
Communications	<b>14%</b>
Peer interactions	<b>14%</b>
Problem solving	<b>14%</b>
Agency interactions	<b>14%</b>
Other	<b>5%</b>

**Count = 22**

59. Please rate the overall success of your agency's performance evaluation efforts in impacting performance using a 5 point scale, where 1 = low success and 5 = high success:

- **Average 3.06, Count = 15**

60. Please rate the overall level of satisfaction of your Bus Operators with your agency's performance evaluation efforts, where 1 = low satisfaction and 5 = high satisfaction:

- **Average 3.07, Count = 14**

61. Please rate the overall cost effectiveness of your agency's performance evaluation efforts, where 1 = low cost effectiveness and 5 = high cost effectiveness:

- **Average 3.13, Count = 15**

62. In the area of Bus Operator **Performance Evaluations**, please describe the following:

- Recent concerns or needs

<b>Evaluation Needs</b>
<b>Safety on the road</b>
<b>ADA procedures, calling out bus stops, judgment on improving the use of "common sense" customer service &amp; on-time performance are just as important as safety. These factors should be placed as needed in performance evaluations.</b>
<b>Ongoing system in place that meets all expectations.</b>
<b>Employees do not seem to have as much concern about their performance as they once did (i.e., They are more willing to let their attendance record suffer in order to obtain additional time off).</b>
<b>Very inconsistent. Some supervisors use the performance report to encourage/coach their operators. Others simply give a copy of the performance report when requested by operators.</b>
<b>Bus operations, in conjunction with the paratransit department, are formulating a new GE performance evaluation system in an effort to make the system equitable and fair to all. The new system will also target poor attendance records.</b>
<b>Need budget allowances to permit real operator evaluation on a continuous basis.</b>
<b>Helping employees to accept responsibility with authority.</b>

- Successful programs or innovations

<b>Evaluation Successes</b>
<b>Refresher training program/retraining program/safety ride checks</b>
<b>All Operators have been assigned to a supervisor</b>
<b>Paper and pencil test, observation with checklist, observation with a pass/fail, peer assessment, probationary operator statistics</b>
<b>Twice yearly evaluations</b>
<b>Our training program is very effective and extensively thorough</b>

**Retention Practices**

63. Has your agency set specific retention goals as part of its strategic plan? If yes, please describe.
- **No = 82% Yes = 18%, Count = 17**
  - **8% a year, maintain turnover rate to 6% of those employed less than 1 year, reduce turnover for new hires (first 12 months).**
64. Does your agency perform exit interviews routinely?
- **No = 33% Yes = 67%, Count = 27**
65. Who performs exit interviews?
- Titles: **NA (2)**
- 11 HR representative, analyst, officer, or just HR**
  - 5 HR director/manager, employee relations manager, director administrative services**
  - 3 Operations manager**
  - 1 Instructor**
  - 1 Administrative assistant**
- Count = 22**
66. How and by whom is the exit interview information used (forwarded, documented, statistics, etc.)?
- **NA, no, yes, documented (4), statistics (3), forwarded (3); Count = 13**

67. Does your agency use turnover statistics to measure retention?

- **No = 43% Yes = 57%, Count = 23**

68. Which of the following statistics or types of information did you use in 1999 to specifically assist you in measuring the effectiveness of your retention strategies?

