

**SURTCOM 23-16**

**Workforce Development and Driver Shortages in Small Urban and Rural Transit**



**Prepared for:**

U.S. Department of Transportation

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## **ABSTRACT**

Despite the retirement of transit managers in small urban and rural communities, succession planning to prepare local transit agencies is lacking. Applied research must be developed to provide a smooth transition for the public transportation industry as it moves forward. Current specific workforce shortages need to be considered as well. For example, a lack of qualified drivers in numerous small urban and rural communities has made providing high-quality transit service difficult to nearly impossible. These workforce labor shortages must be addressed or transit service in many small urban and rural areas may cease to exist in its present form.

A national survey of small urban and rural transit managers was conducted to determine current workforce development practices. A cross-section of 170 viable responses were received from 42 different states. The majority of transit agency managers have been employed by their current agency for more than 10 years while nearly 65% of total respondents were 50 years of age or older. Almost 40% of respondents indicated they plan to retire within the next five years while 32% have a viable succession plan currently in place to reduce management turnover concerns.

More than 90% of respondents indicated they have experienced driver shortages during the past two years. Lack of adequate driver compensation was the most-cited reason for driver shortages at 70% followed by a tight labor market at 57%. More than half of respondents indicated that aging/retiring drivers led to their driver shortages while 44% cited COVID-19 issues resulting in driver shortages within their agencies. Finally, poor work hours and unruly passengers were cited by 21% and 9% of managers, respectively.

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# **1. INTRODUCTION**

For more than two decades, research by the Transit Cooperative Research Program (TCRP) and related efforts by the Federal Transit Administration (FTA) have addressed workforce development issues related to the recruitment, retention and development of public transportation employees. Some of these studies, including case studies of local transit systems, have focused on small urban and rural areas. Despite the retirement of transit managers in small urban and rural communities, succession planning to prepare local transit agencies is lacking. Applied research must be developed to provide a smooth transition for the public transportation industry as it moves forward. This research study builds on previous research conducted by Peterson and Rieck (2016).

Management changes will occur within all agencies eventually. Some will be prearranged, but other changes, both unplanned and unannounced, may happen quickly. Providing successful and uninterrupted high-value service will depend on previous workforce development undertakings targeted at developing high-quality managers within each agency. This is particularly true given the difficulty of managing small urban and rural transit systems which involves efficient human resource management, operational planning, grant management, and data reporting, and numerous other activities. These challenging management activities create difficulties related to succession planning and staff development and are not unique to certain small urban and rural transit agencies. In fact, they are shared issues throughout the country.

Current specific workforce shortages need to be considered as well. For example, a lack of qualified drivers in numerous small urban and rural communities has made providing high quality transit service difficult to near impossible. These workforce labor shortages must be addressed or transit service in many small urban and rural areas may cease to exist in its present form. Targeted driver recruitment and training must focus on meeting the needs of local transit agencies to provide high quality service expected by the local communities, or they could face funding cutbacks due to perceived inefficient service levels.

## **1.1 Objectives**

The objectives of this research were to address and quantify current workforce development and driver shortfall issues in small urban and rural transit. A nationwide survey was conducted to determine current workforce development practices as well as the causes for driver shortfalls and associated methods to recruit and retain new drivers. Training practices among transit agencies were also studied to gain greater understanding as to the necessary steps that must be taken within succession planning to build stronger efficient transit systems.

## **1.2 Organization of Content**

The report begins with a literature review which includes research and other applicable information regarding workforce development issues and current driver shortfall and recruitment activities. Following the literature review are results from a nationwide survey conducted within the small urban and rural transit industry. Manager traits, agency characteristics, current driver issues, workforce training practices, and employee reward systems are all included within this section. Finally, an inclusive summary and conclusions section completes the report with recommendations based on research findings. The appendix includes the workforce development and driver shortfall survey instrument.

## **2. LITERATURE REVIEW**

### **2.1 Workforce Development Issues and Efforts**

Workforce development has been an issue of concern for the transit industry for years. More than 20 years ago (Vogel 2001) completed a scoping study defining the challenges within public transportation workforce development. Industry growth, along with changes in both technology and demographics, were factors influencing workforce issues. The study consisted of listening sessions and key leader interviews. Public transportation leaders represented a cross section of all-sized agencies, unions, and private firms. Key workforce issues that were identified included: weak succession planning, recruitment challenges, and an aging workforce. These and other workforce concerns were found to be affecting the industry as a whole.

A more recent study from the U.S. Department of Education (2015) focused on future transportation needs. It forecasted that the transportation industry is projected to add more than 400,000 net jobs over a 10-year period. It also found that 48 states, with the exception of Kentucky and Vermont, will experience job growth during this period. The fastest growth will occur throughout the Midwest, Gulf Coast, West Coast, and Mid-Atlantic regions. The highest percentage of forecasted new jobs would be in public transportation and ground passenger transportation.

Peterson and Rieck (2016) surveyed 160 transit agency managers from 40 different states regarding workforce development topics within their respective agencies. They found that three-fourths of respondents were 50 years of age or older, and one-third of those indicated they plan to retire within the next five years. Also concerning was the fact that only 15% of responding agencies had a viable succession plan currently in place to combat such high management turnover.

Training opportunity findings for both national and local levels focused on topics such as emergency management and transit principles, among others. Survey results indicated that inexperienced managers required training in transit principles while training for more experienced managers should focus on leadership and business plan development. Transit principles, emergency management, and human resource management were found to be helpful training for employees seeking promotion within an agency (Peterson and Rieck 2016).

APTA (2022) recently completed a study on transit workforce shortages. Survey results among transit agencies revealed that 96% of agencies reported they are experiencing a workforce shortage while 84% said the shortage is affecting their ability to provide adequate service to their communities. Large urbanized areas reported the most severe shortages, but small urban and rural agencies are also reporting that the workforce shortages are affecting their agencies as well (Table 2.1). Specific to small urban and rural agencies, 80% and 61% reported shortages affecting services while 36% of small urban and 18% of rural agencies reported substantial effects on services due to workforce shortages within their agency.



**Table 2.1** Workforce Shortage Experiences by Population Size

<b>Impact</b>	<b>Rural</b>	<b>Small Urban</b>
Shortage, substantial effects	5	16
Shortage, some effects	12	19
Shortage, no effects	7	8
No shortage	4	0
Percentage: Any shortage effects	61%	80%
Percentage: Substantial Shortage effects	18%	36%
Total of Responding Agencies	28	44

APTA (2022)

Engaging potential transit employees has been of utmost concern in recent years. Some West Coast transit agencies are beginning to engage youth as part of a broader initiative through a Youth Transportation Advisory Board (YTAB). Since starting the YTAB, agencies have learned that existing safety and security measures are inadequate to keep certain groups safe from harassment. They also learned that youth do not want to interact with the agency’s social media accounts, found it challenging to navigate the system, and believe they are sometimes discriminated against by certain bus drivers (Pan 2022).

Transit agencies in other regions have also worked to engage youth by soliciting feedback regarding their transportation systems while also discussing youth outreach programs at the county level. Youth transportation ambassador programs have also been piloted in Washington state. They collaborate with community-based organizations to educate youth about public transportation options and discuss transit access, education and safety (Pan 2022).

To combat workforce development issues from a federal level, the Federal Transit Administration created the Transit Workforce Development Technical Assistance Center (TWC) in September 2021. It was designed to support public transit agencies’ workforce development needs for all modes in urban, rural, and tribal communities of different sizes. The center assists transit agencies in recruiting, hiring, and training the workforce necessary to sustain and build potential transit services. The primary objectives include:

- conducting technical assistance activities within and for transit agencies that promote more effective and efficient training of frontline workers; and
- implementing technical assistance activities, including apprenticeships, through collaborative partnerships between transit agency managers and employees.

FTA (2022)

## **2.2 Driver Specific Issues and Efforts**

Driving a public transit bus is a tough and often thankless job and many transit agencies across the country are struggling to find qualified drivers. Rigid programming requirements, compulsory overtime, hostile interactions with passengers because of driver-enforced rules such as fare payment, or other incidents on board are some of the challenges faced by bus drivers (Glasø et al. 2011). The shortage of drivers has been a growing worldwide issue for some time and the pandemic has deepened this already significant problem.

