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EXECUTIVE SUMMARY

As the transportation sector has grown over the decades, the competition for drivers and skilled workers has increased. Even in the last several years, employment in transportation-related industries has grown to levels not seen since the 1990s. However, the demand for transportation services has grown even more quickly, and the transportation sector continues to face a worker shortage. Recent economic conditions and a global pandemic have only accelerated and exasperated the workforce shortage issue, and employment in public transportation has been declining even as other occupations grow. In addition, agencies’ ability to respond to the worker shortage has been hampered by inadequate information about its causes and effects.

The Transit Workforce Shortage Study builds a framework for APTA, its members, and its partner organizations to better understand the workforce shortage’s causes and outlines best practices for recruiting, hiring, and retaining transit operations workers. The study consisted of two phases: Phase 1 updated and expanded previous research on the worker shortage using a combination of a survey of transit agencies and background research into the macro causes of the shortage and produced an Interim Findings Report, published in October 2022. Phase 2 involved extensive outreach to public transit agencies and a subsequent survey of operations workers to characterize in detail the broader themes identified earlier. This document synthesizes the findings of Phase 2 with those from Phase 1 and presents a toolkit for agencies to assess and bolster their workforce management activities.

A Note on Terminology
Recently, a great deal of attention has been paid to those who work in roles that cannot be done remotely and involve a great deal of face-to-face contact. As a result, many different terms exist to describe them. This study focuses on experiences with recruiting, hiring, and retaining transit operators, mechanics, and mid-level supervisors (e.g., street supervisors, operations supervisors, dispatchers). Accordingly, we refer to workers in those positions as “operations workers.”

Causes of the Shortage
The Interim Findings Report was devoted to identifying why transit agencies are in a labor crunch. In July 2022, APTA surveyed its membership to build upon an earlier survey conducted in March 2022. In addition to asking about the severity and impact of the shortage, the July 2022 survey investigated three questions:

1. What do public transit agencies know about why workers leave?
2. What difficulties do agencies encounter with attracting, hiring, and onboarding new workers?
3. What barriers exist to improving the hiring and retention of transit workers?

The survey received responses from 190 agencies, who reported the following major findings:

- The transit workforce shortage is widespread and severe. Ninety-six percent of agencies surveyed reported experiencing a workforce shortage, 84 percent of which said the shortage affects their ability to provide service.
- The transit workforce is aging and will experience a high retirement rate for the foreseeable future. Forty-three percent of transit workers are over 55, nearly double the percentage of the broader transportation sector. Agencies report that 24 percent of quitting workers are retirements; this is 34 percent at rural agencies.
- Transit agencies face intense competition for workers. Applicants reject transit agencies’ employment offers 35 percent of the time—more than twice the rate for jobs across all industries. Agencies reported that more departing employees leave to take jobs outside the transit industry than those who retire or leave the workforce combined.
- Agencies report that concerns about work schedules and compensation are leading reasons why workers quit. Most agencies said that concerns about work schedule and compensation were responsible for more departures than assault and harassment or concern about contracting COVID-19; those concerns are leading to more

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departures than before the pandemic began.

- A complex regulatory framework is hampering agencies’ ability to fill vacancies. Rules about drug and alcohol testing, Commercial Driver’s License (CDL) requirements, criminal background checks, and driving records extend the hiring process and exclude otherwise qualified applicants.

**Workers’ and Agencies’ Views on the Shortage**

With an initial understanding of the transit agencies’ views on the survey, APTA launched a survey to hear from current and former transit operations workers. The survey aimed at assessing to which extent workers shared agencies’ understanding of why workers are quitting and to which industries these workers are moving, as well as assessing workers’ satisfaction.

The survey received over 1,300 responses from current and former transit workers. The main survey findings include the following:

- **Pay, work schedule, and agency responsiveness are seen as key to retaining and attracting workers.** According to current transit workers, increasing pay and providing better work schedules are the most effective ways to retain employees. In addition, former workers emphasize listening to (and acting on) employees’ concerns, increasing pay, and improving worker safety as the top strategies.

- **One-half of current transit workers believe their benefits are competitive with previous jobs; this number drops for those working at the largest transit agencies and among former workers.** Although current transit workers believe benefits are competitive, only 36 percent of these workers feel their pay is competitive with similar jobs in their area. At the top 50 agencies by ridership, this figure is only 32 percent. Interestingly, 44 percent of former workers felt their pay was competitive.

- **Transit workers and agency management have different understandings of the pressures on operations workers.** Operations workers and agency management both ranked assault and harassment lower among reasons for quitting. However, current and especially former workers ranked it substantially higher than the agency management respondents.

- **Transit workers feel agencies could support workers more when they face challenges on the job.** Current and former transit workers feel (or felt) unsupported by their supervisors and that their agencies are (were) not responsive enough when they have (had) concerns. Responses suggest room for agencies to support workers more when they face challenges on the job.

- **Transit workers are frequently leaving the transportation industry, but many remain.** Among workers who left transit, taking a job outside the transportation industry was the most common next step (28 percent), followed by other jobs in transportation, excluding transit or logistics (22 percent) or retirement (17 percent). Many workers also pointed out that former colleagues commonly sought positions in government (9 percent), and many sought jobs involving other kinds of driving (27 percent). This suggests that workers who departed transit operations roles might have been willing to stay but for administrative differences.

**Agencies’ Responses to the Shortage**

Extensive interviews with transit agency staff reveal a complex social, regulatory, and economic landscape in which transit agencies and their current and prospective employees work together to address the labor shortage. Agencies generally have a clear understanding of why they are struggling to hire or retain workers, and many are already taking proactive steps to close gaps and prepare for the future. Key themes among these solutions include:

<table>
<thead>
<tr>
<th>Recruiting</th>
<th>Agencies report that expanding recruitment capacity is essential—ensuring enough staff and resources to conduct the agency’s recruitment activities. Likewise, creatively advertising positions in new media, developing new partnerships, and having a physical presence in the community make for successfully attracting applicants.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hiring</td>
<td>The hiring process is critical to a successful workforce strategy and needs appropriate resources to maximize the number of qualified candidates who complete the hiring process. Given the attrition in the hiring pipeline, some agencies have developed approaches to process a high volume of applicants. However, in situations where qualified applicants are in shorter supply, there are also several strategies for expanding the pool.</td>
</tr>
</tbody>
</table>
EXECUTIVE SUMMARY

Training and Onboarding

Once a candidate becomes an employee, learning their day-to-day responsibilities and transitioning them to work is critical. Training is an essential part of onboarding. Small changes can make training more accessible and effective and contribute to a positive agency culture.

Working Conditions and Policies

The changing economic conditions of the last several years has affected workers’ expectations. Work-life balance, predictability, and adequate compensation matter more now to transit workers. Agencies and unions can make a number of changes to increase the appeal of transit work and increase the engagement of existing workers.

Building Agency Culture and Improving Morale

Strong, encouraging agency culture appeals to workers, whether they are already part of the agency or considering joining. Agencies can attract new workers and retain existing ones through responsive, meaningful engagement with their workers, acknowledging their accomplishments, and providing clear pathways for career growth without having to leave the agency.

Conclusion

Agencies learn from one another’s attempts to address the national shortage of transit workers. This study aims to help facilitate the exchange of creative solutions for hiring and retaining transit workers. The experiences of agencies and workers gathered for this report suggest several principles that agencies should keep in mind as they try to develop a workforce necessary to provide the service essential to many people.

1. **Workers make employment decisions based on a complicated mix of factors.** Even if compensation is the dominant factor in workers’ decision-making, agencies are likely to see improved satisfaction and retention if they can improve their responsiveness to worker concerns about working conditions. By the same token, increases in compensation can help offset the safety risks that operators experience on the job.

2. **Agencies must work to accommodate the changing needs and preferences of the transit workforce.** In interviews, agencies reported that today’s transit workers have different responsibilities and priorities than previous generations. Agencies that have successfully recruited and retained workers have adapted their policies and practices to accommodate those changes.

3. **Collective bargaining agreements (CBAs) can be modified to serve the interests of both agencies and workers.** Unsurprisingly, interviewees reported that unions and agencies are sometimes at odds over compensation, work schedules, and other issues. However, there are many examples of agencies where management and labor have agreed to changes that increase recruitment and retention. We hope that the examples offered in this report encourage agencies as they work to address their workforce needs.

The transit workforce shortage is among the most pressing issues facing public transit agencies. While many factors making hiring and retaining workers harder are outside agencies’ control, the agencies who participated in this study are demonstrating creativity and resilience in addressing their workforce needs. APTA hopes that this document will contribute to the exchange of ideas between agencies and encourage them to find new and innovative ways to maintain the workforce needed to provide essential transportation services.

The Toolkit

The toolkit included in this report guides agencies in understanding their recruiting, hiring, and retaining needs using a series of checklists and reference strategies based on agencies’ experiences. Agencies at all stages of hiring capability can use the toolkit to enhance their workforce management processes and improve their outcomes.
INTRODUCTION

Public transit agencies across North America face a shortage of operators and mechanics. This crisis has strained budgets and forced agencies to reduce service during a period of economic uncertainty exacerbated by the COVID-19 pandemic. Agencies’ ability to respond to the worker shortage has been hampered by inadequate information about its causes and effects, and stakeholders have been interested in understanding how their peers are handling the situation. The Transit Workforce Shortage Study builds a framework for APTA, its members, and its partner organizations to understand the workforce shortage’s causes better and provides best practices for recruiting, hiring, and retaining transit operations workers.

The Transit Workforce Shortage Study consisted of two phases. The Interim Findings Report, published in October 2022, synthesizes the findings from Phase 1, which included a survey of transit agencies and background research into the macro causes of the shortage—these findings are summarized in the executive summary. That research effort updated and expanded previous surveys and studies on the worker shortage, revealing the extent of the labor shortage’s impacts on transit agencies around North America. The results indicate that the transit workforce shortage is widespread, and the ability to provide service is hampered by a shortage of transit workers at most agencies, irrespective of region, agency size, and service area population. The shortage results from a mixture of pressures, including:

- Persistent concerns about work schedules and compensation lead to quits and deter prospective employees from pursuing transit jobs.
- Stiff wage and benefit competition for similar skills inside and outside the transportation and logistics sector make transit roles less appealing.
- Policies and regulations hamper transit agencies’ ability to effectively recruit new employees, swiftly onboard new hires, and retain the existing workforce.

This Synthesis Report and Toolkit compiles the results of Phase 2, which involved targeted interviews with agency staff from 18 transit agencies in every region of the United States and a survey of 1,300 operations workers at agencies in North America. The interviews and survey built on the work in Phase 1 and were structured to provide detailed insight into the trends identified earlier and resolve knowledge gaps identified in the Interim Findings Report. These include identifying what agencies and workers find most effective among recruitment, hiring, and retention strategies so that peers may use shared knowledge.

In addition, the Phase 2 research also revealed that workers and agencies often share the same perspectives on issues facing the transit workforce but that some differences exist, especially for former transit workers. The results indicate that while most transit workers feel like their agencies (former or not) generally prepared them through training and onboarding, a majority believe their compensation packages do not compete with other jobs and that their agency management is unsupportive. These assessments become more polarized for former workers who cite scheduling and other workplace inflexibilities as reasons for changing jobs. Understanding the gaps between the perspectives of agency staff and its operations workforce will help both sides make transit work better.
This document first presents the findings from the operations worker survey. This section describes what the survey reveals about worker satisfaction and the dynamics of their employment choices: why and to where are they going if not transit jobs? The second section describes the findings from the agency staff interviews organized by theme, including discussions of tested approaches, their efficacy, and case studies of their use in action. Finally, the third section identifies remaining research gaps and identifies future areas for cooperation among transit agencies and their partners that may yield further benefits for workforce development.

Finally, this report concludes with a toolkit for agencies to review and bolster their workforce development approaches and address labor shortages. The toolkit begins with a structured self-assessment to help agencies understand the extent and effectiveness of existing workforce development programs. The results of this exercise will reveal how the agency can focus its efforts on improvement. Agencies can then explore various strategies for enhancing their activities along several themes identified through this study, ranging from recruitment to hiring to training to on-the-job working conditions and culture.
WORKERS’ AND AGENCIES’ VIEWS ON THE WORKFORCE SHORTAGE

In March and July 2022, APTA surveyed its membership about the transit workforce shortage. In addition to providing a clearer image of the impact and severity of the shortage at transit agencies, the July survey offers insights into what agencies know about why workers leave and where they are heading. The survey showed that:

- **Compensation and schedule are the leading reasons why workers quit.** Additionally, for over one-half of the agencies, the significance of these two factors has increased since the pandemic.
- **The largest share of workers leaves transit agency positions for jobs outside the transit industry** (non-transportation jobs and non-transit transportation jobs). Those departures exceed the number of workers retiring or leaving the workforce altogether.
- **Although retirements make up a substantial share of worker departures, nearly twice as many happen in the first two years of employment.**

In December 2022, APTA launched a third survey to build upon these findings, specifically to hear from current and former transit operations workers. The survey shows to which extent workers share agencies’ understanding of why workers are quitting and to which industries these workers are moving, as well as workers’ satisfaction.

The findings presented in this section are based on the responses of 190 agencies and over 1,300 transit current and former workers.

How Satisfied Are Operations Workers?

The **Interim Findings Report** showed how compensation and work schedule drive a significant number of resignations and that most of those happen in the first two years of employment. Hearing directly from workers on aspects of the job that may lead to resignations is invaluable information for agencies in coping with the shortage. The transit operations survey allowed for a deeper understanding of how satisfied operations workers are with training and onboarding, agency and supervisor responsiveness, career growth opportunities, and pay and benefits.

**ORIENTATION, ONBOARDING, AND TRAINING**

Agencies report that 16 percent of transit workers leave during training and onboarding and 20 percent more during the probationary period. Although many of the reasons for quitting might be external to the agencies, comparing the views of current and former employees on agencies’ training and onboarding practices can help agencies assess to which degree they need to improve those practices or try to mitigate external factors to the extent possible.

Survey findings show that, overall, workers are satisfied with onboarding practices (Figure 1 and Figure 2). Most (69 percent) of current transit workers surveyed either agree or strongly agree that orientation and onboarding prepared them for their job. While most former workers (60 percent) still agree or strongly agree that orientation and onboarding prepared them, a higher percentage of former workers (29 percent) disagreed or strongly disagreed, compared with just 16 percent of current workers.