**57%** Voluntary and involuntary turnover

**46%** Turnover differences between Operator classifications

**22%** Average length of service

**22%** Current operator feedback

**30%** Exit interviews (reasons for termination and feedback)

**0%** Other: **No Comments**

**Count = 23**

69. Please check each of the following strategies that you use as a specific part of your retention efforts.

Strategy	Do you use this strategy (circle one)	Please rate the effectiveness of this strategy at your agency with 1 = low effectiveness, 5 = high effectiveness	Please rate the cost of this strategy at your agency with 1 = low cost, 5 = high cost
Working conditions (equipment, tools, schedules)	No = 39% Yes = 61%	3.47	3.07
Work environment (facilities, safety, comforts)	No = 26% Yes = 74%	3.56	3.40
Competitive benefits	No = 4% Yes = 96%	4.14	4.05
Job enrichment	No = 83% Yes = 17%	2.80	3.80
Performance recognition programs	No = 22% Yes = 78%	3.33	2.80
Opportunities to contribute	No = 43% Yes = 57%	3.15	2.58
Opportunities for creativity	No = 78% Yes = 22%	2.83	2.40
Competitive pay	No = 26% Yes = 74%	3.67	3.75
Internal equity and fair treatment	No = 30% Yes = 70%	3.87	2.62
Opportunities to collaborate with others	No = 65% Yes = 35%	2.88	2.43
Job progression/advancement	No = 61% Yes = 39%	3.22	3.00
Family friendly policies	No = 65% Yes = 35%	3.00	3.25
Agency social events	No = 48% Yes = 52%	3.08	3.00
Autonomy	No = 70% Yes = 30%	3.43	2.14
Exit interviews	No = 48% Yes = 52%	2.70	1.64
Retention bonuses	No = 87% Yes = 13%	3.00	3.33
Training opportunities	No = 43% Yes = 57%	3.23	3.17

Strategy	Do you use this strategy (circle one)	Please rate the effectiveness of this strategy at your agency with 1 = low effectiveness, 5 = high effectiveness	Please rate the cost of this strategy at your agency with 1 = low cost, 5 = high cost
Recognition programs	No = 30% Yes = 70%	3.21	2.92
Mentoring programs	No = 70% Yes = 30%	2.80	2.00
Wellness programs	No = 43% Yes = 57%	3.00	3.10
Schedule enhancements	No = 78% Yes = 22%	3.00	3.25
Safety programs	No = 17% Yes = 83	3.38	3.19
Mission vision and values of the organization	No = 43% Yes = 57%	3.08	2.17
Promotion of diversity	No = 39% Yes = 61%	3.20	2.46
Management respect for employees	No = 17% Yes = 83%	3.20	1.88
Other (please list): <b>Automation</b>	No = 96% Yes = 4%	3.00	4.00

Count = 23

70. On a scale of 1–5 how well do your Hiring, Training, Performance Evaluation, and Retention strategies support and reinforce each other? Circle One: Low 1 2 3 4 5 High

- Average = 3.09, Count = 22

71. In the area of Bus Operator **Retention** please describe the following:

- Recent concerns or needs

<b>Retention Needs</b>
<b>3 - Schedules (Our schedules are not compatible to career people. We need to get rid of split shifts for part-time operators; New employees have a hard time acclimating to working nights, weekends, holidays. Turnover high first 6 months; a demanding schedule is awkward for employees who have other priorities ahead of income and work record.)</b>
<b>Salary, growth opportunities.</b>
<b>We reward safety performance each year, but need to create short-term reward system. In addition, we need to create a system to reward on-time performance and customer service as well as safety. Bus operators know the requirements to earn a safety award, this same mind-set can be created for customer service standards.</b>
<b>Early retirement, turnover positions outside of transit, failure to complete probation.</b>
<b>2 - Recruiting is more of a priority than retention. We hired 43 new full-time bus operators during 1999 and had an 8% turnover rate; Ongoing economic trends, coupled with low entry-level wages have made it very difficult to attract and retain quality applicants. Collective bargaining issues concerning working conditions and wages.</b>
<b>2 - Turnover and poor attendance; the need for new employees to "stick it out" and make it a career.</b>
<b>Our retention is very high. 60%, 5 years or more; 94%, 1 year or more.</b>