In Europe, the driver shortage is extremely widespread, with 19% of bus driver vacancies remaining unfilled, and Great Britain is facing a sector-wide shortage of 4,000 drivers. Germany has a shortage of more than 1,000 bus and tram drivers with 55% of its bus drivers expected to retire by 2027. In the near future, Belgium is also expected to face a driver shortage of nearly 50% (Lannoo and Verhofstadt 2016).

A lack of drivers causes bad experiences for everyone. For passengers, the lack of drivers means longer waiting times, fewer routes and services along with more crowded and less-reliable buses. For drivers, it means increased pressure and longer hours to make up for the lack of available resources. This can, ultimately, lead to further loss of passengers, which is another problem that public transportation agencies constantly face. These factors reinforce each other in a cycle of service reductions that become permanent. Many agencies have raised wages, offered benefits, and are trying to streamline hiring practices to lessen driver hours. Meanwhile, a shortage of drivers has forced many to cut service or delay expansion plans, leading to longer wait times and more crowded buses for some passengers (TransitCenter 2022).

During a driver shortage, every shift being tailored to the driver's preferences counts. It can be the difference between getting a new hire or the driver quitting. Also, the ability to reduce routes, even if only one or two, can make the difference between providing good services or not providing them at all. Maintaining rush hour services, for example, by minimizing double shifts and shortening routes, is a situation that is made possible with the ability to run multiple scenarios quickly and find a balance that satisfies both drivers and passengers (TransitCenter 2022).

Last year, amid a driver shortage, the Western Reserve Transit Authority (WRTA) in the greater Youngstown, Ohio, area with 30 scheduled bus routes and more than a million riders, used Optibus Multi-Scenario Creation to create routes with no part-time trips, a 17% reduction in double-shift duration, and nearly identical service levels. Maximizing operational efficiency during slow employment periods created room for even more jobs once the driver shortage passed, and the cost savings achieved were used for hiring and expansion. Ultimately, drivers want the same things as everyone else: a comfortable and stable salary, good working conditions, flexible hours, and a proper work-life balance. Better scheduling, shift allocation, and working conditions can improve drivers' living conditions, which reduces absenteeism due to illness, burnout, and lack of motivation, among other reasons (Jones et al. 2014).

How can operators and agencies improve these conditions? A good starting point is to consider the preferences of drivers. This means listening, understanding, and designing services that meet the special needs and preferences important to them. It is essential to learn about the types of shifts they prefer, their availability, lifestyle needs, and the routes they enjoy to create schedules that truly go beyond meeting agency service requirements and consider the needs of the person who represents the agency behind the wheel. Community feedback is an important component in a network design using the same approach to learn about working conditions that could help develop a successful working environment (Crizzle et al. 2017).

Many of the occupational issues which are the result of existing circumstances at work such as emotional exhaustion, work-family conflicts, muscular problems, higher mortality rates, and increased risk of heart disease are the result of the sedentary life of drivers which, together with PTSD, are cited as reasons for burnout, absenteeism, and job dissatisfaction (Crizzle et al. 2017).

Many drivers work “double shift” schedules, which are especially problematic for people hoping to find another job, or spend time with their children and loved ones at home. New drivers are often given the most difficult schedules which negatively impacts recruiting efforts. Some drivers are also concerned about their physical safety. Violence against drivers in the United States is also on the rise with many constantly fearing being attacked or mugged by passengers. There are also safety concerns like being on the front lines of the pandemic and handling passengers who refuse to wear masks (Teale 2021). Concern for safety can also discourage some aspiring drivers. Data from the Federal Transit Administration (2021) showed that transit operator assaults by passengers quadrupled between 2009 and 2020.

However, being a driver also has some advantages. The camaraderie between them is solid, and passengers come to regard their “regular driver” as part of their extended family. Public service drivers are trusted and respected members of the community. Union benefits, health care, public retirement, working with people, and the social contribution of helping community members get around safely make the job rewarding. The working hours themselves can be another benefit if created with the needs of the driver in mind (Jones et al. 2014).

Drivers are a diverse group of people, each with their own life experiences and particular set of needs and preferences. To attract and retain a strong workforce, these features must be considered during the scheduling and shift assignment process. Smart planning and thoughtful policy making can help make this complicated process much simpler by adding custom settings based on driver feedback and preferences. Shifts can also be designed that incorporate more driver-specific parameters allowing for more flexible working conditions to be created (APTA 2022).

A good approach for designing strategic plans to retain current drivers is to consider meeting the workforce conditions and contract rules first, and then develop a workforce plan based on specific input and suggestions from drivers. With efficient ways to gather feedback, new plans can have custom settings that minimize hiring and retention barriers like caps on double shifts and overtime (Jones et al. 2014).

A report from the American Public Transportation Association (APTA 2022) revealed that nearly all transit agencies that responded to a recent survey reported experiencing an overall labor shortage. The highest level of job vacancies was for bus drivers. The agency said shortages were becoming a problem before the coronavirus pandemic due to an aging workforce and a lack of interest from younger people. The pandemic made the labor shortage considerably worse.

Survey findings also indicated that there has been a high retirement rate among drivers and now, with low unemployment and the rise of e-commerce, shipping agencies, package delivery companies, and others are competing with transit agencies for drivers. Like school bus, delivery, and truck drivers, commuter drivers must have a commercial driver’s license, which means they must pass a specialized exam along with road and drug tests, which is often a barrier when recruiting potential drivers (APTA 2022).

A report by TransitCenter (2022), a New York-based nonprofit research group, found that while many agencies offer middle-class pay and good benefits for city bus drivers, the cost of housing and living in many areas has skyrocketed while wages for operators have not kept pace. Starting wages for drivers in the seven busiest regions ranged from \$19.55 to \$29.61 per hour, not including overtime, according to the report. Drivers with years of seniority can often earn much more.

During the first year of the pandemic, ridership also dropped considerably across the country leading to large decreases in revenue. This forced agencies to stop the hiring process and take other cost-cutting measures. There was also an increase in bus driver retirements with agencies being unable to replace them. Although ridership has increased, many transit agencies have lagged behind in hiring bus drivers. Many agencies have had to cut hours, and that has meant more-crowded buses, more frequent delays, and longer commutes for riders (FTA 2021).

### **3. WORKFORCE AND DRIVER SHORTAGE SURVEY**

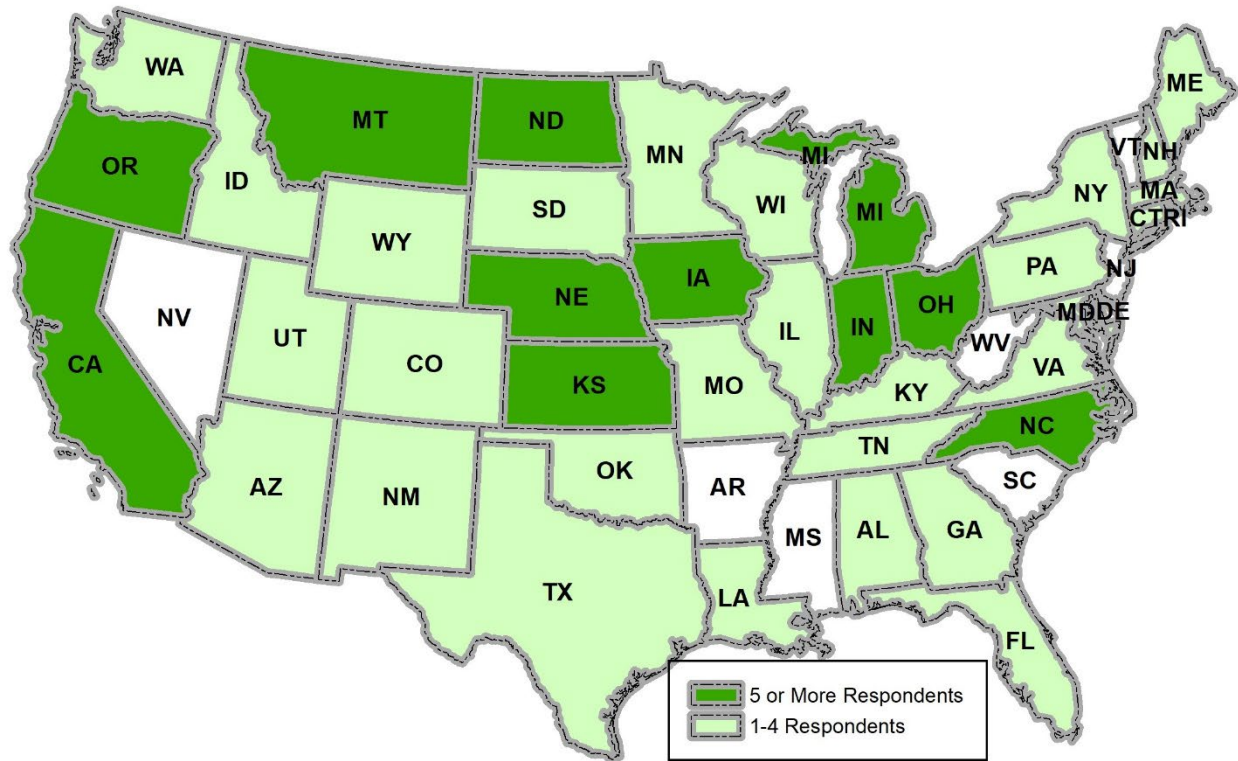
#### **3.1 Survey Design and Administration**