Most current workers agree or strongly agree that job training is available to them, and most participate in it. Interestingly, former transit workers are in greater agreement about job training availability than current workers. Seventy percent of former workers agree or strongly agree that their agency made job training available, and 61 percent availed themselves of those opportunities. These figures point to successes in training practices at agencies,
including changes to early training and onboarding practices and helping applicants get their commercial driver’s license (CDL), as further described in the Solutions for Addressing the Workforce Shortage section.

### FIGURE 1: CURRENT WORKERS’ SATISFACTION WITH TRAINING AND ONBOARDING

<table>
<thead>
<tr>
<th>Statement</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Neutral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orientation and onboarding sufficiently prepared me to carry out my duties</td>
<td>12%</td>
<td>43%</td>
<td>26%</td>
<td>14%</td>
</tr>
<tr>
<td>My agency makes job training available to me</td>
<td>4%</td>
<td>42%</td>
<td>20%</td>
<td>22%</td>
</tr>
<tr>
<td>I participated in job training opportunities offered by my agency</td>
<td>6%</td>
<td>42%</td>
<td>24%</td>
<td>24%</td>
</tr>
<tr>
<td>My agency offers job training, but I’m not able to get for reasons out of my control</td>
<td>12%</td>
<td>25%</td>
<td>16%</td>
<td>9%</td>
</tr>
</tbody>
</table>

### FIGURE 2: FORMER WORKERS’ SATISFACTION WITH TRAINING AND ONBOARDING

<table>
<thead>
<tr>
<th>Statement</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Neutral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orientation and onboarding sufficiently prepared me to carry out my duties</td>
<td>7%</td>
<td>32%</td>
<td>28%</td>
<td>12%</td>
</tr>
<tr>
<td>My agency made job training available to me</td>
<td>10%</td>
<td>41%</td>
<td>29%</td>
<td>12%</td>
</tr>
<tr>
<td>I participated in job training opportunities offered by my agency</td>
<td>7%</td>
<td>36%</td>
<td>25%</td>
<td>23%</td>
</tr>
<tr>
<td>My agency offered job training, but I was not able to get for reasons out of my control</td>
<td>13%</td>
<td>29%</td>
<td>12%</td>
<td>14%</td>
</tr>
</tbody>
</table>

### RESPONSIVENESS

A workplace’s receptiveness to and willingness to act on feedback is an integral part of job satisfaction. On average, the worker survey results point toward a perceived lack of responsiveness from agencies (Figure 3 and Figure 4), especially at larger agencies, i.e., the top 50 agencies by ridership. At these larger agencies, just 27 percent of workers agree or strongly agree that their employer is responsive to their concerns, whereas 47 percent disagree or strongly disagree. These figures point to the need for improvements in routine and responsive engagement with operation workers, such as formalizing avenues for workers to provide input and communicating how agencies are responding to the received input.

Feeling supported by a supervisor is a key aspect of retention, as survey responses show. Among current transit workers, a slight majority agree that they can count on their supervisor for help when they have a problem. However, overall responses to this question are polarized: 27 percent of current workers disagree or strongly disagree with this statement (29 percent among larger agencies). And notably, most former transit workers felt unsupported by the time they left the agency. Establishing employee feedback mechanisms and making them meaningful by utilizing 360-degree evaluations, as well as maintaining mentoring programs, are ways agencies are tackling this issue.
Tenure and longevity are largely determined by whether employees perceive their ability to progress in their careers without changing organizations. Current workers tend to agree (more than they disagree) that their agency offers other opportunities for career advancement (Figure 5). However, paths to promotions, raises, bonuses, or other perks were relatively unclear to former transit workers (Figure 6). While some attrition due to mismatched expectations would be expected at any workplace, the sharp division suggests that information may not reach some employees or that some agencies are not making this information clear to all. It is worth noting that creating a supportive working environment with growth opportunities is increasingly important as agencies attempt to hire a younger generation. Creating well-defined career ladders and helping workers understand the possibilities can attract potential hires and motivate employees to pursue professional development and continue at the agency. Additionally, the large percentages of “neutral” responses for all questions and for both current and former workers (approximately 24 percent in any given category) underscores a potential ambivalence to the statement and may indicate that career advancement information is simply not clear to a fifth to a quarter of workers.
PAY AND BENEFITS

Increasing compensation is the most common strategy agencies have adopted to respond to the workforce shortage, according to the July agency survey. Yet, attracting and retaining workers through pay increases has been harder than agencies expected. The worker survey shows that, interestingly, former workers are more likely to say their pay was competitive than current workers (Figure 7 and Figure 8). Half of the current workers agree or strongly agree that their benefits package is better compared with prior jobs, while 29 percent disagree or strongly disagree. Only 36 percent of current workers agree or strongly agree that their pay is competitive with similar jobs, compared with 44 percent who disagree or strongly disagree. Forty-four percent of former workers agree or strongly agree that their benefits package was better than prior jobs, and the same share indicated their pay was competitive with similar jobs. The somewhat split results among former workers show that compensation in itself has a limited impact on retaining workers.
Why Are Workers Leaving or Not Joining the Transit Workforce?

Agencies and workers share similar views on factors that contribute to why workers leave or do not join the transit workforce. Insights from the worker survey include (i) how particular factors are more or less relevant for each group (agencies vs. workers and current vs. former workers); (ii) workers shared more reasons that may prevent candidates from joining the industry; some of these factors are intrinsic to the job, such as working with the public, but many factors are related to agency culture which agencies may be able to address; (iii) in terms of strategies to attract workers from the perspective of the workers themselves, those related to pay and work schedule clearly rise to the top, but a factor not discussed in the agency survey is the relationship between operations workers and their managers/supervisors.

CORE ISSUES

The agency and worker surveys asked respondents about the common factors that led to workers leaving their jobs, and the two surveys returned roughly similar results. According to transit agencies, compensation and work schedule were perceived as the two most significant factors leading workers to quit, which generally held true for current and former workers (Table 1). Compensation is generally the highest-ranked factor among current workers, followed by work schedules, working conditions, harassment or assault, and concern about contracting COVID-19.

While the agency survey indicates that assault and harassment are not major factors leading workers to quit, a literature review and the worker survey suggest that workers may have a different view. While the operations worker respondents also ranked assault and harassment lower, current and especially former workers rated it substantially higher than the agency respondents: it was generally rated fourth rather than fifth of five, and the rating score was approximately one to one-and-a-half points higher (current versus former workers). This indicates that communication about concerns and priorities may be breaking down between agencies and workers, and workers who depart transit agencies may have had a harder time managing the working conditions for unknown reasons. Possible reasons for this include that current workers may be more experienced or better equipped to manage harassment or de-escalate events that would otherwise lead to assault. However, more research is need determine why workers have different views on the significance of harassment and assault on quitting rates.

Concerns about COVID-19 rate the lowest among workers, especially among former workers. This may be the result of relative threat exposure (i.e., safety concerns from assaults are more memorable than COVID-19 illnesses in light of widespread vaccination) or recency bias (workers with less public interaction at the time of taking the survey may have less COVID-19 exposure concerns). Agencies' ranking of COVID-19 concerns higher than assault or harassment concerns remains noteworthy and deserves additional research scrutiny.

TABLE 1: AVERAGE RANKINGS OF FACTORS FOR LEAVING TRANSIT JOBS ACCORDING TO AGENCIES, CURRENT, AND FORMER WORKERS

<table>
<thead>
<tr>
<th>Factor</th>
<th>Agency</th>
<th>Current Worker</th>
<th>Former Worker</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compensation</td>
<td>2.19</td>
<td>2.36</td>
<td>2.57</td>
</tr>
<tr>
<td>Work Schedule</td>
<td>2.02</td>
<td>2.63</td>
<td>2.35</td>
</tr>
<tr>
<td>Other Working Conditions</td>
<td>3.31</td>
<td>2.97</td>
<td>2.83</td>
</tr>
<tr>
<td>On-The Job Harassment or Assault</td>
<td>4.24</td>
<td>3.34</td>
<td>2.94</td>
</tr>
<tr>
<td>Concern Over Contracting COVID-19 on the Job</td>
<td>3.24</td>
<td>3.57</td>
<td>4.02</td>
</tr>
</tbody>
</table>

REASONS FOR DEPARTURES

The agency and workers surveys used open-response questions to gather insight into why workers leave their jobs, and agencies and workers provided varying responses. Almost a third of agency answers pointed to retirement being a major factor in operations workers deciding to leave their jobs before the COVID-19 pandemic began affecting their agency. However, since the onset of the COVID-19 pandemic, health and work-life balance factors have gained significant importance, accounting for over a fifth of the open-ended responses. These factors include childcare and other caregiving responsibilities, vaccination and masking requirements, and workers pursuing education to change careers.
In addition to the factors identified in Table 1, the worker survey asked respondents to describe other factors that caused them to leave their jobs in transit. Eight themes arose from those submitted. While the first three related to pay, schedules, and concerning interactions with passengers, other factors included disapproval of management conduct (e.g., lack of transparency for decision making, lack of support during incidents, lack of communication; 32 percent); challenges related to hiring, training, or passing required exams (16 percent); issues related to mental or physical health (16 percent); and the feeling of being overworked or “burnout” (14 percent) (Table 2).

**TABLE 2: ‘OTHER’ FACTORS FOR LEAVING TRANSIT JOBS**

<table>
<thead>
<tr>
<th>Factors</th>
<th>Percent of Valid Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issues with Management</td>
<td>32%</td>
</tr>
<tr>
<td>Hiring, Training, Passing Exams</td>
<td>16%</td>
</tr>
<tr>
<td>Mental or Physical Health</td>
<td>16%</td>
</tr>
<tr>
<td>Feeling Overworked</td>
<td>14%</td>
</tr>
</tbody>
</table>

**RECRUITMENT BARRIERS**

When asked which factors current and former workers thought might discourage potential workers from applying for a job in transit, hundreds responded with unique, agency-specific answers. However, several themes emerged across agency responses as prominent factors that could discourage workers from taking a job in transit (Table 3). Almost half of the respondents noted reasons related to compensation, including pay and benefits. Likewise, in keeping with other findings throughout this study, a similar share of responses noted issues related to inflexible work schedules, long shifts, and feeling overworked.

Almost a fifth of the respondents mentioned customer-related reasons, such as physical and verbal abuse from passengers. Factors including ‘safety and security issues,’ ‘hiring and training challenges,’ ‘poor communication and transparency from management,’ and ‘culture of non-support and lack of respect from management’ also arise as common factors that could discourage potential workers.

**TABLE 3: ‘OTHER’ FACTORS DISCOURAGING NEW WORKERS**

<table>
<thead>
<tr>
<th>Factors</th>
<th>Percent of Valid Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor Pay and Benefits</td>
<td>46%</td>
</tr>
<tr>
<td>Inflexibility of Schedules</td>
<td>29%</td>
</tr>
<tr>
<td>Physical and Verbal Abuse from Passengers</td>
<td>19%</td>
</tr>
<tr>
<td>Long Shifts; Feeling Overworked</td>
<td>18%</td>
</tr>
<tr>
<td>Safety and Security Issues</td>
<td>13%</td>
</tr>
<tr>
<td>Hiring and Training Challenges</td>
<td>8%</td>
</tr>
<tr>
<td>Lack of Support and Respect from Management</td>
<td>5%</td>
</tr>
<tr>
<td>Poor Communication and Transparency from Management</td>
<td>1%</td>
</tr>
</tbody>
</table>

**RETENTION CHALLENGES**

Survey respondents were asked to rank various actions transit agencies could take to encourage workers to stay in their positions long-term (Figure 9). ‘Increasing pay’ was ranked first by current workers and second by former workers. Former workers ranked ‘listening to concerns and changing procedures or practices’ first. Providing better work schedules was also ranked highly among both current and former workers, and other topics related to work-life balance, including childcare access and hours flexibility, also garnered sizeable numbers of responses.
FIGURE 9: TIMES EACH STRATEGY WAS LISTED AS ONE OF THE TOP 5 ENCOURAGING WORKERS TO STAY

A number of current and former workers responded with ‘other’ factors not previously listed as actions transit agencies could take to improve employee retention. Of note, 15 percent of responses included comments related to needing better equipment. Further exploration of the effect that the state-of-good repair issues may have on operator experience is needed to understand the extent to which state-of-good repair investments affect operations worker satisfaction.

Where Are Workers Heading?

The worker survey also asked operations workers questions about where those who separate from transit agencies go for subsequent employment to clarify findings from earlier research. The Interim Findings Report identified in broad terms that agencies report the largest share of workers leave transit agency positions for jobs outside the transit industry (non-transportation and transportation non-transit). The report also found that those departures exceed the number of workers retiring or leaving the workforce altogether, indicating that departures are an active choice to seek alternatives. Competition for operations workers from employers outside the transportation industry appears to be increasing faster than in transportation-related industries. For roughly one-half of agencies, the number of operations workers accepting jobs outside the transportation industry has increased since COVID-19.

The worker survey asked where former workers’ careers have taken them since leaving the transit agency (current workers were asked about their former colleagues who left) (Table 4). Taking a job outside the transportation industry was the most common next step for former workers (28 percent), followed by other jobs in transportation or logistics (excluding transit) (22 percent) or retirement (17 percent). Leaving transit to become unemployed or pursue higher education was relatively uncommon.

TABLE 4: DESTINATION OF WORKERS LEAVING AGENCIES ACCORDING TO AGENCIES, CURRENT, AND FORMER WORKERS

<table>
<thead>
<tr>
<th>Factor</th>
<th>Agency</th>
<th>Current Worker</th>
<th>Former Worker</th>
</tr>
</thead>
<tbody>
<tr>
<td>Another Transit Agency</td>
<td>13%</td>
<td>19%</td>
<td>9%</td>
</tr>
<tr>
<td>Transportation (Non-Transit)</td>
<td>18%</td>
<td>19%</td>
<td>22%</td>
</tr>
<tr>
<td>Non-Transportation</td>
<td>27%</td>
<td>27%</td>
<td>28%</td>
</tr>
</tbody>
</table>

In addition, current and former workers responded with several other career pursuits (or pursuits that may have been included but with less specificity) (Table 5). Notably, instead of listing a career type or category, many workers emphasized that the jobs sought post-agency had better benefits, pay, or working hours (39 percent). Many workers also pointed out that former colleagues commonly sought positions at city, county, state, or federal agencies (9 percent), and many sought jobs involving other kinds of driving (27 percent). Since transit agencies are often structured...
similarly to government agencies, this set of statistics suggests that workers who departed transit operations roles might have been willing to stay but for administrative differences.