- Successful programs or innovations

<b>Retention Successes</b>
<b>Benefits, transit appreciation day, project pride, safety awards.</b>
<b>Safety programs: banquet, certificates, award jackets, watches. Attendance: certificates and cash. Bus Roadeo: senior bus operator program (every 6 months) drivers that meet standards will receive 5% bonus.</b>
<b>Ongoing economic trends, coupled with low entry level wages have made it very difficult to attract and retain quality applicants. Collective bargaining issues concerning working conditions and wages.</b>
<b>\$18.45 per hr with a 40-hour guarantee and a benefit package worth another 52%.</b>
<b>Raising the training rate to 10.00 per hr has helped to keep trainees.</b>
<b>No figures yet. Implementing a more stringent screening.</b>

## APPENDIX D

### UTA Workforce Model

#### OPTIMIZE PLANNING WITH A WORKFORCE MODEL

It seems that hiring Bus Operators is often a game of catch up when it comes to staffing. Your Dispatcher comes in after a particularly nerve-racking scheduling experience and the call goes out to hire more Bus Operators. A few days later an ad appears in the paper, then there's testing and interviewing, background investigations and physical examinations. Training begins, but you become even more short-staffed as additional Bus Operators are pulled out of service to be Road Trainers and Line Instructors. Now a systemwide ADA training program begins and in just a few days, vacation slots are due to double. And isn't that square dance convention coming to town? It's been two months since your Dispatcher's first cry for help and the situation has gotten even worse so that now you're beginning to wonder if the number of new trainees will cover current needs.

Human Resource professionals have responded to their internal customer's needs by trying to hire and train more operators faster and by responding more quickly to staffing shortages reported by work dispatchers. Some transit systems have developed hiring rosters or reserve pools of prequalified or pretrained operators. UTA found that responding quickly to an expressed need sometimes resulted in overstaffing because the problem was actually just a temporary one. We also found that a reserve pool could be a barrier to recruiting the best applicants, because some withdrew saying they couldn't afford the uncertainty and waiting period while many of the best newly trained Bus Operators were the first to leave the reserve pool.

The solution to these problems came to UTA in the form of a workforce planning model. The model was developed jointly by our Human Resources and Operations functions. The model allows UTA to accurately predict staffing needs and to develop a recruiting plan for a year at a time. Following the model and resulting recruiting plan allows UTA to have operators ready for work "just-in-time," avoiding costs of under- or over-staffing. The model also provides an objective measure of staffing levels, an improvement over the sense from the operations dispatchers. The model accounts for seasonal changes in work requirements, vacations, and the operators needed to train new operators. Of course, what the model can't do is provide a labor market of qualified workers at the wage UTA is paying and, if UTA is unable to attract qualified workers, understaffing situations may occur.

#### Benefits of Having a Planning Model

- ⇒ Know How Many Operators Are REALLY Needed
- ⇒ Hire in Anticipation of Staff Need
- ⇒ Schedule New Hire and Systemwide Training During Periods of "Overstaffing"
- ⇒ Provide Proactive Scheduling Recommendations (Special Service, Vacation Slots)
- ⇒ Optimize Run Cutting (like keep AM/PM tripper numbers similar)
- ⇒ What ifs

Creating a workforce model is simpler than you think. To do it right, begin with a team of employees from all impacted departments, especially those that effect resource allocation like Operations, Human Resources, Training, Planning, Scheduling, and Customer Service. You'll be more likely to achieve organizational buy-in (hence cooperation) and be able to address concerns you haven't even considered while maximizing organizational savings and efficiency. Human Resources can coordinate creation of your model but not become the ultimate owner, responsible for the program. At UTA, we waited too long before including other departments, and continue to work towards attitudes of "our model" instead of "your model."

Once impacted departments have been identified, you'll want to ensure that team members include those that would be good at particular roles. The team will need a detail-oriented, coordinator to keep everyone in touch and on track and to make sure meetings are scheduled and attended. There needs to be an operations expert who knows what's been done in the

past and wants to make a change, and dispatchers (or those in charge of scheduling) to make sure that all relevant factors like types of absences, both expected and unexpected, are included in the model. There must also be a data guru (the person who knows where all numbers began and where to now find them...). Although it may require a little more work up front, it's also a good idea to involve employees that tend to be traditionalists who you believe may be reluctant to change. That way, you can apply a concerted team effort now rather than worry about future sabotage.