The Small Urban and Rural Center on Mobility (SURCOM) designed an online survey and distributed it to transit agency directors. Surveys contained questions pertaining to current workforce development practices, current driver shortfall and attainment practices, and anticipated needs pertaining to training and succession planning. This survey instrument and the resulting findings build on previous work completed by Peterson and Rieck (2016). A copy of the survey is found in Appendix A.

The survey was distributed nationwide via email to agencies in small urban and rural areas. An email list containing approximately 1,200 valid email addresses was used along with individual transit agency contacts. The email list was specific to those agencies receiving 5311 formula grant federal funding. These grants are disseminated to states for the purpose of supporting population centers of fewer than 50,000. A total of 170 usable surveys were received from the email list yielding a 14% response rate. No incentive was given to potential respondents for completing any portion of the survey.

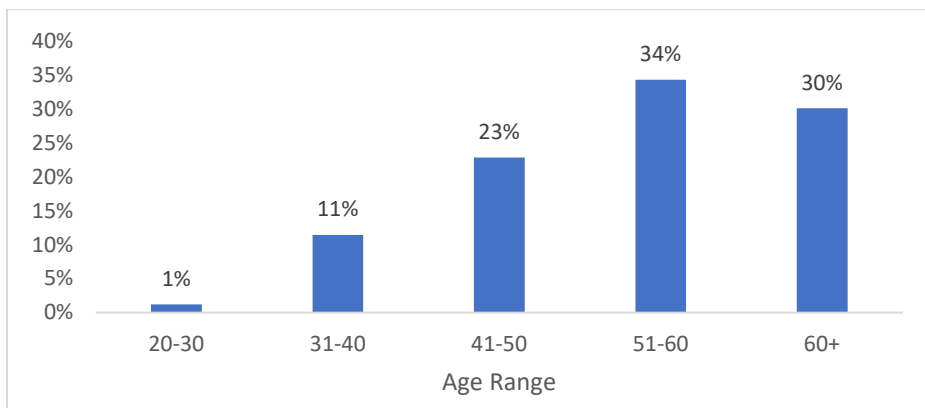
#### **3.2 Profile of Respondents**

Survey participants represented 42 U.S. states (Figure 3.1). Eleven states had five or more respondents while the other 31 had between one and four, respectively. Figure 3.1 also illustrates that the distribution of states represented most of the country equally. Alaska and Hawaii are not represented in Figure 3.1 but had two and one participants respectively, as well. There was similar participation from western and midwestern states. Only Nevada in the west was not represented among all western and midwestern states. Three southeastern and four northeastern states were not represented. Montana had the most respondents with twelve, and North Carolina had the second-most with ten followed by North Dakota with nine and Oregon with eight, respectively.



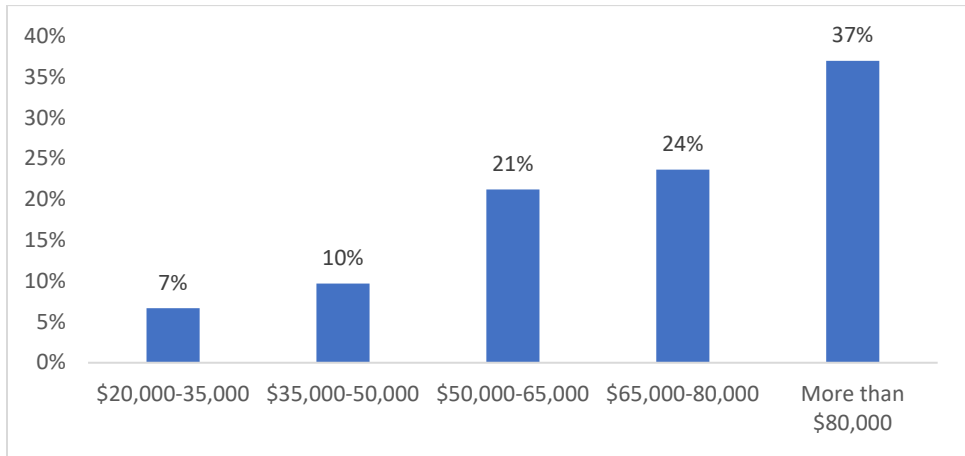
**Figure 3.1** Survey Respondent Map

A wide variety of age was represented among survey respondents (Figure 3.2). More than 60% indicated they were age 51 or older while 11% reported being between 31 and 40 years old. Nearly 23% indicated being between 41 and 50 years of age, and only 2 survey respondents reported being in their 20s.



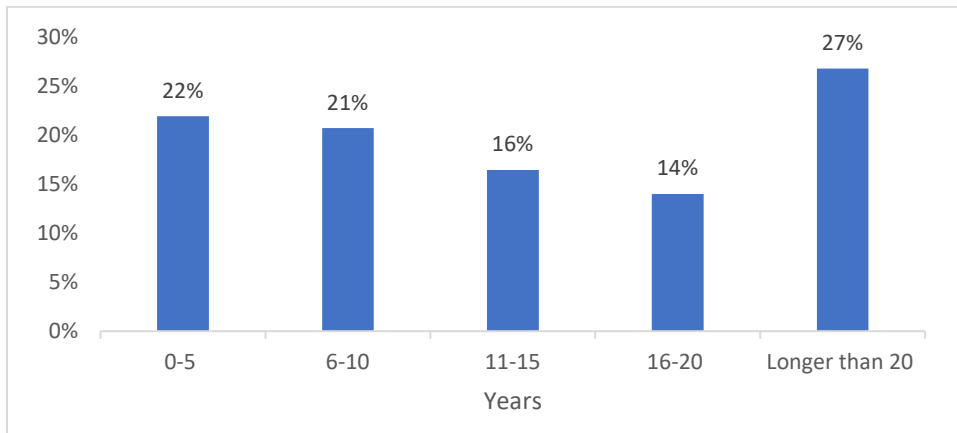
**Figure 3.2** Participant Age

Incomes also varied substantially among survey participants with Figure 3.3 illustrating that 17% of participants earn less than \$50,000 annually. Of the respondents, 21% reported earning between \$50,000 and \$65,000 annually while 24% earned between \$65,000 and \$80,000, respectively. Finally, the most common salary reported by 37% of respondents was greater than \$80,000 annually. This showed a noticeable increase in salary level among transit managers compared to findings from seven years ago by Peterson Rieck (2016), when the most common salary among transit managers fell between \$50,000 and \$65,000 annually.



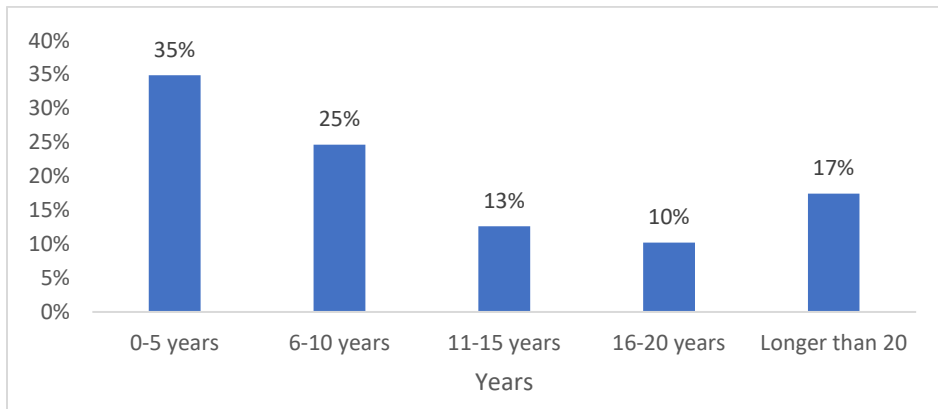
**Figure 3.3** Annual Salary

Transit managers were also asked how long they have been employed by their current employer. Approximately 22% indicated they had been with the current transit agency for 5 years or less (Figure 3.4). More than 40% of respondents have worked at their current employer for longer than 16 years while 37% of transit managers surveyed have been with their current employer between 6 and 15 years.