Several workers noted that former colleagues chose to be self-employed (14 percent), and some reported at-home caregiving jobs for family members as post-agency career moves (9 percent). Moreover, a handful found positions where they could work from home after exiting the transit agency (5 percent), illustrating a pandemic-era employment trend. This bears out statements and findings in other parts of this research that indicate work-life balance concerns rate highly among current and former transit operations workers and those likely to hold those roles given the right conditions.

TABLE 5: ‘OTHER’ FUTURE CAREER MOVES

<table>
<thead>
<tr>
<th>Careers</th>
<th>Percent of Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Job with Better Pay, Benefits, Hours</td>
<td>39%</td>
</tr>
<tr>
<td>School Bus, Truck, or Uber Driver</td>
<td>27%</td>
</tr>
<tr>
<td>Self-Employed</td>
<td>14%</td>
</tr>
<tr>
<td>City, County, State, or Federal Jobs</td>
<td>9%</td>
</tr>
<tr>
<td>Caregiver or Medical Care</td>
<td>9%</td>
</tr>
<tr>
<td>Remote Work</td>
<td>5%</td>
</tr>
<tr>
<td>Retirement</td>
<td>5%</td>
</tr>
<tr>
<td>Return to School</td>
<td>4%</td>
</tr>
</tbody>
</table>
AGENCIES’ RESPONSES TO THE WORKFORCE SHORTAGE

According to APTA’s recent surveys, nearly all agencies across the country report a shortage of transit workers; most of those agencies also said the shortage is impeding their ability to provide service. We interviewed 18 agencies across the country to learn what they are doing to respond to the shortage (Figure 10). A roster of interviewees was drawn from the Phase 1 agency survey, where many agencies volunteered information about their challenges as well as their approaches to resolving issues related to the labor shortage. Agencies’ experiences were sorted into the thematic issue categories used in this report. APTA and the project team are grateful for their staff’s time and candor.

FIGURE 10: MAP OF INTERVIEWED AGENCIES

Framework

This summary of agency interviews focuses on two levers by which agencies can increase their operations workers’ headcounts:

- **Increase the number of new workers.** These are actions agencies can take to attract applicants and get them through the hiring process.
- **Increase worker retention.** The fewer workers who quit, the fewer workers agencies will need to hire to replace them.
Many changes to agencies’ policies and practices affect both recruitment and retention. For example, increasing compensation will likely attract new workers and persuade existing ones to stay.

Sometimes, a solution will positively impact one dimension of an agency’s workforce issues but negatively impact another. For example, reducing the number of hours operators drive to 20 hours a week might improve retention but would also result in major cost increases or service cuts. Therefore, agencies need to think comprehensively about the impact of changes to their workforce policies. Because of the interrelatedness of workforce issues, solutions are presented programmatically rather than by their intended impact.

**Solutions for Addressing the Workforce Shortage**

This section will share the experience of the 18 interviewed agencies in developing strategies to mitigate the shortage. Solutions will be organized into five categories, representing the path of a transit worker from prospective candidate to long-term employee.

The section concludes with a discussion of opportunities for inter-agency coordination on workforce development.

**RECRUITING**

The path to increasing operations workforce headcounts begins with recruiting, which refers in this report to any activity related to attracting applicants, including advertising, attending community events, and improving the application process. In interviews, many agencies reported that they need to find ways to boost the flow of new applicants to keep up with workers who are leaving. For example, the transit agency survey revealed that agencies find that employee referrals and online advertising are the two most effective forms of recruiting (Figure 11). Agencies are continuing to rely upon those sources for the recruitment of candidates but are also exploring how to develop new employment pipelines. This section also discusses strategies for increasing agencies’ ability to keep up with the demanding work of posting and advertising positions and responding to applicants.

**FIGURE 11: FREQUENCY AND EFFECTIVENESS OF OUTREACH STRATEGIES, APTA AGENCY SURVEY**

<table>
<thead>
<tr>
<th>Outreach Strategy</th>
<th>1 - Not effective</th>
<th>2</th>
<th>3</th>
<th>4 - Highly Effective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee Referrals</td>
<td>5%</td>
<td>10%</td>
<td>30%</td>
<td>31%</td>
</tr>
<tr>
<td>Technical Colleges</td>
<td>27%</td>
<td>21%</td>
<td>32%</td>
<td>14%</td>
</tr>
<tr>
<td>Job Fairs</td>
<td>12%</td>
<td>20%</td>
<td>35%</td>
<td>25%</td>
</tr>
<tr>
<td>Online Advertising</td>
<td>6%</td>
<td>21%</td>
<td>40%</td>
<td>32%</td>
</tr>
<tr>
<td>Other Advertising</td>
<td>5%</td>
<td>8%</td>
<td>35%</td>
<td>39%</td>
</tr>
<tr>
<td>Other</td>
<td>20%</td>
<td>7%</td>
<td>44%</td>
<td>21%</td>
</tr>
</tbody>
</table>
Increasing Agency Recruiting Capacity

Faced with the need to attract and process a greater number of new applicants, agencies have worked to expand their capacity for outreach and applicant engagement. One approach is to simply increase the human resources available for recruiting. For example, Utah Transit Authority (UTA) hired additional human resources staff and is exploring freeing up recruiters’ time by moving data entry responsibilities to a dedicated person or even an AI-enabled system. Bay Area Rapid Transit (BART) is working to formalize a year-round internship program focused on recruiting, with an option for interns to progress to part-time and eventually full-time employment.

Agencies are also investing in their ability to track and analyze their recruiting efforts so they can better understand what’s working and what’s not. In 2022, King County Metro in Washington state hired a data specialist who designed a system to track the effectiveness of the agency’s outreach. The data specialist is currently training recruiters to use the new system, so data is complete and accurate.

Agencies can also take steps to better anticipate future workforce needs rather than responding to vacancies, which can take months to fill. Pinellas Suncoast Transit Authority (PSTA) developed a workforce tracking tool that forecasts their expected headcount using the average turnover rate and is used to develop recruiting targets.

Improving Job Advertising Effectiveness

Agencies have begun exploring new ways to reach potential applicants. Several agencies, including UTA, described the need for agencies to develop a brand identity to help connect with potential applicants. San Antonio’s VIA Metropolitan Transit (VIA) has put ads on television but reports its most successful advertising effort is targeted mailings. The agency works with a marketing firm to send flyers to residents in zip codes where people have applied for positions with similar qualifications as jobs at transit agencies such as car dealerships and oil-change shops.

Agencies had mixed feelings about using social media to advertise. One agency expressed concern that posting to social media could have unpredictable consequences, such as agency posts getting used out of context. However, most agencies have embraced social media as a necessary component of their recruitment program. Chicago Transit Authority (CTA) reports ongoing advertising on Facebook, which allows targeting by location, interest, and age. PSTA’s “day in the life of an operator” video series, posted on Facebook, presents compelling personal stories about its workers, conveying the critical social function of transit work and the benefits of a career with the agency. BART has created content showcasing training graduations and highlighting compelling stories about individual employees. Since launching this new social media strategy, BART has seen an increase in post-engagement and job applicants.

Agencies have also worked to identify the most effective advertising messages for attracting workers. CTA has refined its message to prospective employees to emphasize the “value proposition” that the agency offers: longevity, pension, having a career rather than just a job, and the opportunity to do something positive for one’s community. The resulting “Better on the Bus” campaign highlights the advantages of driving for a transit agency rather than a rideshare or delivery company. CTA’s advertising strategy also involves creating messages that are seasonal and topical to help keep their advertising feeling current. CTA also promotes itself as an employer that celebrates diversity, which it believes is crucial to appealing to applicants of different backgrounds.

Other agencies worry that changes to the culture and the economy have weakened many messages agencies have traditionally used to recruit. Houston Metro reported that information about time off and compensation are the most important factors for applicants and that aspects of the job that have been attractive in the past (for example, job stability and union protection) no longer resonate as strongly. Instead, Houston Metro reports that applicants are motivated by time off, the opportunity to earn overtime, and benefits.

Cultivating Referral Networks

To generate a steady stream of referrals, agencies emphasized the importance of cultivating and maintaining relationships with key organizations and communities. In some cases, establishing a relationship with a new community or partner requires agencies to tackle other programmatic changes first. For example, UTA has plans to expand its recruitment efforts to the Spanish-speaking population, but only after it begins offering CDL and operator training in Spanish later this year.

Several agencies also noted that current and former military servicemembers are an important community for outreach. King County Metro and Portland, Oregon’s TriMet both reported success from efforts to build relationships with nearby military bases. CTA built a tool that matches military occupation codes to transit jobs so that military
servicemembers can see that they have applicable skills. Long Beach Transit (LBT) has worked to establish relationships with organizations that serve displaced workers, like America’s Job Center. In general, agencies noted that building relationships with organizations requires a sustained commitment and multiple touches but that those relationships can be valuable sources of worker referrals.

CASE STUDY: CHICAGO TRANSIT AUTHORITY (CTA)
Chicago Transit Authority (CTA) has developed a network of partner organizations that helps it engage many potential applicants. Its most robust program is an internship program for high school and college students. CTA partners with organizations that work with youth like CASA and After School Matters to enroll 200 high school students as part of the One Summer Chicago internship program. CTA interns develop professional skills, learn about careers at the agency, and produce capstone projects which include art installations and advertising campaigns. The interns leave with an awareness of CTA as a viable future employer and relationships with agency employees. By leveraging partners to help enroll students, and using college student interns as the intern coordinators, CTA can run the program without tremendous expense.

Increasing an Agency’s Visibility via Public Events
Several agencies reported that attendance at community events is an important component of boosting an agency’s visibility as an employer in the local job market.

CASE STUDY: LONG BEACH TRANSIT (LBT)
Over the past year, Long Beach Transit’s (LBT) talent acquisition manager has prioritized attending community events to reach potential employees. LBT staff have attended job fairs specific to transit but also for other industries, such as trucking, as well as informational events that aren’t necessarily about hiring. The agency sees public engagement as an important component of their recruiting effort. Agency staff outside of talent acquisition also provide support at events.

Making Applications More Accessible
Many agencies reported changing their job application forms to reduce barriers to applying. For many agencies, that means developing web-based applications and ensuring that the agency’s website is mobile-friendly and uses simple, clear language. For example, Greater Cleveland Regional Transit Authority (GCRTA) worked to simplify its application so that it is quick enough to complete “while waiting at a bus stop.”

While mobile applications may be useful for recruiting workers who are young and tech-savvy, agencies must also appeal to workers who are not. IndyGo in Indianapolis invites prospective applicants to the office, where human resources staff will help them fill out the required forms. LYNX in central Florida fills out forms and uploads documents on the applicant’s behalf.

Agencies also discussed tactics for shortening applications:

- Removing redundancy (for example, making sure applicants do not need to manually enter their job history and submit a resume)
- Delaying requests for certain information (like references) until the interview stage, where possible.
- Simplifying language to make the application easier to understand.

Agencies who have been successful at increasing applications recognize they must make every opportunity to remove barriers to hiring.
Hiring

Once an applicant is in the door, they must navigate a sometimes long and complex road to receiving an offer and then beginning orientation and training. If applicants get discouraged (Figure 12) or find another job before securing a position at the agency, they may withdraw their application. Agencies shared strategies for keeping applicants engaged and making the hiring process shorter, easier, and more effective.

FIGURE 12: PERCENTAGE OF AGENCIES MENTIONING VARIOUS FACTORS AS BARRIERS TO HIRING AND RETENTION IN OPEN-ENDED RESPONSE QUESTIONS, APTA AGENCY SURVEY

Streamlining Hiring

Beyond speeding up interviews, agencies have taken steps to reduce applicant attrition in the hiring process by increasing engagement with applicants and streamlining the process.

CASE STUDY: GREATER CLEVELAND REGIONAL TRANSIT AUTHORITY (GCRTA)

When Greater Cleveland Regional Transit Authority (GCRTA) noted that it was losing many applicants between application and the start of training, they decided to conduct a step-by-step audit of their hiring process. They found that their hiring process involved 86 steps and averaged five months. Just getting forms signed and returned—which required applicants to print, hand-sign, and re-scan several documents—often took multiple weeks. GCRTA started looking for opportunities to streamline the hiring process. They enabled electronic signatures on documents and consolidated communications around physical and background checks so all necessary information comes in a single, well-organized email rather than several sent over multiple days. The result is a hiring process down from 86 steps to about 40, and from five months to two and a half.

Expanding Interview Capacity

Given the amount of attrition that occurs in the hiring pipeline, agencies recognize that a high volume of applicants is essential to a successful workforce strategy. However, conducting interviews is time-consuming. PSTA reduced the number of questions in its interviews (resulting in interviews taking about thirty minutes instead of an hour), so they could conduct more interviews every day. PSTA, along with TriMet and King County Metro, also expanded the pool of people trained to conduct interviews. Other agencies discussed strategies for ensuring that staff is available to conduct interviews, like holding interviews at regular times each week, inviting multiple people from each department to each interview, and holding the department accountable for making sure someone attends.

Hiring En Masse at Special Events

For some agencies, the limiting factor in hiring enough workers is not the number of applicants but the amount of staff time it takes to move an applicant through the process. Several agencies discussed using mass hiring events to engage with many workers at once.

Houston Metro’s Fast Track hiring events are designed to cover as much of the hiring process as possible in a single touch. Applicants apply online before arriving at the event, where they can participate in an interview, receive a
contingent offer, and take their drug test. Applicants with contingent offers can return the following day for a physical exam conducted in a mobile clinic operated by a contracted medical services provider. Likewise, IndyGo’s hiring event strategy focuses on making its events as convenient as possible for potential workers. They hold events at the downtown transit center as well as at the agency’s operating garages, where staff is on-site to conduct interviews and make contingent offers. The hiring events held by GCRTA involve staff from across the agency interviewing more than 40 applicants a day and extending verbal offers on the spot.

In addition to using staff time more efficiently, mass hiring events reduce the time between application, interview, and offer, which decreases the chance that an applicant will accept a job from another employer while waiting to receive an agency’s offer.