Start your first meeting with some group goal planning and brain storming. Agree which records are the most accurate when counting current staff, typical absenteeism, and turnover. Agree on formulae. Determine all the other factors of your workforce projection equation. In it's simplest form, our Workforce Planning Model equation was:

$$\text{CURRENT STAFF} - \text{MINIMUM STAFF REQUIRED} - \text{EXPECTED ABSENCES} - \text{TURNOVER}$$

Decide how to quantify the minimum number of operators needed to cover all the work within a division. At UTA, we first quantified our minimum staff requirements in terms of runs and trippers. For us, one run equaled one Bus Operator and that generally, the combination of an AM and a PM tripper equaled one Bus Operator. To determine the minimum staff requirement for a whole division, we then took the total number of runs plus any runs added since the last change day, plus the maximum number of either the AM or PM trippers. This formula was modified a bit for some divisions, as when trippers were generally longer than 4 hours. In that case, an extra board operator couldn't be "theoretically" assigned to drive two trippers each day for 6 days a week. (2 trippers X 4 hours X 6 days = 48 hours). And at another division, we found that there were several short midday trippers, which easily fit between an AM and a PM tripper so that extra board operators were most efficiently scheduled with 3 trippers per day. To accommodate these anomalies, we modified the formulae for those divisions to accommodate "long trippers" and "midday trippers" as necessary.

#### Summary of the Components of UTA's Workforce Model

Meadowbrook

Month	Min. Staff			A-Board Day Off	Turnover	Training	Vacation	Special Service	Service	Operator Need	New Operators Ready
	Staff	Required	8% Absent								
Jan.	303	264	24	3	3	1	5	1	1	-2	0
Feb.	300	264	23	3	3	5	4	1	1	-6	0
Mar.	297	264	23	3	3	1	4	1	1	-8	14

...

Now when December roles around, or when runcutting is about to begin, Training and Scheduling are always wanting to learn what the latest projections are from the model so they can more effectively plan and carry out their work. The model can also be used to run hypothetical situations prior to their occurrence, to learn whether there would be enough Bus Operators or to better understand and explain temporary over- or under-staffing. At UTA, we learned that it is best to have our extra board Operators work additional overtime rather than employ additional Bus Operators.

# APPENDIX E

## Orange County Transportation Authority Bus Operator Application

Applicants are considered without regard to race, color, religious creed, sex, sexual orientation, national origin, age, marital or veteran status, medical condition, physical disability, or ancestry.

Last Name	First	Middle	Other	Date of Application
Street Address		Apartment #	City	State
Please list <i>Previous</i> Addresses		City	State	Zip
Social Security Number	Home Telephone	Work Telephone	Other Telephone	
How did you hear about this position?		If referred by a current OCTA employee, provide name		
Do you have a valid California driver's license? <input type="checkbox"/> Yes <input type="checkbox"/> No Number:				Class:
Training and Education (circle highest completed year) High School 9 10 11 12 College or Technical 1 2 3 4 5 6				
Have you applied to work at OCTA before? <input type="checkbox"/> Yes <input type="checkbox"/> No When? Month ____ Year ____ What Job?				
Have you worked at OCTA before? <input type="checkbox"/> Yes <input type="checkbox"/> No When? Month ____ Year ____ What Job? Why did you leave?				
Do you have any relatives that work for OCTA? <input type="checkbox"/> Yes <input type="checkbox"/> No Who? Where do they work?				
Do you have the legal right to work in the United States? <input type="checkbox"/> Yes <input type="checkbox"/> No (If you are hired, at the time you start work, you will be required, in accordance with the Immigration Reform and Control Act of 1986 to produce proof of identity and eligibility to work.)				
Have you been convicted of a crime? <input type="checkbox"/> Yes <input type="checkbox"/> No When? Month ____ Year ____ What crime? (Do not include any misdemeanor more than seven (7) years ago. A conviction of a crime does not automatically exclude you from employment it will be considered in terms of the Bus Operator job)				

### WORK HISTORY

List your jobs for the last ten years. Please be detailed, accurate, and complete. Explain any employment gaps over 30 days.

