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Understanding Workforce Diversity in the Transit Industry: Establishing a Baseline of Diversity Demographics

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16. Abstract

This study provides baseline data on the status of the racial/ethnic and gender diversity of the transit agency workforce in the U.S. and identifies potential barriers and promising practices for diversifying this workforce. Public transit agencies function best when the diversity of their workforce represents the communities they serve, yet previous research finds an underrepresentation of women and minorities in senior and managerial roles, along with an overconcentration of men and workers of color—particularly Black workers—in operational roles (e.g., drivers, janitors).

The study updates those earlier studies with newer data drawn from five discrete research tasks: 1) review of the scholarly and professional literature on the topic; 2) review of the websites of the 50 largest transit operators; 3) analysis of employee demographic data submitted by 152 transit operators as part of Equal Employment Opportunity (EEO) program plans; 4) analysis of responses to an original survey sent to the human resources personnel of transit agencies (92 responses from staff at 68 agencies), and 5) interviews with 12 professionals selected for their expertise in transportation workforce diversity monitoring, management, and/or advocacy.

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EXECUTIVE SUMMARY

Public transit agencies function best when the diversity of their workforce represents the communities they serve. Previous research shows an underrepresentation of women in the industry and the concentration of workers of color—particularly Black workers—in a few select occupations (e.g., drivers, janitors, maintenance staff). Transit agency leadership has been traditionally held by White men, resulting in industry practices that likely reflect a singular set of values, which may not represent or align with the needs of the majority of transit riders.

In this study we provide baseline data on the status of the racial/ethnic and gender diversity of the transit agency workforce in the U.S. and identify potential barriers to and promising practices for diversifying this workforce. The study draws on five different sources of information. The Federal Transit Administration (FTA) collects data on transit agency workforce diversity through the Equal Employment Opportunity (EEO) program. The FTA requires agencies that meet certain funding and size thresholds to periodically report on the race and sex of their transit workforce across 8 jobs categories (officials/administrators, professionals, technicians, protective services, paraprofessionals, administrative support, skilled craft, service, and maintenance). We supplement these data with a summary of previous research on workforce diversity, reviews of the websites of the 50 largest transit operators, analysis of survey data from human resources personnel of transit agencies, and interviews with twelve professionals selected for their expertise in transportation workforce diversity monitoring, management, and/or advocacy.

Findings from existing studies on diversity in the transit sector

- Women and some non-White workers (especially Black and Hispanic workers) are underrepresented in managerial and high-paid leadership positions in the transit industry and overrepresented in frontline staff and operator positions.

- Barriers to improving workforce diversity include lack of resources, male-centered workplace culture, and inadequate data to support diversity, equity, and inclusion (DEI) activities.

- Strategies to improve workforce diversity include improved outreach to underrepresented groups, use of diversity goals in outreach, networking and mentoring, building an inclusive work culture and adopting inclusive policies, and establishing intentional DEI practices.

Findings from the Equal Employment Opportunity (EEO) data

- Women comprise less than 30 percent of the transit agency workforce and a small percentage of workers in all job categories except administrative support.

- Relative to the racial composition of the transit workforce, Black and Hispanic workers are overrepresented in many of the lower-paying job categories and occupations

within them. In contrast, White workers are overrepresented in leadership positions (as officials and administrators), and White and Asian workers are overrepresented in the more-highly paid professional and skill-craft occupations.

- Relative to the demographic composition of workers in the transit agency service area, Black workers—both men and women—are overutilized across all job categories. White, Hispanic, and Asian women are underutilized across all job types. Hispanic men are underutilized across all job types except one: technicians. Asian men are underutilized across all types except one: craft workers. These patterns appear to be widespread across transit agencies.

- The EEO data are reported in ways that make it difficult to regularly assemble reliable data for ongoing analysis of transit agency workforce diversity.

Findings from the website review of the 50 largest transit agencies

- A majority of the Chief Executive Officers are male.

- Transit agency websites have relatively little information on the agency's diversity programs. Most of the websites only post the required formal EEO statement, stating that their agency is an equal-opportunity employer and does not discriminate in hiring or advancement on the basis of race, sex, religion or other categories protected under federal law.