Tests and Checks
Agencies have worked to ensure that conducting criminal background checks, driving record reviews, and drug and alcohol tests do not end up excluding people who would otherwise be qualified and valuable employees. For example, applicants who live in states where cannabis is legalized may not be aware that transit employees are tested for THC. PSTA and Mountain Line Transit Authority (MLTA), which serves Monongalia County in West Virginia, emphasized the importance of communicating their drug and alcohol policy to applicants and trainees; when applicants people are aware of the rules, they better meet the testing process and meet hiring criteria.

Some agencies are applying additional discretion when considering applicants’ driving records and criminal records. Such an approach requires judgment and consideration but may be necessary in an environment where operators and mechanics are scarce. For instance, PSTA reviews criminal background checks on a case-by-case basis and has shortened the lookback window for driving infractions from seven to four years.

PSTA also changed its policies concerning operator physicals. For decades, the agency required new drivers to get pre-employment Department of Transportation physical exams with PSTA’s occupational medical provider even if they already held a current DOT medical certificate, perhaps from a previous job. This often required going to expensive specialists and lengthened the time to complete onboarding. Now, PSTA honors existing current CDL medical certifications.

MLTA found that obtaining a CDL is difficult for many applicants (solutions related to CDL training are presented in the next section). Like many agencies, MLTA requires candidates to obtain their CDL permit or license before they begin driving full-size buses. However, in addition to assisting applicants in obtaining CDL permits and licenses, the agency is also acquiring smaller vehicles for which a CDL is not required. They are deploying these buses and drivers for them on routes where ridership can accommodate the lower vehicle capacities, all while supporting these employees through full CDL training.

TRAINING AND ONBOARDING
Once prospective employees accept an offer and agree to work for an agency, a process begins to prepare them for their role. Onboarding processes include familiar forms for payroll, taxes, and administrative access. For operator positions, onboarding also includes extensive training on equipment, procedures, and the routes they may be driving. Operators must also obtain a full CDL before legally operating full-size buses. All these activities take time and training resources, making the onboarding process pivotal to filling holes left by general worker shortages. Moreover, training affects the existing workforce’s ability to grow in place. Well-functioning training and onboarding allow an agency to swiftly incorporate new hires into their everyday work, encouraging continuous improvement, and fostering a pipeline for internal advancement.

2 THC is Tetrahydrocannabinol, primary psychoactive cannabinoid extracted from the cannabis (marijuana) plant.
Transit agencies around North America have identified training and onboarding improvements as key to resolving worker shortages in various roles. The following sections describe some of the different issues agencies have encountered and the solutions they have implemented in response.

**Early Training and Onboarding**

New operator training is a months-long process, which limits how frequently agencies can start new classes of trainees. This results in increased worker attrition: the longer new hires wait to begin training, the more likely they are to take another position elsewhere. The agencies that have launched early training and onboarding programs emphasized that their programs have additional benefits beyond improving worker retention in the hiring process; the additional time workers spend getting acclimated to an agency’s culture and familiarizing themselves with the routes they will be driving can reduce worker stress once on the job.

**CASE STUDY: PINELLAS SUNCOAST TRANSIT AUTHORITY (PSTA)**

Like many agencies, Pinellas Suncoast Transit Authority (PSTA) noticed that many new hires were dropping out before training began. PSTA concluded that this attrition was in part due to a long lag between hire dates and the start of training. In response, they created a paid “early start” training program, which allows workers to start receiving a paycheck right away.

In the weeks before formal training begins, new hires complete the administrative components of onboarding and begin familiarizing themselves with routes. While the additional study time does not replace any of the content of the regular training course, PSTA has found that it does boost the confidence of operators when they eventually get behind the wheel. The early start also gives them a sense of what the job actually entails, which helps them prepare mentally for the role.

**CASE STUDY: UTAH TRANSIT AUTHORITY (UTA)**

The Utah Transit Authority (UTA) also described the benefits of bringing on operators before formal training begins. UTA realized they were losing 80 percent of their applicants to other employers because of how long the hiring process was taking. To increase employee retention between hire and training start dates, their distinct training and onboarding departments partnered together to ensure that applicants begin training rapidly after hiring. Streamlining the process and increasing communication between the two departments succeeded in increasing retention.

The resulting early onboarding program also gives new employees the opportunity to familiarize themselves with the agency’s culture and operations. During the mornings, they take trips to different facilities to build an understanding of how different parts of the agency work together to provide service. In the afternoons they participate in CDL training sessions with an outside vendor. This early onboarding ensures that new hires begin working in a timely fashion and familiarizes them with their role in the agency's work. The early onboarding program has reversed their retention issue – UTA now retains 80 percent of hires. The early onboarding program has also helped trainees acquire their CDLs; UTA credits early onboarding with boosting its CDL pass rate to about 90 percent.

**Expanding On-the-Road Training**

Agencies have also explored extending and improving their training programs to better prepare new operators and reduce the stress they often experience, which can lead to early quits. For example, PSTA added a period of on-route ride-along mentor support after the end of formal training. These training and mentoring elements lowered attrition, boosted operator skill and confidence, and improved morale by connecting new operators with their more experienced peers.

In addition to the early start, PSTA added two additional weeks for on-the-job training where the new hires drive with an experienced operator riding with them in case they need help or to guide them during challenging moments. This “soft landing” allows new drivers to acclimate more quickly, boosts morale among new hires, and connects them to the more senior workforce. The experienced drivers who participate in the program are also compensated for the ride-along, and PSTA reports that many enjoy the mentorship role.
Several other interviewed agencies discussed the benefits of expanded training and soft landings, including CTA, BART, and LBT. Each interviewee pointed out that transit operators have an unusual job that involves customer service and regulatory compliance in addition to operating a large commercial vehicle. The skill in multitasking between these different elements makes the work much more involved than other jobs at similar pay, and these agencies have noticed that relatively small, intentional changes to the training and onboarding processes substantially improve agency outcomes in terms of reduced attrition and bolstered operator skills.

**More Accessible Training**

When the COVID-19 pandemic began in early 2020, it meant that in-person gatherings were no longer safe or feasible. As a result, many transit agencies shifted some of their training and onboarding programs to a virtual or hybrid format. Today, most transit operations agency staff are in person again. Still, many agencies have found that offering virtual and pre-recorded training modules has made agency education more accessible to the existing and potential workforce.

Several agencies, including BART, reported that they have continued to offer multiple formats (online, in-person, hybrid, on-demand, and live) and multiple times of day (normal business hours, weekends, off-hours). While it requires additional investment in training capacity, offering more ways to access training resources ensures that people with complex schedules can attend in a way that fits their personal and work lives. This promotes a better balance for new hires and existing employees interested in pursuing additional education: many have family obligations or are working shifts that would overlap with traditional bankers’ hours and prevent them from attending. This helps resolve the worker shortage internally and externally as new employees have better access to their entry training, and existing employees are better able to grow and advance in the wake of retirements and attrition.

Other agencies, especially those in areas with large immigrant communities and limited English proficiency, have encountered potential labor pools with sufficient technical aptitude but whose command of English hampers their ability to advance. COTA and UTA, for example, are exploring offering training in Spanish. These programs involve partnerships with state agencies and community organizations that teach English as a second language (ESL) classes; special trainers and curricula are designed to familiarize ESL students with the working language of the transit industry, especially acronyms and terminology used by dispatchers. In some cases, a special trainer will continue with them during their CDL preparation and training. While this involves a bigger financial commitment from the agency and lengthens the training process, increasing training access to un- or underutilized groups expands agencies’ labor pool and can improve candidate quality.

**Training For a Positive Culture**

Many interviewees reported low morale among operations workers. Training plays a key role in fostering a sense of solidarity and positivity among an agency’s workforce. Many agencies discussed how operators are feeling overextended and burnt out by negative social interactions with the public. Interactions with passengers have worsened in recent years, in part due to issues related to public health policies. CTA trains new operators in conflict de-escalation. Similarly, Riverside Transit Agency (RTA) in Riverside County, California, will be increasing training for defensive driving in response to conversations with operators.

Training can also be a way to reinforce an agency’s values in new recruits. RTA’s eight-week training course for new employees includes an extensive introduction to a set of core values. The agency has employee recognition programs structured around these values, and discussions about policy and even disciplinary actions are always couched in terms of the agency’s core values. Likewise, UTA has partnered with a consultant to provide multi-day training on the pillars of their “One UTA” initiative. This focuses on removing organizational barriers and minimizing negative interactions between different parts of UTA.

**Helping Applicants Get Their CDLs**

For many transit systems, transit operators must obtain a CDL with passenger endorsements, per the Federal Motor Carrier Administration. However, an increase in trucking jobs has increased competition among employers for CDL-holding drivers and made them increasingly valuable and increasingly scarce. In response, many transit agencies have begun providing additional support to ensure they have sufficiently trained drivers. This support ranges from providing minimal assistance and requiring applicants to come with their full CDL – which was the historical status quo – to hosting paid entry-level driver training to get both the commercial learner’s permit and the full CDL license as part of the standard in-house onboarding package.
Agencies that have taken smaller steps include LYNX and TriMet. Both agencies indicated they have plenty of applicants with CDL permits. Their challenges instead stem from a lack of internal capacity to provide CDL training and testing. As a result, both agencies have partnered with local technical schools and community colleges to contract for CDL training and testing. They indicated that this approach might also be helpful for agencies that have short-term needs or capacity issues so long as a local partner can provide the necessary assistance.

Other agencies struggle to attract applicants with CDL permits in the first place. St. Cloud Metro Bus developed a training program that begins with the permit written test and allows for an accelerated timeline; someone hired on Wednesday completes a permit test preparation course on Thursday and Friday and then takes the permit test the following Monday and Tuesday. If they pass, they begin onboarding and CDL training on the following Wednesday – a one-week turnaround for new hires without CDL experience.

**WORKING CONDITIONS AND POLICIES**

Working arrangements—how many hours they work, their schedule, how and when they can take leave, how they are paid, and how they are protected against hazards—has a major impact on recruiting and retaining workers. The APTA agency survey found that while many agencies had made changes to compensation, fewer had altered working conditions (Figure 13), likely because those changes can be difficult to make and require negotiation with workers’ unions. Nevertheless, the importance of these factors to worker retention and hiring means agencies should consider adjusting working conditions where possible. This section discusses agencies’ efforts to improve worker satisfaction through changes to working conditions while also providing effective service.

**FIGURE 13: CHANGES TO COMPENSATION AND WORKING CONDITIONS BY IMPLEMENTATION STATUS, APTA AGENCY SURVEY**

As noted in the discussion of the transit workforce survey, worker schedules are among the most important drivers of worker satisfaction. Making changes to transit operator schedules affects many aspects of an agency’s operations, from its finances to its ability to provide service. Additionally, work schedules are often subject to the provisions of collective bargaining agreements. Therefore, it can be difficult for agencies to know what changes to their scheduling
policies and processes they should make or how to make them. Several agencies described attempts to increase their capacity to analyze and alter worker schedules.

CASE STUDY: CENTRAL OHIO TRANSIT AUTHORITY (COTA)
Central Ohio Transit Authority (COTA) has tackled the thorny problem of schedule improvement through the creation of the Schedule Modernization Team (SMT). The SMT includes staff from across the agency, including Human Resources, Operations, and Innovation. The experience of these members allows the team to consider proposals from all sides. For example, the inclusion of staff from finance allows the SMT to request an analysis of the financial impact of various proposals.

One major item of business for the SMT is simply to improve the agency’s visibility into its current scheduling process. Improving information about its employee schedules allows the agency to better assess the importance of various aspects of its schedule practices as well as what it would take to change them.

The SMT’s approach is helping the agency mitigate the issue of undesirable shifts. Various solutions COTA is considering include the adoption of new scheduling software to increase compliance with the agency’s scheduling policies and help coordinate the selection of early and late shifts. The scheduling software would also allow operators to swap days off with one another.

More broadly, the SMT’s systematic approach to understanding scheduling allows the agency to understand workers’ concerns and how to address them. In the meantime, COTA continues to work to recruit and retain frontline workers, including offering sign-on bonuses, monthly student loan payment stipends and extending health care insurance benefits to the domestic partners of employees.

Changing Worker Schedules
The demanding schedules required of transit workers are one major factor drawing workers out of the transit industry, and agencies have been exploring opportunities to provide workers with better schedules.

CASE STUDY: INDYGO
IndyGo’s workforce shortage have forced the agency to cut service three times; in response, the agency has been proactive about trying new strategies to improve worker retention.

One change that has been well-received by workers was to offer workers the option to work four ten-hour shifts a week rather than five eight-hour shifts. This option was so popular that IndyGo is considering increasing the pool of four-tens. In addition to improving worker satisfaction, the four-ten schedules have become a talking point among recruiters, who find that the schedule appeals to workers looking for flexibility and consecutive days-off.

IndyGo also heard from its workers that they disliked having a four-hour unpaid break between shifts in the middle of the day, so IndyGo reconfigured its schedules so that most operators working split shifts only have a two-hour break. This change has been less successful; IndyGo found that the improvement in worker satisfaction was marginal, and that the change exacerbated its workforce shortage and resulted in considerable additional cost.

IndyGo’s experience illustrates the interconnectedness of worker satisfaction and providing efficient service. As agencies seek to improve worker schedules to increase retention, they must be careful not to exacerbate the problem—not having enough workers—they hope to solve. Other agencies, including UTA, have found that the best way to reduce splits is to increase headcount high enough that they can afford the diminished efficiency that comes from running straight shifts and other more desirable schedules. But in an environment of worker scarcity, that tactic is unavailable to most agencies. Agencies must continue experimenting to find the scheduling configuration that maximizes worker satisfaction and efficiency.
Rethinking Shift Selection
Beyond changing the types of shifts workers can choose, agencies discussed changing the process by which work is selected. One benefit often afforded to more senior workers is the ability to choose their work schedule before more junior employees. Unions view this practice as an important way to recognize and reward the contributions of long-serving operators. However, it also has the unfortunate effect of leaving more junior employees with less desirable schedules, sometimes including extraboard, difficult runs, or exclusively getting night and weekend shifts, making it more difficult for agencies to attract and retain new workers.