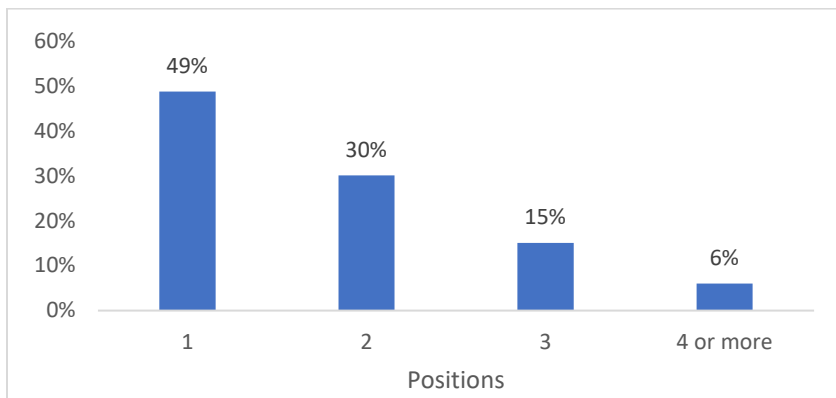


**Figure 3.4** Employment Length with Current Employer

Approximately 60% of transit managers indicated they had been in their current position for less than 10 years (Figure 3.5). This shows a sizable increase from Peterson and Rieck (2016) when less than 45% of respondents indicated being in their current position for less than 10 years. Also, more than 25% of managers indicated they had been in their current position for 16 years or longer while 13% have been in their current position for between 11 and 15 years. More than half of current managers also indicated that they have held multiple positions within the same transit agency (Figure 3.6). Also, among respondents, more than 20% have been in three or more positions while 49% have held only their current position within the agency.



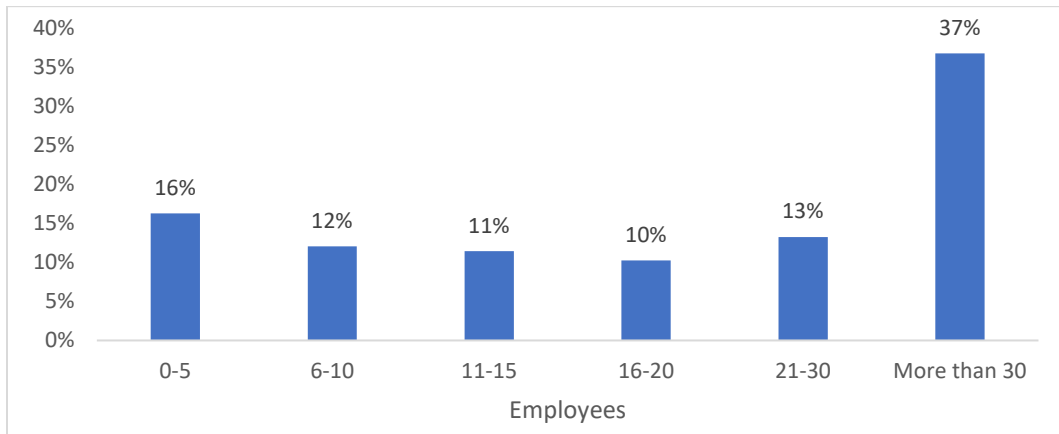
**Figure 3.5** Time at Current Position



**Figure 3.6** Positions Held Within Agency

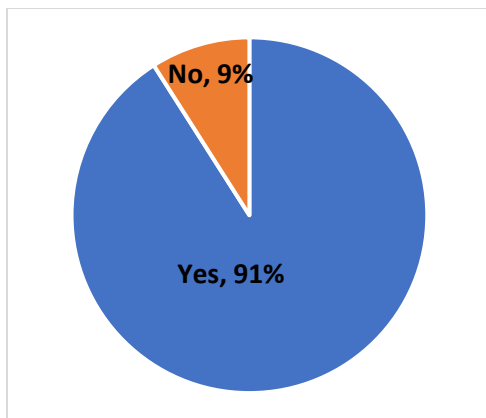
### 3.3 Employment and Driver Characteristics

Transit managers were questioned regarding the number of people employed at their transit agency, including part-time employees, but not contracted employees (Figure 3.7). Greater than one-third (37%) reported having more than 30 people currently working at their transit agency. Of the respondents 16% indicated that fewer than 6 people work at their agency while a total of 39% indicated they have fewer than 16 employees. Approximately 25% of remaining managers reported having either between 6 and 15 or 16 and 30 employees working at their respective agencies.



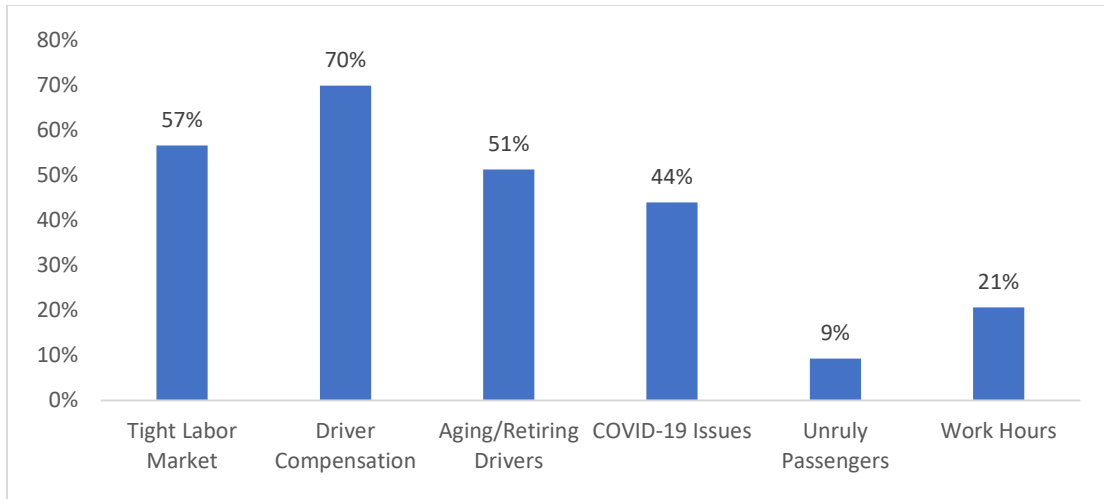
**Figure 3.7** Transit Agency Employees

Respondents were then asked if they had experienced any driver shortages during the past two years and more than 90% said they had (Figure 3.8). When questioned as to why they felt these shortages had occurred, transit managers indicated a number of different reasons (Figure 3.9). The lack of adequate driver compensation was the most cited reason for driver shortages at 70% followed by a tight labor market at 57%. More than half of respondents indicated that aging/retiring drivers led to their driver shortages while 44% cited COVID-19 issues resulting in driver shortages within their agency. Finally, poor work hours and unruly passengers were cited by 21% and 9% of managers, respectively.