Findings from the survey of human resources personnel

- A majority of transit agencies in our sample regularly collect diversity data that, in some cases, extends beyond gender and race/ethnicity.

- Transit agencies in our sample use diversity data to assess their DEI goals and to help in employee recruitment and retention.

- About half of survey respondents believe that their workforce diversity has increased over the last few years; however, most respondents acknowledged that White employees remain overrepresented in leadership positions.

- Survey respondents believe that more staff support for DEI, particularly among agency leadership, is necessary to increase workforce diversity.

Collectively, the findings indicate that many of the issues raised in previous analyses of transit agency workforce diversity persist: little gender diversity, underrepresentation of workers of color in positions of leadership, and overrepresentation of Black workers in almost all job categories relative to their percentage in the larger labor market. However, there is evidence of positive change. Human resource personnel report that their transit agency has become more diverse over time. Unfortunately, the EEO data necessary to support these opinions is not readily available.

Findings from the full set of data gathered, including the key stakeholder interviews, support the following recommendations

- Increased efforts to strengthen workforce diversity including strong executive leadership on DEI issues, greater resources (staff and funding) dedicated to DEI efforts, development of in-house DEI expertise, early outreach to high schools and colleges with high percentages of minority students, programs/policies to aid in hiring and retention of minority employees, and implementation of regular employee satisfaction surveys.

- Rigorous evaluations of workforce diversity programs and policies to quantify their effect on diversity.

- Improved collection and availability of EEO data, including requiring agencies to submit their data electronically in spreadsheet form, requiring agencies to submit their data in raw numbers to facilitate data aggregation, technical support to help smaller agencies with reporting requirements, routine data auditing for accuracy and completeness, and public availability of the data, not requiring the filing of a Freedom of Information Act request.

- Regular analysis of transit agency workforce diversity by the FTA and/or APTA and of other publicly available workforce diversity data.

I. INTRODUCTION

Public transit agencies, public-benefit corporations organized to provide transportation within a region or service area, function best when the diversity of their workforce—board members, executives, managers, administrators, operators, mechanics, contractors—represents the communities they serve. A diverse workforce can engender diverse perspectives, innovation, improved staff recruitment and retention, and better matches between agency and customer goals. However, there is limited industry-wide public data on the current demographics of the transit agency workforce, as well as little information on the barriers to achieving greater diversity in the transit industry. This study aspires to fill this gap.

More specifically, the study aims to develop baseline information on the diversity of the transit agency workforce in the U.S. and identify potential barriers to and promising practices for diversifying the transit workforce. Diversity along many dimensions—gender, race, ethnicity, income, disability status, age, sexual orientation, gender identity, language, national origin—are essential to recruiting and retaining a high-quality transit workforce. Our inquiry focuses primarily on the gender and race/ethnicity dimensions of workforce diversity, largely due to data availability.

Our study employed five discrete research tasks: 1) review of the scholarly and professional literature on the topic; 2) review of the websites of the 50 largest transit operators; 3) analysis of employee demographic data submitted by 152 transit operators as part of Equal Employment Opportunity (EEO) program plans; 4) analysis of responses to an original survey sent to the human resources personnel of transit agencies (92 responses from staff at 68 agencies), and 5) interviews with 12 professionals selected for their expertise in transportation workforce diversity monitoring, management, and/or advocacy.

In what follows, we first discuss the findings from our literature and website reviews. We then summarize and discuss the findings from the analysis of the EEO data, followed by an analysis and discussion of the survey data. We conclude with reflections about the status of workforce diversity in the U.S. public transit industry and draw on our findings and stakeholder interviews to offer recommendations on how agencies can further diversify their workforce.

II. LITERATURE REVIEW

Public transit serves many important purposes. In some neighborhoods, transit provides an important alternative to driving, and in doing so, contributes to reduced emissions and traffic congestion. Transit also provides affordable transportation, particularly important to travelers with limited incomes. Transit is an essential service for many individuals living in communities disproportionately affected by socioeconomic, geopolitical, and racial inequities (Enright, 2019). Residents of these communities are less likely than other travelers to have access to automobiles and, therefore, are more likely to rely on public transportation (Enright, 2019; Cantilina et al, 2021; National RTAP, 2020).