Several agencies have explored changing their schedule selection practices to provide more junior employees with less stressful routes and afford them a better work-life balance. One approach is moving from cafeteria-style scheduling, where workers pick shifts a-la-carte, to rostering, where workers choose a basket of shifts. While some rosters are still more appealing than others, there can be less variation in the desirability of schedules than when workers pick work a-la-carte (see WeGo Public Transit case study).

Alternatively, agencies could improve a cafeteria-style selection system by implementing some limitations on what operators can pick; for example, requiring all workers to work at least one weekend shift per month. As many agencies observed in interviews, changes to the schedule selection process require the coordination, discussion, and ultimate approval of unions, which is why agencies should work with union leaders and union members to find common goals and solutions to make changes to the scheduling system more palatable.

CASE STUDY: WEGO PUBLIC TRANSIT
During the first months of the COVID-19 pandemic, WeGo Public Transit, in Nashville, Tennessee, switched from cafeteria-style scheduling to rostering. The change, which ordinarily would have received opposition from the union, was possible because the service cuts that WeGo implemented meant it could offer workers a four-day work week without cutting pay. Senior operators were happy to accept less choice over their schedule if it meant a paid day off each week. As pandemic restrictions loosened, the agency returned to a five-day workweek and a cafeteria-style system of choosing work. However, the experiment taught WeGo that rostering did improve the job satisfaction of its more junior employees. Moving back to rostering in the future would have to be done in the context of a renegotiated collective bargaining agreement, and WeGo suspects that a four-day work week would likely be the prerequisite to such a change.

Expanding Full-time Work
Several interviewees told us that qualified applicants regularly declined employment offers because new workers at their agencies are required to start as part-time employees before progressing to full-time work. However, two agencies reported successful efforts to change their policies to allow newcomers to start as full-time employees, with positive impacts on recruiting and retention. The experience of agencies who have moved to offer full-time positions to new operators suggests that full-time work is a very important factor for applicants deciding whether to take a job at a transit agency or weighing another option. It also suggests that agencies can work with unions to find solutions that protect current operators while also making the job more attractive to new ones.
AGENCIES' RESPONSES TO THE WORKFORCE SHORTAGE

Incentivizing Retention and Shift Distribution Through Pay

One way that agencies can help distribute work in a way that is more tolerable to new workers but respectful of existing seniority protections is to offer incentive pay for less desirable times, days, and routes. Likewise, hiring bonuses paid out after a pre-defined period could also incentivize retention. Experience with incentive pay varies:

- At COTA, workers earn more per hour for working shifts at undesirable times and days, which helps spread out less-appealing shifts across the workforce rather than be concentrated among junior operators.
- Like other agencies, CTA’s new operators often get the least desirable shifts. However, the agency’s hiring and retention bonuses can help make up for that; bonuses are contingent on the operator staying in the role. The hiring bonus was $1,000 if they stayed for 12 months, and the retention bonus was an additional 3 percent of their wages for up to 18 months until the end of 2023. Though this did not resolve work-life balance issues for some operators or potential operators, the additional pay may make up for the less desirable hours for those with more flexible schedules. These incentives were negotiated as part of the most recent collective bargaining agreement, and CTA is hopeful that those provisions will remain in the upcoming renegotiated agreement.
- Other agencies have been unable to implement incentive pay schemes that help address the worker shortage. WeGo in Nashville reported difficulty implementing shift differentials because different groups have different ideas about what work should be better compensated. Some at the agency feel incentive pay should be used to incentivize workers to take shifts that are hard to cover. Other people think that workers whose shifts are more personally difficult should be rewarded with incentive pay (e.g., shifts that occur during dinnertime or evening hours). At the time of the interview, WeGo and its union had not found an agreement on an incentive pay structure.
- IndyGo’s shift differentials, which have been in place for several years, were effective at helping the agency cover less-desirable shifts before the COVID-19 pandemic. More recently, however, the agency’s headcount dilemma has been too large for pay differentials to be completely effective in staffing undesirable shifts.

The experience of the agencies interviewed for this study suggests that developing an effective incentive pay structure is trickier than it seems. Agencies ought to determine precisely what they are trying to accomplish with their policies because those goals should shape the details of the policy.

Protecting Workers’ Health and Safety

Agencies and workers alike reported an increase in negative interactions between operators and customers since the COVID-19 pandemic began, including customer drug and alcohol use, assault and harassment of operators on vehicles and at transit facilities, and customers in crisis. These incidents have major impacts on employee morale and wellbeing that go well beyond the directly involved workers. For example, WeGo in Nashville believes that assault and harassment of operators is a major cause of unscheduled absences, as operators take time off to recover from emotional or physical distress. In addition, many agencies, including TriMet and VIA in San Antonio, Texas, said they believe violent and disruptive customer behavior is a major reason why worker retention has declined.

Agencies have taken various steps to protect workers from the effects of unruly customers. RTA in California’s “Inform, Do Not Enforce” policy is meant to remove operators from the role of a security officer. Operators are instructed to inform customers of the agency’s rules (for example, about fares or what conduct is allowed on vehicles); if passengers do not comply, road supervisors can be called to meet vehicles and address problems. Operators can also signal to their dispatch and local police to conduct “live look-ins” over bus CCTV so that dispatch can become involved without
the operator escalating the situation. In addition, the clear plastic barriers RTA installed on its vehicles as a COVID-19 mitigation measure have been left in place because they provide workers with protection against assault.

Other efforts to protect workers from assault and harassment include:

- **GoRaleigh** in North Carolina provides operators with de-escalation training, encourages incident reporting, and trains operators to rely on road supervisors and police to resolve situations that escalate too far.
- **CTA** invites police officers to come to the agency’s garages to answer questions and indicate that they are available to support operators when they encounter particularly difficult situations.

For some agencies, operators’ fear of contracting COVID-19 continues to affect retention and recruiting. VIA reported that workers’ fear of contracting the virus is the determining factor for many operators who leave the agency, particularly those who go home to family members with health problems. While agencies cannot eliminate the risk of infection, they can take steps to protect workers. VIA has trained COVID-19 “incident commanders” and implemented policies to prevent the spread of illness among staff.

**Restructuring Compensation to Improve Retention**
Considerable variation exists between agencies regarding the structure of compensation and how agency pay compares to pay with other local employers. GCRTA in Ohio said it has a reputation in its community for paying well, which it credits for helping it maintain a steady flow of applicants. Central Florida’s LYNX raised wages last year only to find that the nearby theme parks and the major international airport had also increased pay.

Many agencies said they were surprised that it has been harder to move the needle on attracting and retaining workers through pay increases than they expected. BART reported that pay seems to be of lower relevance to prospective employees than it was in the past; employees are now more motivated by remote work and other benefits. VIA reports that more and more workers are accepting lower pay for improved quality of life.

Nevertheless, agencies have found that carefully structured compensation increases can effectively improve retention. Houston Metro increased pay for all operators last year to help boost retention but said that the more important change they made was to increase training pay to be equal to new operator pay, with a raise after the first six months on the road. This change helped them retain workers who might otherwise decide to take a more lucrative job rather than wait for a raise until they had completed training. Similarly, MLTA in West Virginia eliminated the lower pay rate for workers during their six-month probationary period. On top of general wage increases, agencies instituted retention bonuses. CTA offers new workers a $1,000 hiring bonus if they stay at the agency for 12 months.

**BUILDING AGENCY CULTURE AND IMPROVING MORALE**
 Agencies described robust programs for worker recognition, professional development, and employee engagement. The worker survey suggests these programs are important to worker retention: in the open-ended questions on the worker survey, the most common category of reasons former transit workers gave for leaving the industry was “issues with management.” Organizations where staff feel as though they have a stake in the outcomes of their work are attractive to prospective hires and current employees. Creating a supportive working environment with growth opportunities is increasingly important as agencies attempt to hire a younger generation and foster trusting, productive relationships between staff, operations workers, and management.

**Clear Pathways and Growth Potential**
While interviewees observed that many newer workers are less interested in the traditional transit career at a single agency that lasts several decades, many agencies relayed feedback that staff across their organizations were interested in understanding how they can advance in their organizations. Transit agencies, particularly among unionized workforces, have historically operated according to seniority and, therefore, not needed well-defined career ladders. However, the existing workforce, as well as potential hires, are demanding more clear trajectories. These help workers understand the possibilities before them and motivate employees to pursue professional development at the agency for which they already work.

32% of former transit workers said **ISSUES WITH MANAGEMENT** was the reason they quit.
Agencies are also thinking about employee growth beyond supervisor levels. BART discussed how they are encouraging continuous growth by developing training seminars for mid-manager positions and even senior leadership. BART’s mid-manager academy is specially designed for operations managers to build skills necessary for effective organizational performance that advancing employees will need as they rise to greater leadership. This academy has a 55 percent promotion rate among alumni.

Many agencies also have extensive education assistance programs, including funding for pursuing higher education degrees in related disciplines. These include certificate and full degree programs in transportation planning, civil and structural engineering, and construction management, among others. Several agencies discussed reimbursement arrangements as well as partnerships with local institutions that lower tuition costs and integrate continuing education with existing work to minimize the burden on both the agency and the employee.

**Engagement, Recognition, and Acknowledgement**

Agencies interviewed for this report emphasized that transit operations work is stressful and difficult, and the public often treats operations workers with less than kindness. Therefore, agencies must work to foster a culture of positive affirmation and gratitude alongside the demands for organizational performance. Those that have the former often find the latter much easier to pursue, and this makes the workplace more appealing to prospective and existing employees alike.

Many interviewees discussed how routine and responsive engagement helps prove to the front line that management is interested in the health of its workforce. The CTA’s president regularly writes messages to staff that are printed and circulated to the garages and break rooms around the system. The agency also puts up posters and other more light-hearted engagements around holidays and makes an effort to engage and support staff during periods of unrest. CTA has found that staff appreciates the opportunity to provide feedback, so they survey the front line frequently and use methods that are friendly to mobile users, especially with QR codes.

To help develop an organizational community and provide new avenues for workers to provide input, TriMet established employee resource groups (ERGs) in 2015, which act as support groups for different focus areas, such as women, military veterans, and Black employees. TriMet currently has eight ERGs, each of which has a sponsor from executive leadership, a small budget, and someone from the agency’s talent management branch as a dedicated support resource. The groups bring in speakers, develop guidance and professional development opportunities for members,
and facilitate up-and-down communication between organization levels and departments. The ERGs foster organizational openness and visibility for different groups within TriMet and demonstrate the agency’s support for its employees.

**INTER-AGENCY COORDINATION**

Individual agencies have many tools with which to address their workforce issues. In some domains, however, agencies may be able to accomplish more by working together. This study, prepared by APTA, is, of course, an example of how interagency coordination can generate insights that are valuable to many individual agencies. Agencies can also work with their state and regional partners to help advance their workforce objectives. Several examples came up during interviews for this study:

- **California transit mentorship program.** California Transit Works (CTW), a state association of transit agencies, unions, and colleges, has partnered with the American Transit Union to develop training and programs to improve the relationship between transit management and labor. One such initiative is a mentorship program where more senior workers help new workers become acclimated to their roles and gain the skills they need to be successful. The program is recognized across all ATU properties in California and has expanded to other states, and employees who become mentors can become recognized as journeymen sooner.

- **California Transit Training Consortium (CTTC).** California’s transit agencies have partnered with the state’s community and technical colleges to develop training programs to prepare students to work as operators and mechanics.

- **Minnesota Transit Working Group.** Agencies in Minnesota participate in a regular working group that tackles a wide range of issues. The group helped develop training materials compliant with federal Entry-Level Driver Training (ELDT) requirements, which allowed Minnesota agencies to adjust quickly to the new requirements.

- **The Indiana Transportation Association,** the state’s transit lobbying group, is working with the state legislature to increase the penalties for assaulting transit operators.

Agencies could also consider partnering with other local agencies to develop advertising materials to assist with recruiting or share some aspects of training with nearby agencies to start training classes more frequently.
LESSONS FROM OTHER INDUSTRIES

While the transit workforce is idiosyncratic, there are two industries where the workforce dynamics have analogs with the transit workforce: nursing and police. Therefore, this section summarizes lessons from the workforce strategies of those industries.

Nursing

The workforces of both nursing and transit are aging and have experienced a higher level of hazard and stress because of the COVID-19 pandemic. The rate of workers leaving their fields seems to have increased in both professions. As a result, employers in both industries are looking at ways to improve retention, and workers in both fields experience low morale and a lack of agency.

The educational requirements for nurses are considerably higher than those for transit workers, and the constraints on nursing education are a key factor limiting the supply of nurses. Therefore, much work on addressing the nursing shortage has focused on increasing the country’s capacity for training nurses through new facilities and more nurse educators. Educational requirements for transit workers are lower than those for nurses. Despite this difference, the similarities between the workforces point to two areas where transit agencies might learn from nurse employers: insulating workers from the effects of workforce shortages and improving working conditions.

Insulating Workers from the Effects of Workforce Shortages

Workforce shortages can diminish working satisfaction and wellbeing and contribute to burnout, further exacerbating a shortage. In addition, at hospitals with a shortage of nurses, nurses must take care of a larger number of patients, contributing to worse patient outcomes. One response is to implement policies to insulate workers from the effects of the worker shortage:

- To address the impact of the nursing shortage on patient care, California adopted a minimum nurse-to-patient ratio. Hospitals with shortages must fill the gaps with travel nurses, who make double, triple, or even quadruple their typical salary. Although expensive, staffing ratios may help alleviate burnout and stress among nurses and, therefore, may help reduce the number of workers leaving the profession.
- The Center for American Progress recommends limits on mandatory overtime for nurses.

Transit agencies might also decide to limit overtime or develop other policies to help reduce burnout, but such changes could also make it more difficult to provide service.