Employer	Telephone ( )	Dates Employed		Current Salary
Street Address		From	To	Duties Performed:
City, State, Zip code		mo/yr	mo/yr	
Your Job Title				
Name and Title of Supervisor		Reason for Leaving		

Employer	Telephone ( )	Dates Employed		Salary
Street Address		From	To	Duties Performed:
City, State, Zip code		mo/yr	mo/yr	
Your Job Title				
Name and Title of Supervisor		Reason for Leaving		

Please complete reverse side of this form

**WORK HISTORY (CONTINUED)**

Employer	Telephone ( )	Dates Employed		Salary
Street Address		From	To	Duties Performed:
City, State, Zip code		mo/yr	mo/yr	
Your Job Title				
Name and Title of Supervisor		Reason for Leaving		

Employer	Telephone ( )	Dates Employed		Salary
Street Address		From	To	Duties Performed:
City, State, Zip code		mo/yr	mo/yr	
Your Job Title				
Name and Title of Supervisor		Reason for Leaving		

Employer	Telephone ( )	Dates Employed		Salary
Street Address		From	To	Duties Performed:
City, State, Zip code		mo/yr	mo/yr	
Your Job Title				
Name and Title of Supervisor		Reason for Leaving		

<u>Special skills and qualifications</u> (Summarize special job related skills and qualifications acquired from employment or other experience)

**Legal information about alcohol and drug testing – telling the truth – giving us permission to check your background – your right to quit your employment and our right to terminate your employment. Please read and sign.**

I hereby certify that the answers given to the forgoing questions and statements are true and correct. I authorize my prior and present employers and educators to give OCTA any information they may have regarding me. If upon investigation by OCTA, anything I revealed in this application is found to be untrue, omitted or misstated, I understand that I may be refused employment or that I will be subject to discharge at any time during the period of my employment. I agree to a pre-employment medical examination, including alcohol / drug screening by a clinic under contract with OCTA. I understand that any offer of employment is contingent upon the results thereof. Either OCTA or I may terminate my employment relationship at any time with or without cause, on notice to the other and subject to the provisions of an applicable collective agreement.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

# APPENDIX F

## Duluth Transit Authority Safety Ride Check

# DULUTH TRANSIT AUTHORITY

## SAFETY RIDE CHECK

Operator \_\_\_\_\_ Badge No. \_\_\_\_\_  
 Date \_\_\_\_\_ Bus No. \_\_\_\_\_ Run No. \_\_\_\_\_  
 From \_\_\_\_\_ To \_\_\_\_\_

### On-time Performance

Terminals \_\_\_\_\_  
 Time \_\_\_\_\_  
 Loads: Outbound \_\_\_\_\_ Inbound \_\_\_\_\_ Outbound \_\_\_\_\_ Inbound \_\_\_\_\_