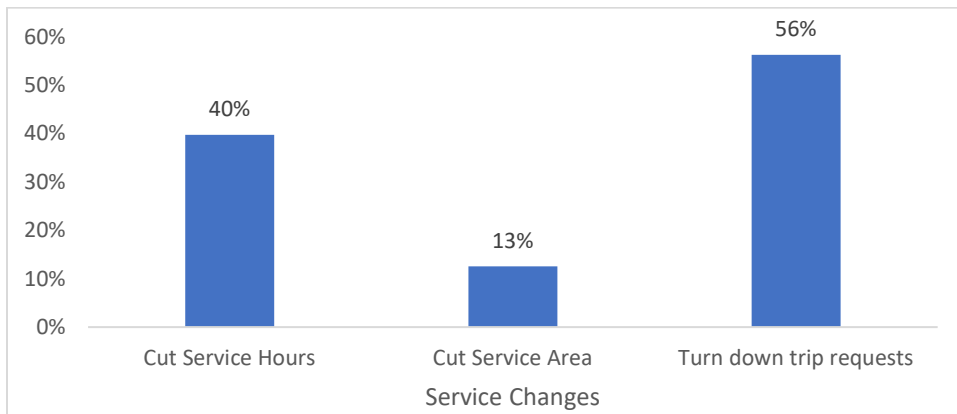
**Figure 3.8** Experienced Driver Shortages





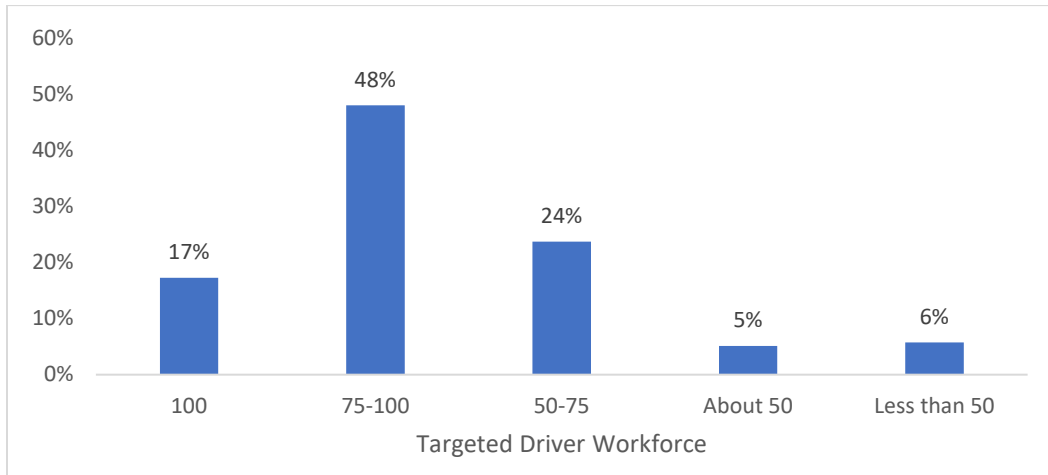
**Figure 3.9** Why Driver Shortages Have Occurred

Managers were also questioned about the effect of driver shortages on the services they provide (Figure 3.10). More than half of respondents indicated they were forced to turn down certain trip requests due to the shortage. Also, 40% had to cut their normal service hours while 13% had to cut the service area normally served by their agency.



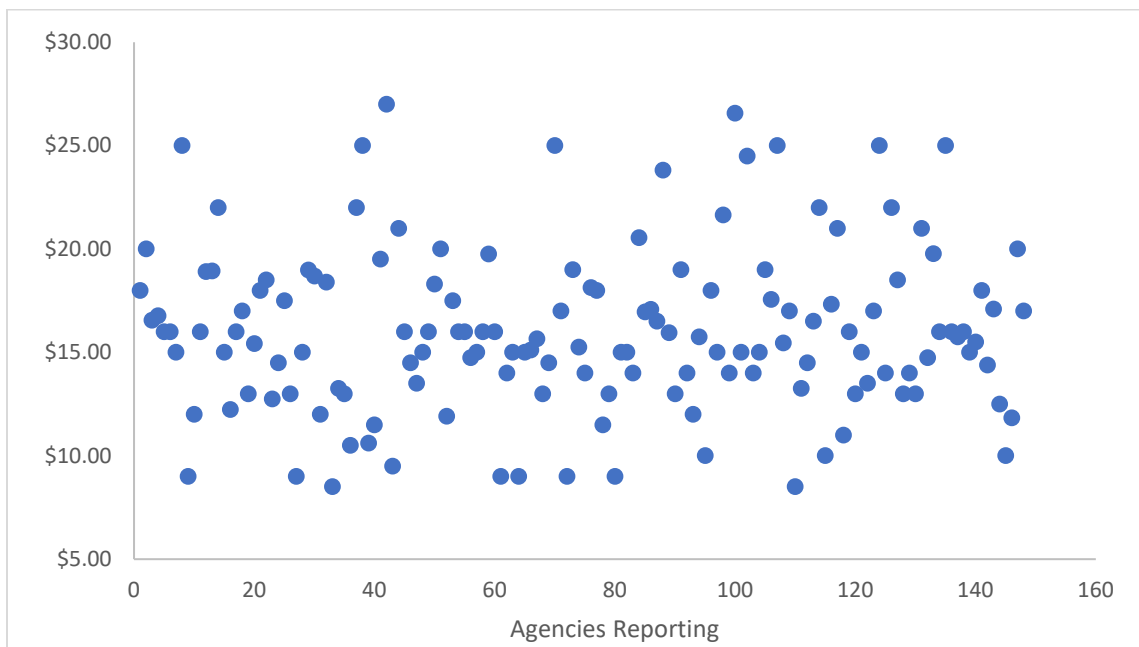
**Figure 3.10** Effect of Driver Shortages

Another more specific question asked managers to indicate what percent of their total targeted driver workforce was currently employed (Figure 3.11). Nearly half (48%) of respondents indicated that between 75% and 100% of their targeted driver workforce was currently employed. Nearly one-fourth of managers believed that they currently had between 50% and 75% of their targeted workforce employed while 17% indicated that they currently had all of the drivers necessary to provide all needed services. Finally, approximately 10% responded that they had 50% or less of their current driver targeted workforce currently employed.



**Figure 3.11** Percent of Targeted Driver Workforce Employed

Driver wages were the focus of the next questions with individual responses representing starting driver wages illustrated within Figure 3.12. This figure shows the noticeable variability among hourly starting driver wages that range from \$8.50/hr. to \$27.00/hr. with an average of \$16.18/hr. Managers were also asked to provide hourly wages for all of their drivers. The average hourly wage for all drivers was \$19.72/hr. among respondents with a minimum of \$10.40/hr. and a maximum of \$33.00/hr., respectively.

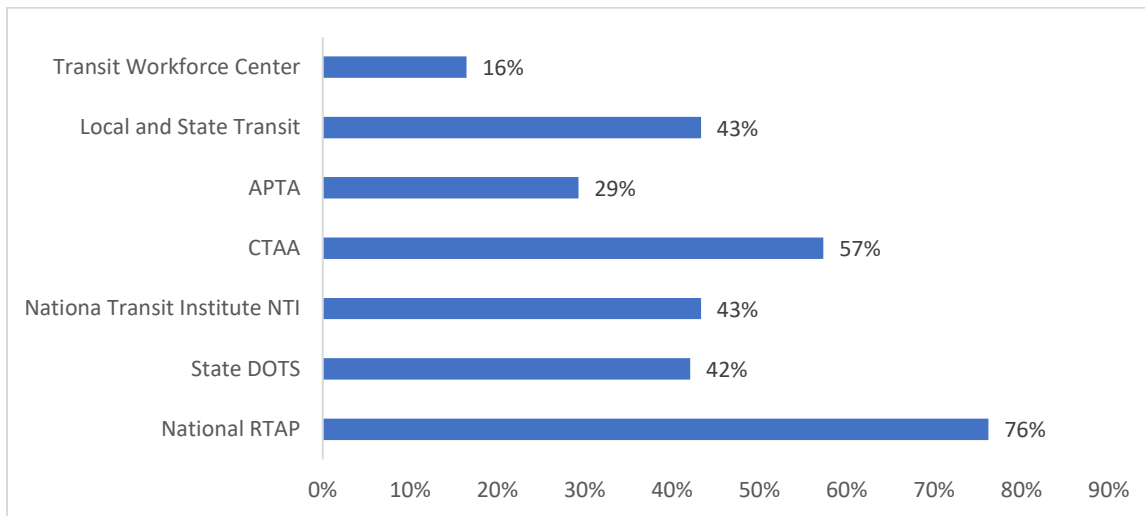


**Figure 3.12** Average Hourly Starting Wage for Drivers

An open-ended question asked managers what steps their agencies have taken to alleviate driver shortages. The most common response was they have had to increase wages, but other responses included using more advertising and marketing efforts, creating flexible work schedules, developing in-house commercial drivers license (CDL) training programs, starting driver sign-on bonuses, and other steps. Another open-ended question asked what steps state departments of transportation or the federal government have taken, or could take, to help alleviate driver shortages. Responses included: more funding so driver wages can increase accordingly, make it easier to obtain a CDL, and eliminate federal match requirements. A number of respondents also mentioned the Entry Level Driver Training (ELDT) regulations established in 2016. They see these regulations as a hindrance in maintaining an adequate driver workforce, especially at a time when drivers are more difficult to recruit and train compared to pre-pandemic times.