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3 The proportion of nurses over 55 increased from 13 percent to 23 percent between 1978 and 2021. [https://www.americanprogress.org/article/how-to-ease-the-nursing-shortage-in-america/](https://www.americanprogress.org/article/how-to-ease-the-nursing-shortage-in-america/)
4 Over half of nurses say the pandemic has made them less committed to their profession, and over half say they are or plan to look for work outside nursing. [https://uploads.ssi.webflow.com/5e5b66e10b42f155662a8e9e/608304f3b9897b1589b14bee_mental_health_survey-2021.pdf](https://uploads.ssi.webflow.com/5e5b66e10b42f155662a8e9e/608304f3b9897b1589b14bee_mental_health_survey-2021.pdf)
6 [https://www.aacn.nursing.org/Portals/42/News/Factsheets](https://www.aacn.nursing.org/Portals/42/News/Factsheets)
10 Ibid.
Improving Working Conditions

Nurses and transit workers are similar in another way: they are crucial workers that often have limited say in their workplaces. Collective bargaining agreements and direct worker participation in governance may help employers be more attuned to the needs of employees. Nursing advocacy organizations have urged hospitals to take nurse wellbeing more seriously and invest in employee wellness programs ensuring that workers have safe and relatively low-stress environments in which to work. Various advocacy organizations’ recommendations include the following:

1. Create a physically safe and mentally healthy environment, focusing on preventing violence against nurses.  
2. Adopt a comprehensive framework for improving workplace communication through training, more horizontal decision-making practices, and employee recognition. 
3. Ensure that nurses are involved in hospital leadership. One nursing advocate emphasized the need for hospital leadership to include not just people with nursing degrees but people actively taking care of patients; otherwise, a divide between those doing nursing work and leadership can persist.

Each of these approaches is applicable to transit workers as well.

Police

Police officers are another profession that has seen increased resignations and retirements without a corresponding increase in new hires. While police officers and transit workers are not perfect analogs (for example, in general, police officers have more opportunities for advancement than entry-level transit workers), there are two areas where the experience of police forces might inform the workforce strategies of transit agencies.

Police Cadet Programs as a Model for Transit Agencies

Like transit workers, most police officers cannot start working until they are 21 years old. For transit agencies, the limiting factor is the 21-year minimum age to obtain a CDL; for police services, it is the minimum age necessary to enter the police academy. To establish and maintain a connection with students just exiting high school, Baltimore established a Police Cadet program open to applicants aged 18 to 20 1/2 years old. Applicants work throughout the police department, from street patrols to administrative positions. Cadet program alumni report that the experience helped prepare them for the academy and their careers—additionally, years as a cadet count towards sworn retirement.

Initiatives similar to Baltimore’s police cadet program do exist in transit:

- The Virginia Department of Transportation’s public transportation intern program provides grants to support agencies hiring interns who are interested in careers in public transportation.
- Chicago Transit Authority’s internship programs for high school, undergraduate, and graduate students.

Improving Worker Engagement

A 2010 RAND study on the police shortage has several recommendations for improving the retention of officers. The study recommended improving worker “engagement,” which they define as “the idea that companies have a responsibility to regulate employee self-efficacy, trust, and wellbeing.” The authors recommended:

- Allowing employees to experience others’ duties through work diversity, including assignment rotation.
- Creating programs for job shadowing and new hires.
- Giving employees a voice in decision-making.
- Establishing employee feedback mechanisms and making them meaningful by utilizing 360-degree evaluations.
- Developing and maintaining mentoring programs.

All those initiatives have the potential to significantly impact transit workers’ satisfaction with management support and agency culture.

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12 https://aacnjournals.org/ccnonline/article/42/5/58/31808/National-Nurse-Work-Environments-October-2021-
13 Ibid
14 https://ncimpact.sog.unc.edu/2022/05/addressing-law-enforcement-labor-shortages/
15 https://www.baltimorepolice.org/careers/cadet-careers
16 https://www.transitchicago.com/careers/hiring-initiatives
17 https://www.rand.org/pubs/monographs/MG959.html
CONCLUSION

One of the sentiments expressed most often in the interviews conducted for this study was that agencies are eager to learn from one another’s attempts to address the national shortage of transit workers. This study aims to help facilitate the exchange of creative solutions for recruiting, hiring, and retaining transit workers. This section presents some broad conclusions and a discussion of unanswered questions.

OVERARCHING LESSONS

The experiences of agencies and workers gathered for this study suggest several principles that agencies should keep in mind as they try to develop a workforce necessary to provide the service essential to many people.

1. **Compensation and schedules dominate workers’ decisions to stay or quit transit work.** Agency leaders and workers emphasized that inflexible schedules and less-than-competitive compensation packages are leading to quits and keeping potential workers from pursuing jobs in the transit industry. The economic conditions of the moment suggest that the current combination of low unemployment, high inflation, and a generational shift in working conditions preferences, especially schedule reliability, is driving the labor pool that historically worked in transit operations to other jobs. Agencies will need to adapt in the face of this industrial competition, and many have already seen successes as a result of then-experimental changes.

2. **Even so, workers make employment decisions based on a complicated mix of factors.** Issues related to worker safety (including both contracting COVID-19 and other illnesses and being assaulted or harassed on the job) were of greater relevance to surveyed current and former transit workers than to surveyed agencies’ leadership. However, workers make employment decisions at the margin: even if compensation is the dominant factor in workers’ decision-making, if agencies can reduce the real and perceived risks that transit workers face, they are likely to see improved worker satisfaction and retention. By the same token, increases in compensation can help offset the risks that operators experience on the job.

3. **Agencies must work to accommodate the changing needs and preferences of the transit workforce.** In interviews, agencies reported that today’s transit workers are more likely to have caretaking responsibilities than in the past, are more likely to value time away from work, and are more likely to move to other employment opportunities when they present themselves. These changes mean that agencies cannot provide transportation services under the same policies and practices as in the past. Agencies that have been successful at recruiting and retaining workers are those that recognize that workers’ preferences and circumstances have changed and have found ways to accommodate those changes.

4. **Collective bargaining agreements can be modified in ways that serve the interests of both agencies and workers.** Unsurprisingly, interviewees reported that unions and agencies are sometimes at odds over compensation, scheduling, and other issues. However, there are many examples of agencies where management and labor have agreed to changes that increase recruitment and retention. We hope that the examples offered in this report provide encouragement to agencies as they work to address their workforce needs.
RESEARCH GAPS

The interviews and surveys conducted for this study focused on workers’ and agencies’ perceptions of the causes of the transit workforce shortage and strategies for addressing it. Several other research questions can help in advancing our understanding of and ability to cope with the current transit workforce shortage.

1. **How does transit agency compensation compare to relevant industries?** This report suggests that a large and growing share of workers who leave the industry take jobs outside transportation altogether. This makes it difficult for agencies to know what employers they compete against and how much they pay. Future research could compare the compensation at positions for which transit workers might be eligible, keeping in mind that employment options vary considerably across the country.

2. **How much training do transit workers need, and what kind?** In interviews, agencies described considerable variation in the length of transit operator and mechanic training programs. Those programs vary in both duration and content, with some agencies including things like conflict de-escalation and communication skills, not to mention CDL training. In addition, operators in some systems must learn to drive a greater variety of routes and vehicles than operators at other agencies. The variation in content and the length of time agencies spend on the non-CDL portion of training—between 7 and 10 weeks—raises the question: are some agencies over- or under-training their operators? A systematic review of transit agency training curricula and the outcomes of those training programs could provide insights into how to refine or enhance those programs.

3. **How do employers and employees perceive on-the-job hazards in transit operations roles?** In comparing the agency and worker responses to similar questions, this report finds discrepancies between how agency staff, current workers, and former workers perceive safety issues. Survey responses show this specifically for COVID-19 infection and harassment/assault risk: agency staff systematically rated COVID-19 a greater threat than assault, while workers have the reverse perception and former workers more so than current workers. A comparative study of the views of these groups could help guide the industry’s advances in workers’ safety.

4. **What effect do equipment and facility quality have on worker satisfaction?** The findings of this report indicate that workers are greatly affected by interactions with the public, combined with the stress of driving a large vehicle for many hours each day. The worker survey indicated that poor equipment quality might be a retention issue but did not collect enough detail to understand the effect this may have. Since it is true of passengers, it is plausible that this may have an impact on operators and mechanics, as their comfort would be affected by their relative perception of or actual change in safety or ease of use. Additional studies could reveal whether the state of good repair investments can help improve worker satisfaction.

The transit workforce shortage is among the most pressing issues facing agencies. While many of the factors making it harder to hire and retain workers are outside agencies’ control, the agencies who participated in this study are demonstrating creativity and resilience in addressing their workforce needs. It is APTA’s hope that this document contributes to the exchange of ideas between agencies and encourages them to find new and innovative ways to maintain the workforce needed to provide essential transportation services.
THE TOOLKIT

How to Use This Toolkit

This toolkit guides agencies through a workforce shortage assessment and basic steps in developing strategies to enhance workforce management processes and improve outcomes. It repackages the lessons learned from transit agency staff and operations workers throughout North America into a set of questions and problem statements: agencies can focus their efforts on improving their workforce management by identifying which issues they have and linking them to strategies peers have identified as successful approaches to resolving them.

The toolkit begins with a worksheet prompt for agencies to understand their current processes and basic metrics surrounding recruitment, hiring, and retention. After understanding the overall process and procedures in place, agencies can move on to a self-assessment. The self-assessment connects issues with recruitment, hiring, and managing the existing workforce to strategies identified through the APTA Workforce Shortage Study. Each strategy category includes a set of suggested performance indicators that agencies can use to pursue solutions.

While completing the self-assessment and exploring strategies, agencies can consider the maturity of their processes with the capability maturity assessment matrix. This matrix helps agencies understand the quality of their processes to ensure they are efficient and self-sustaining even as other organizational changes occur.

UNDERSTANDING YOUR PROCESS AND YOUR NUMBERS

Agencies must first understand the state of their hiring pipeline and attrition numbers before they begin identifying inefficiencies, bottlenecks, and barriers in the recruitment, hiring, and retention process. Agencies should start by completing the worksheet in Table 6 to outline their recruitment, hiring, and retention process. This worksheet aims to identify recruitment, hiring, and retention components that could impact workforce headcounts. As you respond to each series of prompts, note any potential problems you identify along the way. This exercise in and of itself may help reveal gaps, barriers, and bottlenecks in your process and help you complete the self-assessment in the next section.

After each section in the worksheet are some key metrics to collect and report. If your agency is unable to collect some of these data points, you may first wish to focus on establishing approaches to gather information about the effectiveness of your practices or processes. In addition to the summary metrics in the worksheet below, more performance indicators are listed under each strategy section later in this toolkit. Agencies should select metrics that describe issues they are or may be having, reveal characteristics about their challenges they may not have been aware of, and measure progress towards resolving them.
TABLE 6: RECRUITMENT-HIRING-RETENTION PROCESS WORKSHEET FOR AGENCIES

<table>
<thead>
<tr>
<th>PROCESS COMPONENTS</th>
<th>Recruiting</th>
<th>Agency Answer</th>
<th>Notes (potential issues, barriers within process)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advertising:</strong></td>
<td>How do potential applicants hear about a job? List all of the places your agency advertises job postings. These can include print, online, and in-person advertising activities.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Partnerships and Referrals:</strong></td>
<td>Is there anyone or any organization who helps identify potential applicants? List any partnerships your agency uses to recruit applicants.</td>
<td></td>
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</tr>
<tr>
<td><strong>Application:</strong></td>
<td>What does the employment application look like? How do potential employees submit applications? Describe the length, format, and content of an employment application.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Requirements:</strong></td>
<td>What are the minimum requirements for operation workers? How are they explained to applicants? List the requirements for employment and how or when they are communicated to applicants.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>METRICS</strong></td>
<td>How many potential applicants see or engage with a job posting and/or engage at a recruitment event?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>How many potential applicants begin an application?</td>
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<tr>
<td></td>
<td>How many potential applicants begin an application but do not complete an application?</td>
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<tr>
<td></td>
<td>How many applicants complete an application?</td>
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<tr>
<td></td>
<td>How many applicants are invited to an interview, accept the interview, and attend the interview?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hiring</td>
<td>Agency Answer</td>
<td>Notes (potential issues, barriers within process)</td>
<td></td>
</tr>
<tr>
<td><strong>PROCESS COMPONENTS</strong></td>
<td><strong>Applicant Screening:</strong></td>
<td>What are the steps taken to review applications? How long does the process take, and who is involved? List the steps and parties involved in the application review process.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Testing Requirements:</strong></td>
<td>What testing requirements exist for employment? How long does it take for an applicant to complete testing requirements? List the specific tests (drug, physical, background, etc.). Note where or how these tests are administered and how long it takes to return results.</td>
<td></td>
</tr>
<tr>
<td>PROCESS COMPONENTS</td>
<td>Agency Answer</td>
<td>Notes (potential issues, barriers within process)</td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td>---------------</td>
<td>--------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Offers of Employment:</td>
<td></td>
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<tr>
<td>How are applicants offered employment? What is the overall timeline from when a typical applicant applies to when they are offered employment to when they begin work and earn their first paycheck? List all the relevant steps to extend an offer of employment and complete the hiring process.</td>
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<td></td>
<td></td>
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<tr>
<td>Training and Onboarding:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What training and onboarding are offered to new employees? How long is each component of the training and onboarding program? How long is the time between the acceptance of employment to the start of training and onboarding? Explain the components of the training and onboarding process, where these activities occur, and how long they last.</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>METRICS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How many applicants interviewed are extended offers of employment?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How many applicants accept offers of employment?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How many applicants who accept offers fail background checks or other tests?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How many applicants accept offers and pass background checks but drop out before the first day?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Existing Workforce (Retention)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compensation:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What is the compensation structure like for workers? How often and when do raises occur? What are raises based on (merit, tenure, responsibility)? How is overtime work structured? Are there differences between part-time and full-time employee compensation? Describe the overall compensation structure offered to employees of different types, at different levels and over time.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advancement:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How are employees able to advance in their careers at the agency? Can they move upward within their own departments or laterally to other departments? How are career advancement opportunities communicated to the workforce? Describe the criteria for career advancement.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benefits:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What benefits are offered to employees? Is there a wait time between beginning employment and accessing benefits? How are benefits communicated to employees? How many employees use the various benefits (if known)? List all benefits, including health, family care, paid time off, educational support, employee assistance programs, etc.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Process Components

<table>
<thead>
<tr>
<th>Component</th>
<th>Questions/Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>On-going Training</strong></td>
<td>What types of training are offered to employees after the initial training and onboarding period? How often is it offered? Is training paid, unpaid, and/or subsidized? What formats are training offered (virtual, in-person, hybrid, learn on your own, through other institutions)? List required and optional training for employees.</td>
</tr>
<tr>
<td><strong>Communication</strong></td>
<td>How are policies and procedures, changes in service (detours or normal service changes), or other decisions communicated to employees? On a daily basis, how do employees communicate with their supervisors/managers? During critical incidents, what are the communication procedures? Describe how workers communicate with leadership and their direct supervisors in normal circumstances and during incidents.</td>
</tr>
<tr>
<td><strong>Worker Schedules</strong></td>
<td>How are worker shifts determined? What factors influence how and when an employee selects their work schedule? What types of shifts do workers have to select from? Are there minimum requirements for shift selection (e.g., an employee must work one weekend per month)? List the rules for selecting shifts by an employee and describe the types of shifts they have to select from.</td>
</tr>
<tr>
<td><strong>Safety and Worker Protection</strong></td>
<td>How are employees protected at work from assaults, contracting COVID-19, exposure to the elements, etc.? If an incident occurs, how is the employee supported by management and/or peers? Describe the policies, procedures, and/or physical designs in place to protect employees.</td>
</tr>
</tbody>
</table>

### Metrics

<table>
<thead>
<tr>
<th>Metrics</th>
<th>Questions/Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>How many employees left in the last year? In the year prior to that?</strong></td>
<td></td>
</tr>
<tr>
<td><strong>How many employees complete training but do not finish their first year?</strong></td>
<td></td>
</tr>
<tr>
<td><strong>What are the reasons employees leave (e.g., retirement, health/well-being, better pay, family care responsibilities, etc.)? How many leave for each of those reasons?</strong></td>
<td></td>
</tr>
<tr>
<td><strong>When employees leave, where do they go (e.g., another job in the transportation industry, a job outside the transportation industry, to pursue education, leave the workforce, etc.)?</strong></td>
<td></td>
</tr>
</tbody>
</table>
SELF-ASSESSMENT

After establishing an understanding of your current processes, use the self-assessment questionnaire (Table 7) to identify strategies to improve your workforce management practices. The table is divided into three categories, each including several problem statements. If a problem statement resonates with your agency's issues, review the strategies identified in the third column: the letter and number combinations refer to specific strategies below.