Operator	Vehicle	Traffic Laws	Customer Service
<input type="checkbox"/> Uniform <input type="checkbox"/> Appearance <input type="checkbox"/> Posture <input type="checkbox"/> Seat belt <input type="checkbox"/> Day card <input type="checkbox"/> Transfers <input type="checkbox"/> Schedules <input type="checkbox"/> Run card <input type="checkbox"/> Tobacco <input type="checkbox"/> Eating/drinking <input type="checkbox"/> Properly grasps steering wheel <input type="checkbox"/> Defect card <input type="checkbox"/> Other _____	<input type="checkbox"/> Pre-trip inspection <input type="checkbox"/> Damage <input type="checkbox"/> Mirrors <input type="checkbox"/> Interior inspection <input type="checkbox"/> Destination signs <input type="checkbox"/> Other _____  <div style="background-color: #cccccc; text-align: center; padding: 2px;">Fares</div> <input type="checkbox"/> Checks all fares <input type="checkbox"/> Checks passes <input type="checkbox"/> Inspects transfers <input type="checkbox"/> Free rides <input type="checkbox"/> Route segmenting <input type="checkbox"/> Other _____	<input type="checkbox"/> Speed <input type="checkbox"/> Traffic signals <input type="checkbox"/> Stop signs <input type="checkbox"/> Railroad crossings <input type="checkbox"/> Other _____  <div style="background-color: #cccccc; text-align: center; padding: 2px;">Observations</div> <input type="checkbox"/> Intersection <input type="checkbox"/> Traffic from right or left <input type="checkbox"/> Oncoming traffic <input type="checkbox"/> Traffic overtaking/following <input type="checkbox"/> Pedestrian mirrors <input type="checkbox"/> Passengers <input type="checkbox"/> Other _____	<input type="checkbox"/> Courtesy <input type="checkbox"/> Greets passengers <input type="checkbox"/> Answers questions <input type="checkbox"/> Cautions passengers re safety problems <input type="checkbox"/> Avoids conversations <input type="checkbox"/> Enforces rules <input type="checkbox"/> ADA callouts <input type="checkbox"/> Other _____
<div style="background-color: #cccccc; text-align: center; padding: 2px;">Vehicle Operation</div> <input type="checkbox"/> Smooth starts <input type="checkbox"/> Acceleration <input type="checkbox"/> Braking <input type="checkbox"/> Turns <input type="checkbox"/> Schedule adherence <input type="checkbox"/> Downshifts when desc. hill <input type="checkbox"/> Steering <input type="checkbox"/> Right side clearance <input type="checkbox"/> Following distance <input type="checkbox"/> Other _____	<div style="background-color: #cccccc; text-align: center; padding: 2px;">Passenger Stops</div> <input type="checkbox"/> Alert for passengers <input type="checkbox"/> Adjusts for unsafe area <input type="checkbox"/> Courtesy stops <input type="checkbox"/> Door operation <input type="checkbox"/> Curbs properly <input type="checkbox"/> Authorized stops <input type="checkbox"/> Unauthorized stops <input type="checkbox"/> Signals properly <input type="checkbox"/> Allows for E&H seats	<input type="checkbox"/> Sufficient room for passengers to alight <input type="checkbox"/> Wheelchair lift operation <input type="checkbox"/> Other _____	

Observations/Comments:
Evaluation:
Operator's Comments:
Recommendations:

Route To:

- Director of Operations
- Director of Safety
- General Manager
- Operations Supervisor

Checked by \_\_\_\_\_

Reviewed with Operator \_\_\_\_\_

## APPENDIX G

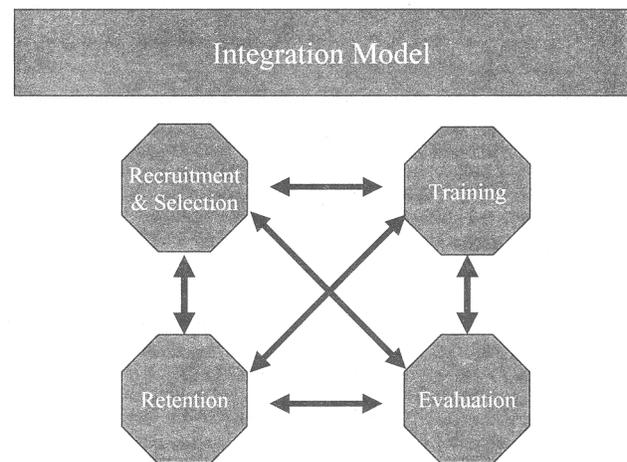
### Case Study—Orange County Transportation Authority

#### Historical Perspective

Orange County Transportation Authority (OCTA) has long been an innovator in training. In the skills training area this innovation is evidenced by its early acquisition of training simulators, a fully equipped computer-based training classroom for coach operators, and mobile training laboratories that take training to the people.