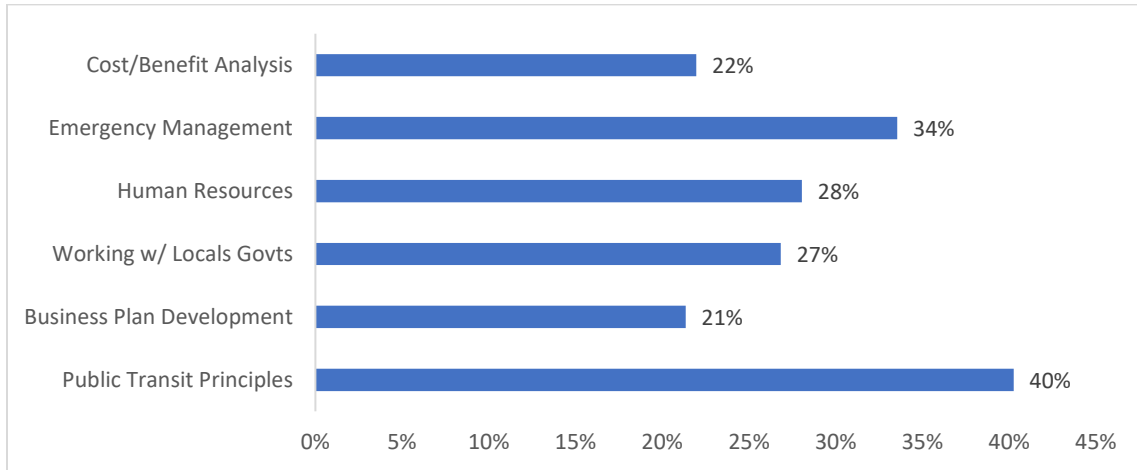
### 3.4 Training and Succession Planning

Transit managers were questioned as to whether or not they were aware of workforce development training offered by different organizations (Figure 3.13). More than three-fourths of respondents were familiar with training from the National Rural Transit Assistance Program (RTAP) while 57% were also familiar with the Community Transportation Association of America (CTAA) training. More than 40% of respondents indicated they were familiar with training provided by the National Transit Institute (NTI), state departments of transportation (DOTs), and local and state transit providers. Finally, 29% were familiar with the American Public Transit Association (APTA) training and 16% with training offered by the Transit Workforce Center.



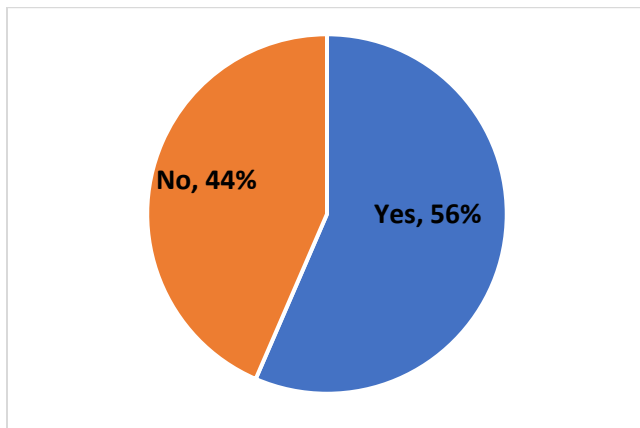
**Figure 3.13** Familiarity with Organizations Offering Workforce Development Training

Respondents were then asked regarding their familiarity with specific training topics. Public transit principles was the most common response by 40% of managers followed by emergency management at 34%. Nearly 30% of managers were familiar with both human resource and working with local governments training, and more than 20% were familiar with cost benefit analysis and business plan development training. Compared to findings from Peterson and Rieck (2016), overall familiarity has increased among all topic areas, and working with local governments saw the largest increase of 10%.

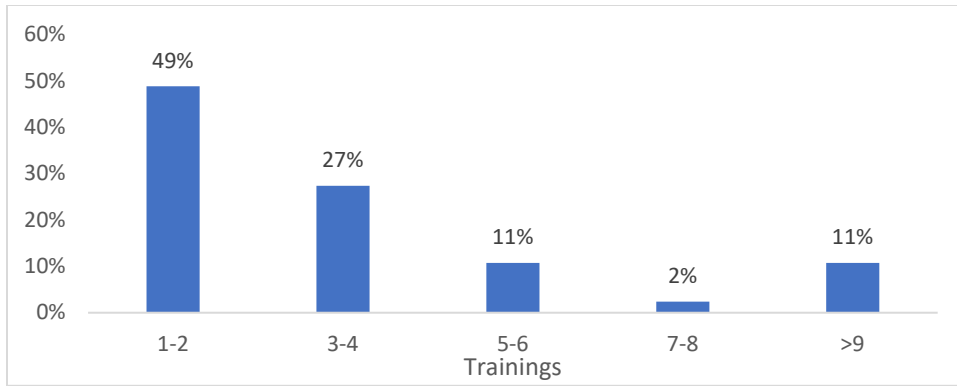


**Figure 3.14** Awareness of Training Topics Available for Transit Managers

Participants were then questioned regarding their attendance at trainings (Figure 3.15). More than half (56%) indicated that they had attended some type of workforce development training during the past 5 years, which was a 10% increase compared to findings from Peterson and Rieck (2016). Also, of respondents who indicated that they had attended training during the last five years, nearly 50% reported that they had attended only one or two trainings during that time frame (Figure 3.16). Almost 40% of managers reported attending between 3 and 6 trainings during the past five years while the remaining 13% have attended 7 or more workforce development trainings during that time period.

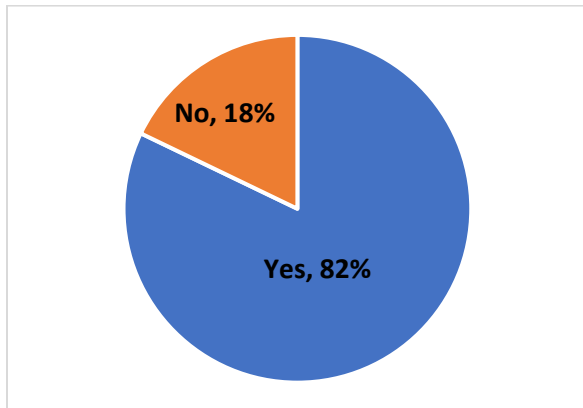


**Figure 3.15** Attending Training During Last Five Years

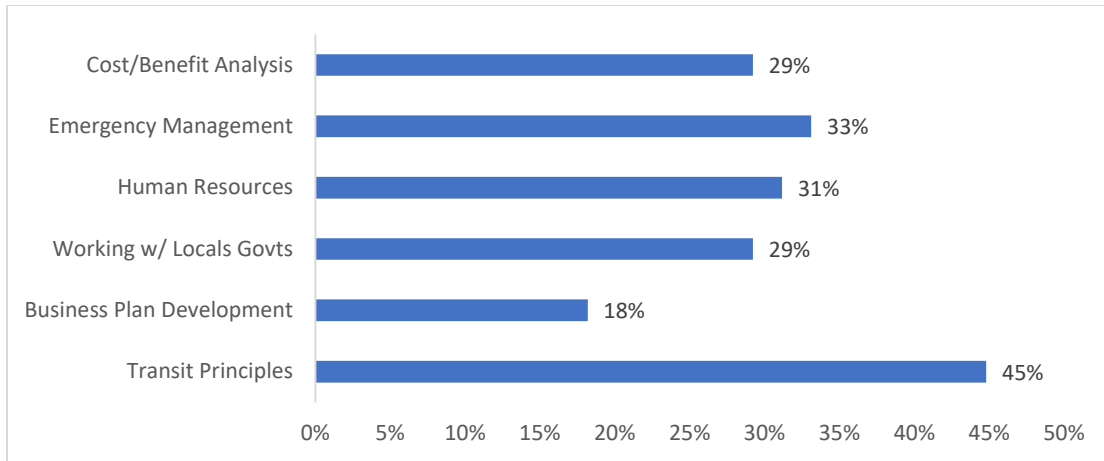


**Figure 3.16** Trainings Attended Throughout the Past Five Years

Managers were then questioned regarding the benefit of workforce development trainings for both themselves, as well as employees in their agency with an interest in training for the purpose of being promoted. Figure 3.17 shows that the vast majority of current managers believe that trainings have been beneficial for them in their current position. Also, Figure 3.18 illustrates that transit principles-related classes would be most beneficial to those seeking promotion within their agencies. More than 30% also believed that emergency management and human resources would be beneficial trainings, while nearly 30% indicated that cost benefit analysis and working with local governments would be beneficial. Finally, business plan development training was found to be beneficial among 18% of respondents.