### Table 7: Agency Self-Assessment

<table>
<thead>
<tr>
<th>Problem Statement</th>
<th>If you’re having this problem, see these strategies below</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RECRUITING</strong></td>
<td></td>
</tr>
<tr>
<td>We don’t know how many people apply for a job, interview, complete background checks/other tests, are offered a position, and/or ultimately accept.</td>
<td>R1</td>
</tr>
<tr>
<td>My agency doesn’t get enough applicants.</td>
<td>R3, R4, H2</td>
</tr>
<tr>
<td>My agency can’t keep up with the volume of recruiting work that we have (posting and advertising positions, reviewing and responding to applications, etc.).</td>
<td>R2, H1</td>
</tr>
<tr>
<td>We have trouble getting potential applicants to complete and submit applications.</td>
<td>R5</td>
</tr>
<tr>
<td><strong>HIRING</strong></td>
<td></td>
</tr>
<tr>
<td>My agency has difficulty conducting enough interviews for operations positions.</td>
<td>H1, H2</td>
</tr>
<tr>
<td>Many of our applicants disengage before we can make an offer of employment.</td>
<td>H2, H3, H4</td>
</tr>
<tr>
<td>We lose qualified applicants because of difficulties completing and passing various types of tests and checks.</td>
<td>H4, T1, T4</td>
</tr>
<tr>
<td>A high proportion of workers who are offered positions don’t accept or don’t show up for training.</td>
<td>H3, T1, W3, W6</td>
</tr>
<tr>
<td><strong>EXISTING WORKFORCE</strong></td>
<td></td>
</tr>
<tr>
<td>Many workers who accept offers of employment don’t complete training.</td>
<td>T3</td>
</tr>
<tr>
<td>Many new workers quit within the first year of beginning their regular duties.</td>
<td>T2, T5, W6</td>
</tr>
<tr>
<td>My agency would like to improve worker schedules, but we’re not sure how to go about it or what changes would be most effective.</td>
<td>W1</td>
</tr>
<tr>
<td>My agency is having trouble hiring and retaining operators because of worker dissatisfaction regarding working schedule.</td>
<td>W2</td>
</tr>
<tr>
<td>Junior operators are leaving because they are dissatisfied with their work schedules.</td>
<td>W2, W4</td>
</tr>
<tr>
<td>Workers at my agency feel they are exposed to an unacceptable level of hazard on the job.</td>
<td>W5</td>
</tr>
<tr>
<td>My agency is losing workers to other employers.</td>
<td>W6</td>
</tr>
<tr>
<td>Low employee morale is affecting worker retention and absenteeism.</td>
<td>C1, C2</td>
</tr>
</tbody>
</table>
CAPABILITY MATURITY ASSESSMENT

While this toolkit is focused on helping agencies identify process gaps for recruiting, hiring, training, and retaining workers, some agencies may also wish to understand the quality of their processes to ensure they are efficient and self-sustaining even as other organizational changes occur. These agencies may find the concept of capability maturity useful. In conjunction with strategic choices about workforce management processes, agencies should also consider how well their processes are functioning. This will make performance management not just possible but continuously better over time. Table 8 defines five levels of capability maturity and provides examples of workforce management in the transit agency context. If desired, return to the worksheet (Table 6) and add your agency’s capability maturity level for each process component.

Table 8: Capability Maturity Characteristics

<table>
<thead>
<tr>
<th>Stage</th>
<th>1</th>
<th>Initial</th>
<th>2</th>
<th>Repeatable</th>
<th>3</th>
<th>Defined</th>
<th>4</th>
<th>Managed</th>
<th>5</th>
<th>Optimizing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Characteristics</td>
<td>The work process is poorly controlled and reactive, relying on individual efforts on individual bases—the highest risk of failure and greatest quality variability.</td>
<td>The work process is documented well enough that repeating the process the same way on a project basis is possible even for someone who has never done it before. Furthermore, work can be planned in advance and monitored at a rudimentary level.</td>
<td>The organization’s work process is well-defined and adopted in a standard way. Individual projects tailor their processes to the standard. Projects can verify and validate work integrity, and organizations can integrate the work of related projects.</td>
<td>The organization quantitatively tracks process activities using standard metrics, such as hours worked, activity clearance, or percent complete. As a result, complex organizational integration and performance management are possible.</td>
<td>The organization engages in process analysis. As a result, management and staff have sufficient visibility into relationships between processes and outcomes so they may collaborate for continuous improvement.</td>
<td></td>
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<tr>
<td>Workforce Management Example</td>
<td>Tom has been working in human resources at The Transit Agency for twenty years. He handles the recruitment process with one or two assistants and knows all of the forms and procedures in his head. Unfortunately, it’s not unusual for long lags in hiring, and everyone is worried about what happens when he retires.</td>
<td>Joan joined the Recruiting Division six months ago. Their predecessor left behind a digital checklist, so Joan successfully handled multiple application reviews and hiring actions from start to finish when her colleague was on extended leave. When the Operations and Planning team leads discussed their staff needs for the next year, Joan and her colleagues could not say if they could clear the number of applications needed to hire that many people.</td>
<td>The Transit Agency’s team leads developed a standard process for determining workforce needs. The process involves each technical team estimating the number of people they need and human resources estimating their ability to clear applications and hiring actions. Progress is discussed during regular meetings, but with limited organizational visibility into the system’s effectiveness.</td>
<td>The Transit Agency uses software to actively forecast and track workforce needs and recruitment/hiring progress. Management is able to see if each team’s estimated needs are realized and whether human resources is making appropriate progress. Organizational visibility into the workforce management system’s effectiveness is strong, and corrective actions occur when issues arise.</td>
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</tbody>
</table>

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18 Capability maturity was originally developed by researchers at Carnegie Mellon University as the Capability Maturity Model (CMM). Now known as the Capability Maturity Model Integration (CMMI), it has been used for organizational performance improvement across many industries including aerospace engineering, government, and any other organization that relies on processes to conduct its work. This section summarizes core CMMI concepts. For further information, see Godfrey, Sally (2008), presentation to the National Aeronautics and Space Administration.
Strategies

Strategies are organized into five topic areas: recruiting, hiring, training and Onboarding, working conditions and policies, and agency culture and morale. These strategies were derived from the research (interviews and surveys) conducted for this study. The Solutions for Addressing the Workforce Shortage section further describes peer agencies’ exemplary programs.

Use the self-assessment to determine which strategies might be useful to your agency—or browse the strategies for ideas. Useful performance indicators are at the conclusion of each strategy topic. These indicators will help your agency understand how it is performing in the topic area.

RECRUITING STRATEGIES

R1 Establish a performance reporting system for recruitment and hiring processes.
Agencies must first understand the state of their hiring pipeline and attrition numbers before they begin identifying inefficiencies, bottlenecks, and barriers in the recruitment, hiring, and retention processes. Agencies should begin by identifying all the components of recruitment, hiring, and retention that could influence workforce headcounts, noting gaps, barriers, and bottlenecks to meeting headcount goals. Agencies with limited visibility into their processes may then focus on selecting metrics that describe issues they are or may be having, reveal characteristics about their challenges that they may not have been aware of, and measure progress towards resolving them.

R2 Increase agency recruiting capacity.
If an agency’s advertising and marketing campaigns see success in capturing applicants, human resources teams may encounter backlogs due to increases in applications. One approach to handling backlogs is to hire more human resources personnel to distribute the workload. Instead of hiring human resources personnel at the mid-senior to senior level, agencies can create pathways for interns or temporary workers to move into full-time positions. Another form of increased capacity includes developing data systems to track and analyze recruitment. Data systems can analyze important data such as hiring, attrition, and retention rates so agencies can anticipate future hiring rather than responding to vacancies.

R3 Enhance marketing and agency messaging.
If an agency is not sending the right message to the best potential applicants, it could be missing out on countless candidates that fit the role. At the internal level, agencies should consider whether their branding conveys the positive aspects of working for them. When advertising positions, agencies should emphasize the “value proposition” that they offer, which can include longevity, having a career rather than just a job, and the opportunity to do something positive for one’s community.

Recruiting should also target the right people. Key strategies to achieve this include targeted mailers to zip codes of current employees or potential employees with the necessary skillset or similar level positions. Agencies can also reach potential candidates using targeted ads and video content on social media. Agencies can also attend public events with the right candidate pool.

R4 Cultivate, evaluate, and strengthen referral networks.
Agencies can look to the communities they serve for applicants that can develop the skillsets needed for openings through referral networks. These networks are built by identifying local partner networks such as workforce development programs, refugee and immigrant support organizations, and local high schools, community colleges, and technical schools. Existing partnerships can be evaluated and strengthened by measuring success and identifying shortcomings or barriers in the partnership. These barriers can be addressed by building up resources such as training in other languages or record expungements. It is important to note that these relationships with community partners must be fostered in order to maintain community trust.

R5 Promote accessibility in the application process.
To broaden the pool of applications, agencies can promote accessibility by improving online applications while creating assistance programs and procedures to help people fill out applications. Agencies can review, evaluate, and redesign their current website and online applications for mobile use to ensure they are not excluding applicants who may not have access to a personal computer or laptop. Assistance programs and procedures that help people fill out
Applications can reduce barriers for applicants who are not tech-savvy and may have trouble filling out an online application independently.

Agencies could also consider making simple changes to their online application process. This can include eliminating redundancies (such as applications requiring a resume and submitting a separate job history), simplifying the application’s language, and ensuring that requests for additional information happen further along in the interview process.

**Useful Performance Indicators**

<table>
<thead>
<tr>
<th>Indicator Question</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many outreach events do we attend per month by type, such as career fairs or pop-up recruitment at community events?</td>
<td>Tracking the number and type of recruitment activities and their outputs enables an agency to understand the effectiveness of each activity. For example, if career fairs at technical schools tend to yield fewer applications than at neighborhood events, recruiters can either reprioritize their resources or re-examine their approach to technical school recruitment.</td>
</tr>
<tr>
<td>On average, how many applicants do we get per outreach event by type?</td>
<td></td>
</tr>
<tr>
<td>How many hiring actions do we have each month?</td>
<td></td>
</tr>
<tr>
<td>On average, how many hiring actions do we get per outreach event by type?</td>
<td></td>
</tr>
<tr>
<td>How many prospective employees begin an application but do not finish or submit it</td>
<td>Understanding whether application completion is a factor in recruitment can indicate that the application itself may need revision or additional resources to help applicants complete them.</td>
</tr>
</tbody>
</table>

**HIRING STRATEGIES**

**H1 Expand interview capacity.**
The interview process can often be cumbersome for human resources departments, especially if interviews are long and personnel is limited. During worker shortages, agencies could consider shortening interviews with potential candidates to speed up the process. Shortening interviews allows for the capacity to conduct more interviews and speed up the hiring process. Interview capacity can also be expanded by increasing the number of people who can conduct interviews and make offers. This strategy would alleviate the burden on human resources personnel with limited capacity. Holding open interviews at advertised times or regular intervals could also lighten workloads for human resources personnel by eliminating the scheduling process for potential candidates.

**H2 Hold mass hiring events.**
In the event of increased demand for a large amount of new personnel, agencies can hold mass hiring events. Events should include portions of the hiring process that can be conducted all at once. These could include applying for a position, participating in an interview, receiving a contingent offer, and taking a drug test throughout the course of one event. It is important to choose convenient locations or latch onto existing events (such as fairs or community events) where the desired population is already in attendance.

**H3 Audit and streamline the hiring process.**
Agencies can look internally at their hiring process to identify delays and chokepoints in the process. The hiring process can be reevaluated by asking questions such as: How long does it take to complete the hiring process on average? What are the specific steps an applicant must take? How are the process and their progress communicated to the candidate? What or where are the chokepoints in the process? Answering these questions can guide agencies to create a streamlined hiring process that can shorten the time needed to hire new personnel and create more flexibility. It can also help capture prospective employees who accept other positions in the time that it takes for the transit agency to review their application.
**H4 Evaluate testing requirements.**
Testing requirements can often become roadblocks for applicants who fit all the necessary requirements for a job. A common issue with testing requirements is inadequate communication. Agencies should communicate drug testing and background check requirements upfront to avoid turning down applications further along the process. This is especially an issue in states where cannabis consumption is legal, and applicants may be unaware that requirements exist.