#### Integration

As a part of this ongoing innovation effort, OCTA made the decision to integrate its Coach Operator recruitment, selection, training, and performance management processes. OCTA is currently revamping its New Coach Operator Training program. The model, to the right, illustrates OCTA's vision of this integration.



#### Coach Operator Success Competencies

In an earlier Human Resources project, focused on recruitment and selection of Coach Operators, OCTA identified 66 critical competencies necessary for the Coach Operator to successfully perform his job. OCTA then divided these competencies into those that could be part of the initial selection process and those that would be built into the skills training program. OCTA used the first set of competencies to build a competency-based criterion referenced selection system. This selection system has been in place for approximately 18 months. The competencies that were not a part of the selection process were to be built into the training program.

#### Cross-Functional Cooperation

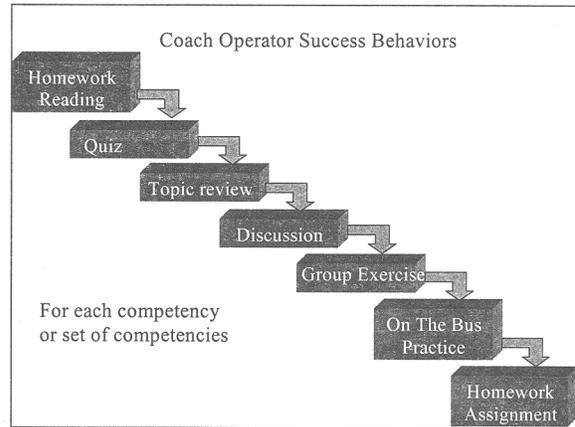
One of the primary goals of the Coach Operator training program redesign (in addition to training the competencies) was to insure the consistency between the formal training and the “real on the road” expectations from Operations. To this end, a cross-functional team (including training, operations, and coach operators) was assembled to review the competencies and training design. Two members of this team representing the Operations and Training departments rewrote the Coach Operator Handbook. In a true advancement toward consistency the Coach Operator Handbook now serves the dual purpose of being the training manual for new operators and the policy manual/handbook for all existing operators.

#### Training Design

The team also decided to incorporate the latest adult learning research into the training design. This research demonstrates that adults learn in at least seven different ways including linguistic, logical-mathematical, spatial, musical, kinesthetic, interpersonal, and intrapersonal.

The diagram to the right depicts how a competency or set of competencies will be taught. Each box in the diagram represents teaching the competency appealing to a different adult learning mode. Using this design each student would be trained on each competency using several different techniques, each technique appealing to a different learning mode.

For example: when learning right turns the student (in their homework reading the night before) would read from the Operator Handbook about making right turns, (in the ice breaker) would talk with her classmates about making right turns, (in the topic review) would hear an instructor's experiences, guidance and instruction about right turns, (in the exercise) would do some group activity (like taking turns driving a miniature bus on an intersection diagram) and or would make right turns in the simulator, and finally, would practice right turns while driving the bus.



### Pilot Program

OCTA's efforts to integrate and redesign its training program are still underway. This redesign represents a potentially important innovation in the transit industry. OCTA has implemented a pilot training program that will train new student coach operators on the 66 behaviors over a period of 15 working days. The new design will place 2 students with each instructor. The students will work a 9-hour workday with not more than 2.5 to 3 hours in the classroom on any given day. This pilot program is designed to reduce the current training schedule from no loss in new coach operator skills and success rates. Measurements are currently underway.

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