The needs of transit riders vary across metropolitan areas and neighborhoods within them and are best addressed by a transit agency workforce and decision makers that reflect the communities they serve (TransitCenter, 2019; Cantilina, et al, 2021). However, research shows that most positions of power in public transit agencies are traditionally held by White men, resulting in industry processes and transit systems that likely reflect a singular set of values, which may not represent the majority of transit riders or align with their needs (National RTAP, 2020; Rouhanizadeh and Kermanshachi, 2021). Developing a diverse transit workforce is one way to ensure that the public transit industry in the U.S. responds to the needs of the riders and communities it serves (Ivey, 2019; Ivey et al 2019; Altimari and Vock, 2022). When transit agencies implement programs and policies to diversify their organizations, they also help to create a more rider-centered, justice-oriented transit environment (National RTAP, 2020; Wellman, 2012).

Racial and gender disparities in the U.S. workforce are caused by biased practices in hiring and placing new employees, promoting or firing certain existing employees, and/or wage determination, all of which contribute to ongoing systems of economic oppression, disproportionately among minority and female employees (Glicken and Robinson, 2013; Singh, 2021). For example, as of 2021, unemployment rates among Black and Hispanic workers were 1.8 and 1.4 times higher than that of White workers (U.S. Bureau of Labor Statistics, 2023). Moreover, wage disparities by both race and gender persist. As of 2021, the median earnings of black and Hispanic full-time wage workers were 79 and 76 percent that of White workers, and the wages of female workers were 83 percent that of male workers (Ibid).

Workplaces often reflect the macro-power dynamics and inequities operationalized through interpersonal and group settings (Bond and Haynes, 2014). The public transportation industry is no exception. Studies find that White, male employees tend to hold higher-powered and more highly-compensated positions compared to other employees, and workers can face discriminatory barriers that start long before they are hired and continue throughout their employment (Bolotnyy and Emanuel, 2020; Rouhanizadeh and Kermanshachi, 2021; Ivey, 2019; Kelly, et al, 2015). Discrimination exacerbates existing inequities within the public transit workforce, and can contribute to transit environments where top-down decision-making does not adequately address the needs that may vary across communities (Enright, 2019; Wellman, 2012).

In the literature review that follows, we draw from existing scholarly sources, industry reports, and professional literature to examine diversity in the U.S. public transportation workforce. We first present our methodology for assembling this review. In the subsequent section, we summarize the findings on workforce demographic patterns and trends. We then turn to the literature on barriers to advancing workforce diversity and recommended best practices. We conclude by identifying recurring categories of best practices.

2.1   METHODOLOGY

To compile this literature review on diversity in the public transit workforce, we searched peer-reviewed journal articles, reports, publications, and blogs using the Transportation Research Information Database (TRID), Transportation Research Board Website (TRB), American Public Transportation Association Website (APTA), as well as the Google and Google Scholar platforms. We used a combination of key search terms: public transportation, workforce, diversity, recruitment, retention, hiring, DEI practices, occupational segregation, wage disparity, barriers to diversity in transportation industry, gender and race in transportation workforce, frontline workers, workforce diversity, racism, and sexism.

The search identified 146 total publications. We then reviewed their abstracts and excluded publications that we could not access through our libraries, as well as those that focused on transit riders rather than transit workers. Thus, we reviewed 86 of the 146 total publications initially identified.

The publications reviewed focused on current public transit workforce trends in the U.S., public transit workforce development strategies, DEI barriers, and recommendations for increasing workforce diversity. Thirty-four of the publications referred broadly to workplace diversity and 52 specifically to workforce diversity in the public transportation workforce sector.