Agencies could also evaluate background checks and testing requirements to ensure they meet agency safety needs without being overly stringent. One example of this is shortening the lookback window for driving infractions. Agencies could also begin to accept CDL medical certification from outside authorities or organizations. To minimize the need for CDLs, agencies could also determine if they are required for all vehicles and consider integrating vehicles that do not require a CDL to operate. This could present the opportunity to bifurcate operators and increase the potential pool of applicants and successful hires.

**Useful Performance Indicators**

<table>
<thead>
<tr>
<th>Indicator Question</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>How long does it take for us to decide whether to interview an applicant?</td>
<td>Keeping candidates engaged in the hiring process increases the likelihood that they will reach the interview and accept a role if offered a position. Measuring the duration of attrition at different stages of the hiring process will help agencies determine how to target improvements.</td>
</tr>
<tr>
<td>How long does it take for us to contact an applicant once we have decided to interview them?</td>
<td></td>
</tr>
<tr>
<td>How long does it take to schedule an interview once we have contacted an applicant?</td>
<td></td>
</tr>
<tr>
<td>How many applicants who interview are also extended offers of employment?</td>
<td>Tracking the effectiveness of decisions to advance candidates can help agencies understand if they are evaluating candidates well.</td>
</tr>
<tr>
<td>How many applicants accept the employment offer we extend?</td>
<td></td>
</tr>
<tr>
<td>How many applicants who accept offers fail background checks?</td>
<td>Understanding attrition at different phases after applicants accept roles will help agencies determine how to keep new hires engaged, implicating training and onboarding strategies described in another section.</td>
</tr>
<tr>
<td>How many applicants who accept offers and pass background checks drop out before the first day?</td>
<td></td>
</tr>
<tr>
<td>How many new hires who attend the first day drop out before training begins?</td>
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</tr>
</tbody>
</table>

**TRAINING AND ONBOARDING STRATEGIES**

**T1 Implement early training programs.**
To avoid high attrition rates from new hires who do not show up on their first day of work and to capture potential new hires who would otherwise lack necessary certifications, agencies can implement changes in their training programs that prioritize retention. For example, one of the strategies agencies could implement include “early start” training programs in which new hires complete the administrative components of onboarding, familiarize themselves with the agency’s culture and operations, and begin to receive a paycheck and benefits right away. Early training programs could also include training that allows employees to familiarize themselves with routes, mentally preparing them for the job. Also, by implementing early training programs, gaps between the hiring date and the first day are reduced, minimizing the risk of new hires taking a job elsewhere.

**T2 Expand on-the-road training.**
The first days of a job as a new operator can be very stressful and often lead to early quits. To address this issue, agencies can expand their on-the-road training programs to create environments where new workers feel safe and supported as they begin their roles. On-the-road training with experienced operators in the early days can provide new workers guidance that might not be included in formal training or onboarding activities. Experienced operators can share their strategies to deal with certain circumstances that might be overlooked in the onboarding process.

Agencies can also expand on-the-job training time where an experienced operator accompanies new hires in the first few days of work. This strategy can help new drivers acclimate more quickly, boost morale, and connect new hires to senior operators that can offer guidance and support immediately and be a resource throughout their early years.
hires can also receive important guidance through mentorship programs where mentors are also compensated for their additional role.

**T3 Develop accessible and flexible training.**
In response to the COVID-19 pandemic, many agencies nationwide developed online or hybrid training formats. Agencies could consider continuing these formats to promote flexibility for new hires, especially considering how many operators must balance difficult schedules and their personal lives. Training can also be offered at various hours of the day or on different days of the week to increase flexibility for drivers with atypical schedules.

To foster accessibility for all new hires in communities with a large immigrant population, agencies can partner with English as a Second Language (ESL) organizations to offer training for people with limited English proficiency. This strategy can help retain new hires who may have limited English and help them feel confident in their skills and training.

**T4 Help applicants acquire CDLs.**
If an agency does not see enough applicants with a CDL, it should consider establishing an in-house entry-level driver training (ELDT) program that complies with federal requirements. Alternatively, agencies can partner with an existing ELDT program at a local technical school or workforce development agency. Agencies could also streamline CDL permitting through early training programs that allow applicants to take a permit test course and complete their permit test within a week.

**T5 Train for positive work culture.**
Low morale amongst transit operators has become a common issue, especially due to the rise in negative social interactions with the public and the feeling of isolation as a result of the COVID-19 pandemic. In response, agencies could consider implementing training to reinforce agency values in new recruits that stress the importance of an agency’s positive work culture. Along with this, agencies can create employee recognition programs structured around core values. Other valuable training includes de-escalation training to help operators handle negative interactions with passengers as well as defensive driving training.

**Useful Performance Indicators**

<table>
<thead>
<tr>
<th>Indicator Question</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many new hires begin and finish training?</td>
<td>Understanding how new hires transit the training and onboarding process helps agencies understand whether and how their onboarding processes are succeeding (or failing) to prepare new hires for full-time work.</td>
</tr>
<tr>
<td>How many new hires begin but do not finish training?</td>
<td></td>
</tr>
<tr>
<td>How many employees complete training but do not finish their first year?</td>
<td></td>
</tr>
</tbody>
</table>

**WORKING CONDITIONS AND POLICIES STRATEGIES**

**W1 Increase capacity for better scheduling.**
Scheduling has been noted as one of the primary drivers for worker satisfaction. However, scheduling is an especially complicated issue because of how it can affect agency operations at many levels. In response, agencies can create a team or identify an individual that specializes in improving worker schedules and/or identifying policy changes that would help improve worker schedules. A team could include staff from different areas of an agency, including human resources, operations, finance, and union representatives.

Agencies should also consider how scheduling changes affect the entire system’s operations. A systematic approach to understanding scheduling allows the agency to understand workers’ concerns and how to address them. Finally, agencies should develop systems (in particular, software platforms) to ensure that scheduling policies are followed.

**W2 Reevaluate worker schedules.**
Traditional shifts are sometimes not suitable for agency needs due to the intensity of working as an operator and the irregular work schedule. Agencies could consider making changes to work schedules that promote flexibility and also ensure that workers are not overburdened by scheduling issues that are often overlooked. One option for agencies is to consider offering workers the option to work four ten-hour shifts rather than five eight-hour shifts, providing workers...
with more days off. Agencies should establish or rework policies that promote flexibility and be willing to look to peer agencies in search of new policies to pilot.

**W3 Expand full-time work.**
Some agencies require new employees to begin as part-time employees, which they often find less appealing than full-time positions at other companies or organizations. Agencies could consider hiring new employees who would have been part-time as full-time workers. In the interest of fairness, agencies pursuing a changed policy should offer existing employees who are already working part-time the option to convert to full-time before extending any full-time offers to prospective hires.

**W4 Incentivize shift distribution through pay.**
Agencies can help distribute work through a variety of incentive pay strategies. A popular strategy throughout many industries is to offer incentive pay to work during less desirable times or days or on certain difficult routes. Although this is an excellent strategy for distributing operators, it is important to note that a shift that is considered desirable can vary between workers.

Seniority is another common factor in selecting worker shifts, leading new hires to work shifts that are least desirable or difficult to cover. In response to this, agencies can offer hiring bonuses for the first months to incentivize working difficult shifts. Agencies can also offer retainment bonuses to keep new hires from leaving.

**W5 Protect worker health and safety.**
The COVID-19 pandemic and its effects have brought many issues concerning worker health and safety to light. Many potential candidates still fear contracting COVID-19 when it comes to accepting a position as an operator. While agencies cannot eliminate infection risk for any transmittable illness, they can take steps to protect workers, including implementing policies to prevent the spread among staff and training staff members to track illness.

Even before the COVID-19 pandemic, negative interactions between operators and passengers increased nationwide. To protect their workers, agencies could implement strategies to deter harassment and assault. Some agencies have used “inform, not enforce” policies to help prevent escalation. Operators are instructed to inform customers of agency rules and rely on procedures involving their supervisors and police for enforcement.

Other agencies have put more actively supportive practices in place, where workers can contact headquarters or other support teams for assistance during incidents. For example, direct lines of communication between road supervisors can streamline addressing issues rather than communicating through dispatchers. Another agency implemented a “live look-in” practice using bus CCTV, which alerts dispatch or local police and allows them to assess the situation while operators do not have to escalate a situation by calling the police in front of a confrontational passenger. Also, installing physical barriers for drivers can also make operators feel more protected.

De-escalation training can help workers feel they have the tools to prevent passenger conflicts from turning into violent or aggressive interactions.

**W6 Restructure compensation and benefits to improve retention.**
Agencies today have to compete with both transportation and non-transportation industries as the economy has rebounded from the COVID-19 pandemic, and there are record-low unemployment numbers. Carefully structured compensation increases can be an effective tool to improve retention throughout agencies. Although pay is an important factor in the retention of workers, agencies should also consider enhancing their benefits packages to attract new employees. Non-wage benefits that would make a big difference include on-site childcare and continuing education reimbursement programs, making starting and staying at an agency easier.

In terms of pay, agencies could also consider other incentives for retention, such as hiring bonuses and/or retention bonuses. Another strategy that has proven to be successful at retention is making training pay equal to new operator pay, with a raise after the first few months on the road.

It may be useful to also evaluate the local employment market to understand the competing employers and the wages and benefits of packages of those competing employers.
Useful Performance Indicators

<table>
<thead>
<tr>
<th>Indicator Question</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many workers separate from the agency? What are their reasons?</td>
<td>Agencies need to gather information about worker satisfaction frequently enough and act on what they learn quickly enough that attrition rates do not rise higher than the agency can hire and train replacements. While the indicators here may suggest quantitative analysis, a qualitative yet current understanding of morale will yield timely results as well.</td>
</tr>
<tr>
<td>What concerns do workers express to their supervisors and agency management?</td>
<td></td>
</tr>
<tr>
<td>How often does the agency gather information about worker satisfaction?</td>
<td></td>
</tr>
<tr>
<td>How often does the agency act on information it gathers from worker satisfaction surveys?</td>
<td></td>
</tr>
</tbody>
</table>

AGENCY CULTURE AND MORALE STRATEGIES

C1 Create clear pathways for growth.
As the existing workforce demands clearer trajectories for job growth, agencies could start thinking about career ladders and how to motivate employees to pursue professional development. Agencies can start to think about career growth for their employees through training academies and opportunities for management. Pathways should also be explored for employees beyond the supervisor roles, but also for other roles in agency leadership or diagonal moves to non-operational departments.

Education assistance programs are another effective tool for recruitment and retention. Agencies could fund pursuing higher education degrees in related disciplines, including transportation planning, civil and structural engineering, finance, and construction management, among others. Reimbursement arrangements and partnerships with local educational institutions are another way to leverage existing pathways for promoting professional development.

C2 Develop programs for engagement, recognition, and acknowledgment.
Transit operations work is stressful and, in many cases, unrewarding due to the treatment many operators receive from the public. In response, agencies can foster a culture that values workers through positive affirmation, routine, and responsive engagement from leadership. Another valuable tool is the ability to provide feedback through frequent surveys. Employee recognition programs allow agencies to reward employees for their work and can also be tied to a company’s identity and core values.

Agencies can also use employee resource groups to create safe spaces for workers from marginalized groups. They serve as support groups for different focus areas (women, military veterans, black employees, etc.), each of which has a sponsor from executive leadership, a small budget, and someone from the agency’s talent management branch as a dedicated support resource. The groups bring in speakers, develop guidance and professional development opportunities for members, and also facilitate up-and-down communication throughout the organization.

Useful Performance Indicators

<table>
<thead>
<tr>
<th>Indicator Question</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>How often do employees voluntarily participate in professional development?</td>
<td>Morale is the product of repeated experiences between workers and their managers. Agencies can foster positive morale by encouraging positive interactions between workers and between workers and management. Tracking measures that indicate morale will help agency staff track their current status and take appropriate action if morale begins to slip.</td>
</tr>
<tr>
<td>Do employees believe they receive recognition for their work? Do separating employees share this view?</td>
<td></td>
</tr>
<tr>
<td>Do workers have meaningful opportunities to gather and express themselves to agency management?</td>
<td></td>
</tr>
<tr>
<td>Do workers believe that management “has their backs”?</td>
<td></td>
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</tbody>
</table>
THANK YOU

APTA and the research team would like to thank all the transit agency staff and transit workers, past and present, who took the time to participate in the surveys conducted as part of this research. We are grateful for their assistance and willingness to share their experiences, without which these insights would have remained known to few rather than many.

We would also like to give special thanks to the agencies that took part in our interviews and shared the exemplary practices found in this report.

TABLE 9: INTERVIEWED AGENCIES

<table>
<thead>
<tr>
<th>Agency</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bay Area Rapid Transit</td>
<td>January 31 and February 3, 2023</td>
</tr>
<tr>
<td>Chicago Transit Authority</td>
<td>January 3, 2023</td>
</tr>
<tr>
<td>Central Ohio Transit Authority</td>
<td>November 28 and December 2, 2022</td>
</tr>
<tr>
<td>GoRaleigh</td>
<td>December 22, 2022</td>
</tr>
<tr>
<td>Greater Cleveland RTA</td>
<td>January 30, 2023</td>
</tr>
<tr>
<td>Houston Metro</td>
<td>December 9, 2023</td>
</tr>
<tr>
<td>IndyGo</td>
<td>December 9, 2023</td>
</tr>
<tr>
<td>King County Metro Transit</td>
<td>January 17, 2023</td>
</tr>
<tr>
<td>Long Beach Transit</td>
<td>February 2, 2023</td>
</tr>
<tr>
<td>LYNX</td>
<td>January 23, 2023</td>
</tr>
<tr>
<td>Mountain Line Transit Authority</td>
<td>December 7, 2022</td>
</tr>
<tr>
<td>Pinellas Suncoast Transit Authority</td>
<td>January 19, 2023</td>
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<tr>
<td>Riverside Transit Agency</td>
<td>December 2, 2022</td>
</tr>
<tr>
<td>St. Cloud Metropolitan Transit Commission</td>
<td>December 7, 2022</td>
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<tr>
<td>TriMet</td>
<td>January 18, 2023</td>
</tr>
<tr>
<td>Utah Transit Authority (UTA)</td>
<td>November 30, 2022</td>
</tr>
<tr>
<td>VIA San Antonio</td>
<td>January 13, 2023</td>
</tr>
<tr>
<td>WeGo Public Transit</td>
<td>December 2, 2022</td>
</tr>
</tbody>
</table>