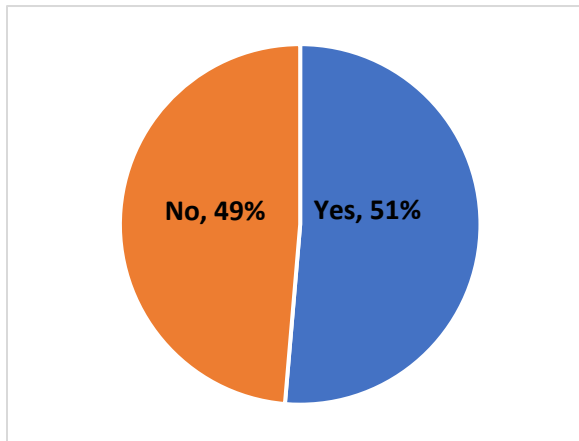


**Figure 3.17** Trainings Beneficial to Your Job

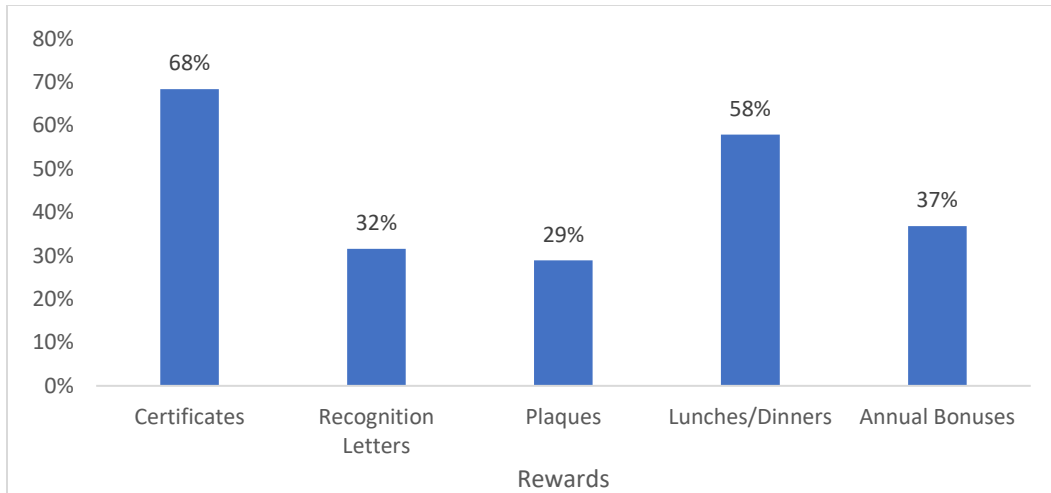


**Figure 3.18** Beneficial Trainings for Promotion

Survey respondents acknowledged that more than 50% of agencies currently have some form of employee recognition program (Figure 3.19). This represents a 12% increase compared to findings from Peterson and Rieck (2016). Larger agencies with more than 20 employees were more likely to have a recognition program compared to small agencies. Among agencies with an employee recognition program, almost 70% issued certificates for outstanding work while more than half rewarded outstanding employees with meals (Figure 3.20). Annual bonuses were awarded by 37% of respondent agencies; plaques and recognition letters were awarded by approximately 30% of agencies.



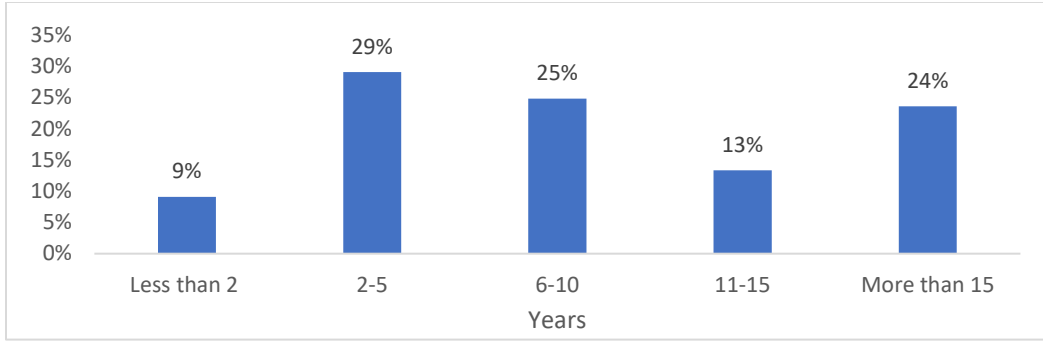
**Figure 3.19** Agencies with Reward Recognition Programs



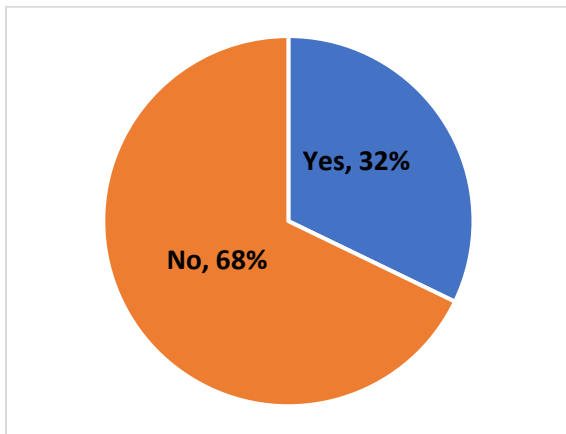
**Figure 3.20** Employee Rewards Among Agencies with Reward Programs

Finally, transit managers were questioned regarding anticipated retirement and succession planning. Almost 40% of respondents indicated they plan to retire within the next 5 years (Figure 3.21). Another 25% plan to retire within 10 years while 37% of respondents have 11 or more years before they plan to retire. Less than one-third of managers (32%) indicated that their agency has an active succession plan currently in place (Figure 3.22). However, this total more than doubles findings from Peterson and Rieck (2016), when only 15% of manager respondents indicated having a current succession plan in place. Agencies with more than 20 employees accounted for the majority of current plans while many smaller agencies had no current succession plan in place.

When asked to elaborate on their current succession plans, agency managers highlighted job shadowing and continual training for assistant managers to keep them “up to speed” regarding necessary agency topics. Other agencies indicated they have monthly leadership trainings and organizational charts that lay out responsibilities for every level of employee. Some agencies emphasized detailed agency manuals with job functions for employees, and others mentioned a detailed plan for who absorbs certain responsibilities when management changes occur. Communication structures have also been developed by some agencies to provide a protocol to follow when management changes arise.



**Figure 3.21** Years Before Anticipated Retirement



**Figure 3.22** Agencies with Succession Plans



## 4. SUMMARY AND CONCLUSIONS

There is an increased need to invest in workforce development as America's transportation workforce continues to age. Literature review findings showed that the transportation industry is projected to add more than 400,000 net jobs over a 10-year period. It also found that 48 states, with the exception of Kentucky and Vermont, will experience job growth during this period. The fastest growth will occur throughout the Midwest, Gulf Coast, West Coast, and Mid-Atlantic regions. The highest percentage of forecasted new jobs would be in public transportation and ground passenger transportation (U.S. Department of Education 2015).

Recruitment efforts, for drivers in particular, found that a good starting point is to consider the preferences of drivers. This means listening, understanding, and designing services that meet the special needs and preferences important to them. It is essential to learn about the types of shifts they prefer, their availability, lifestyle needs, and the routes they enjoy to create schedules that truly go beyond meeting agency service requirements and consider the needs of the person who represents the agency behind the wheel (Crizzle et al. 2017).

Survey findings included a cross-section of 170 viable responses from 42 different states. The majority of transit agency managers have been employed by their current agency for more than 10 years while nearly 65% of total respondents were 50 years of age or older. Almost 40% of respondents indicated they plan to retire within the next five years while 32% have a viable succession plan currently in place to lessen management turnover concerns. This total is more than twice the total based on findings from Peterson and Rieck (2016), when only 15% of manager respondents indicated having a current succession plan in place.

More than 90% of respondents indicated they have experienced driver shortages during the past two years. Lack of adequate driver compensation was the most cited reason for driver shortages at 70% followed by a tight labor market at 57%. More than half of respondents indicated that aging/retiring drivers led to their driver shortages while 44% cited COVID-19 issues resulting in driver shortages within their agency. Finally, poor work hours and unruly passengers were cited by 21% and 9% of managers, respectively. Managers were also questioned about the effect of driver shortages on the services they provide. More than half of respondents indicated they were forced to turn down certain trip requests because of the shortage. Also, 40% had to cut their normal service hours while 13% had to cut the service area normally served by their agency.

The successful recruitment and training of drivers and every transit worker responsible for all facets of transit operations is both critical and timely. Greater action must be taken to safeguard the future success of the industry. Increased investment targeting driver and worker recruitment and development today will result in a public transportation workforce with the capacity to serve small urban and rural communities for years to come.

## BIBLIOGRAPHY

- American Public Transportation Association. (2022). *Transit Workforce Shortage: Root Causes, Potential Solutions, and the Road Ahead*. Washington, D.C. <https://www.apta.com/wp-content/uploads/APTA-Transit-Workforce-Shortage-Report.pdf>
- Crizzle, A. M., P. Bigelow, D. Adams, S. Gooderham, A.M. Myers, and P. Thiffault. (2017). “Health and wellness of long-haul truck and bus drivers: A systematic literature review and directions for future research.” *Journal of Transport & Health*. Volume 7, Part A, pp. 90-109.
- Federal Transit Administration. (2021). Addressing Operator Assault Through Your Agency’s Safety Management System. <https://www.transit.dot.gov/sites/fta.dot.gov/files/2021-02/Addressing-Operator-Assault-Webinar-20210224.pdf>
- Federal Transit Administration. (2022). FTA-Sponsored Technical Assistance Centers. Retrieved from: <https://www.transit.dot.gov/funding/grants/fta-sponsored-technical-assistance-centers#:~:text=The%20Transit%20Workforce%20Development%20Technical%20Assistance%20Center%20%28TWC%29,varying%20sizes%2C%20including%20urban%2C%20tribal%2C%20and%20rural%20entities.>
- Glasø, L., E. Bele, M.B. Nielsen, and S. Einarsen, S. (2011). “Bus drivers’ exposure to bullying at work: An occupation-specific approach.” *Scandinavian Journal of Psychology*. Volume 52, Issue 5, pp. 484-493.
- Jones, W., R. Haslam, and C. Haslam. (2014). “Measuring job quality: A study with bus drivers. *Applied Ergonomics*.” Volume 45, Issue 6, pp. 1641-1648.
- Lannoo, S., and E. Verhofstadt. (2016). “What drives the drivers? Predicting turnover intentions in the Belgian bus and coach industry.” *Transportation Research Part A: Policy and Practice*. Volume 91, pp. 251-259.
- Pan, H. Jiahong, (2022). “How Transit Agencies are Engaging the Transit Professionals of Tomorrow.” *Next City*. <https://nextcity.org/urbanist-news/how-transit-agencies-are-engaging-youth-transportation>.
- Peterson, Del, and Ted Rieck. (2016). *Workforce Development and Succession Planning to Prepare the Rural Transit Industry for the Future*. University of South Florida, Tampa: National Center for Transit Research.
- Teale, C. (2021). “Transit workers face growing rate of assaults: ‘There’s not much we can do’”. SmartcitiesDive. <https://www.smartcitiesdive.com/news/transit-workers-face-growing-rate-of-assaults-theres-not-much-we-can-do/594959/>.
- TransitCenter (2022). *Bus Operators in Crisis: The Steady Deterioration of Transit’s Most Essential Jobs and How Agencies Can Turn Things Around*. New York. [https://transitcenter.org/wp-content/uploads/2022/07/Bus-Operators-in-Crisis\\_RGB\\_Interactive-1.pdf](https://transitcenter.org/wp-content/uploads/2022/07/Bus-Operators-in-Crisis_RGB_Interactive-1.pdf).
- U.S. Department of Education, Office of Career, Technical, and Adult Education. (2015). *Strengthening Skills Training and Career Pathways across the Transportation Industry*. Washington, DC.
- Vogel, Brian H. (2001). “Identification of the Critical Workforce Development Issues in the Transit Industry.” *TCRP Research Results Digest Number 45*. Transit Cooperative Research Program, Washington, DC: Transportation Research Board of the National Academies.

## APPENDIX

Name \_\_\_\_\_

Position \_\_\_\_\_

Transit Agency \_\_\_\_\_

City, State \_\_\_\_\_

1). How long have you been employed by this transit agency?

0-5 years

6-10 years

11-15 years

16-20 years

Longer than 20 years

2). How long have you been employed at your current position within this agency?

0-5 years

6-10 years

11-15 years

16-20 years

Longer than 20 years

3). How many different positions have you held within this transit agency?

1

2

3

4 or more

4). What is your age?

20-30 years old

31-40 years old

41-50 years old

51-60 years old

More than 60 years old

5). What is your current annual salary?

Less than \$20,000

\$20,000-35,000

\$35,000-50,000

\$50,000-65,000

\$65,000-80,000

More than \$80,000

6). How much longer do you anticipate working before retirement?

Less than 2 years

2-5 years

6-10 years

11-15 years

More than 15 years

7). How many people does your transit agency employ? (Include both full and part time employees)

0-5

6-10

11-15

16-20

21-30

More than 30

8). Has your agency experienced driver shortages during the past 2 years?

Yes

No

9). If yes, why do you believe these driver shortages have occurred? (Check all that apply)

Tight Labor Market

Driver Compensation

Aging Drivers

COVID-19 Related Issues (Mask, vaccination requirements, etc.)

Unruly Passengers

Work Hours

Other \_\_\_\_\_

10). If yes, what effect have driver shortages had on your agency? (Check all that apply)

Had to cut service hours

Had to cut service area

Turned down trip requests

Other \_\_\_\_\_

11). What percent of your total targeted driver workforce is employed? (100% indicates you have all the drivers you need)

100%

Less than 100% but more than 75%

Less than 75% but more than 50%

About 50%

Less than 50%

12). What are your starting and average wages for your drivers?

Starting wage \_\_\_\_\_

Average wage \_\_\_\_\_

13). What steps has your agency taken to alleviate driver shortages?

\_\_\_\_\_  
\_\_\_\_\_

14). Are there steps that either your state DOT or Federal Government has taken, or could take, to help alleviate driver shortages?

\_\_\_\_\_  
\_\_\_\_\_

15). Are you aware of any of the following workforce development trainings that are currently available for agency managers? (Check all that apply)

Public Transit Principles

Business Plan Development

Working with Local Governments

Human Resources

Emergency Management

Cost/Benefit Analysis

Other \_\_\_\_\_

16). Have you attended any kind of workforce development training within the past 5 years?

Yes

No

17). If yes, how many workforce development trainings have you attended within the past 5 years?

1-2

3-4

5-6

7-8

9 or more trainings

18). Have you found most training(s) to be helpful in doing your job?

Yes

No

19). If yes, please explain which trainings have been most useful and why.

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20). Are there workforce development trainings that are **not** currently being offered that would be beneficial to your agency? If yes, please explain...

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21). Are there workforce development training opportunities for employees within your transit agency who are interested in further developing their skills and being promoted? If yes, please list...

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22). What workforce development trainings do you believe would be most beneficial for employees in your agency interested in further developing their skills and being promoted? (Check all that apply)

Transit Principles

Business Plan Development

Working with Local Governments

Human Resources

Emergency Management

Cost/Benefit Analysis

Other \_\_\_\_\_

23). Does your transit agency have an employee reward and recognition program?

Yes

No

24). If yes, in what ways are your employees recognized? (Check all that apply)

Certificates

Recognition Letters

Plaques

Lunches/Dinners

Other ways \_\_\_\_\_

25). Does your agency have a succession plan that highlights steps to be taken by a new transit manager if the current transit manager leaves the agency or retires?

Yes

No

26). If yes, please explain your succession plan process.

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