We first categorized each article by publication type (e.g., peer-reviewed journal article, published report, or blog), geographic region, and agency or organization type discussed in the article (e.g., state department of transportation, public transit agency, or nonprofit transit organization). We then identified whether the article focused on the following diversity indicators: gender, race and ethnicity, sexuality, age, veteran or military status, and ability. Additionally, we noted whether the article provided contextual demographic data (e.g., if it included nation-wide statistics on race/ethnicity and/or gender, alongside the demographic data for the specific study sample), potential causes of workforce discrimination, employment barriers, effective strategies for diversifying the workforce, and workforce issues related to the COVID-19 pandemic. If an article included workforce diversity recommendations, we documented those using the following categories: K-12 pipeline, higher education, networking, scholarships, apprenticeships, work culture, work safety, human resource policies, diversity, equity, and inclusion (DEI) training, DEI hiring, diversity data metrics, job descriptions (i.e., adjusting job descriptions to be more inclusive), mentorship, industry rebranding for more inclusive outcomes, family-friendly policies, and ongoing personal development. Finally, we noted if a publication included topics outside of the aforementioned categories.

Below, we summarize the findings from our review of the existing literature in three areas: 1) demographic patterns and trends, 2) barriers to advancing workforce diversity, and 3) recommended best practices.

2.2 DEMOGRAPHIC PATTERNS AND TRENDS IN THE PUBLIC TRANSPORTATION INDUSTRY

Historically, women have been underrepresented in the transportation sector (Batac et al., 2012; Godfrey and Bertini, 2019; Hanson and Murakami, 2010; Sneider, 2012). While many non-White workers—particularly Black workers—hold jobs in the transportation sector, they tend to be concentrated in a handful of specific occupations (Ivey et al., 2019). These disparities persist. Data from the Current Population Survey (U.S. Bureau of Labor Statistics, 2019) show that women continue to be significantly underrepresented in the industry, and Black workers—while overrepresented in the sector—disproportionately work in occupations as drivers, administrative support, and other service jobs.

Although employment patterns in transit agencies are slightly different than in the broader transportation sector, women and some non-White workers remain underrepresented (National Academies of Sciences, Engineering, and Medicine, 2007, 2020). The public transit workforce also tends to skew toward White men in leadership and executive positions, and toward women, racial, and ethnic minority groups in frontline staff and operator positions (National RTAP, 2020; Rouhanizadeh and Kermanshachi, 2021; Bolotnyy and Emanuel, 2020; Ivey, 2019; Steiner et al, 2022; Haas, 2007; Chan and Anteby, 2015; Washington et al, 2011). Data also show that regional transit boards have higher proportions of White and male members relative to the demographic composition of their service areas (Ehrman, 2018; TransitCenter, 2019).

The data show that White men tend to have more decision-making authority and clearer promotion pathways compared to women and employees of color, who often work in occupations that include more manual tasks and have fewer opportunities for career advancement (Washington et. al, 2011; Chan and Anteby, 2015; Steiner et al, 2022; Rouhanizadeh and Kermanshachi, 2021). This occupational segregation contributes to pay disparities, with White men, on average, earning more over the course of their careers compared to other workers (Washington et al, 2011; Chan and Anteby, 2015; Steiner et. al, 2022; Rouhanizadeh and Kermanshachi, 2021). For example, a 2019 study of the Massachusetts Bay Transportation Authority found that "female operators earn $0.89 for each male-operator dollar in weekly earnings," with a "11% earnings gap [that] carries over into retirement" (Bolotnyy and Emanuel, 2020, pgs.20-21). A 2001 study by the American Public Transit Association (APTA) revealed that "Whites comprised 61% of all transit managers, compared to 39% of all minorities combined" and "management of transit agencies was 87.3% male [and] 12.7% female, compared to 85% and 15% respectively of all transit employees" (Haas, 2007, pg. 96). The gender and racial distribution of workers has changed very little over time. A 2017-18 report from the Bureau of Labor Statistics found that "while women account for 50% of the population and 46% of the total workforce in the United States, they make up only 4 [to] 25% of the workforce in specific transportation occupations," with Black employees representing 12 to 20% of the transit workforce, and Hispanics representing 9 to 19% (Ivey, 2019).

Studies highlight three trends that may significantly affect future workforce diversity in the transit sector: 1) changes associated with the aging of the current U.S. transit workforce 2) automation, and 3) the COVID-19 pandemic. Studies show that "the transit workforce today is older than the national average of U.S. workers" (Le Grand and White, 2021, pg. 18; Mohebbi et. al, 2022), likely contributing to growing numbers of retirements. To avoid labor shortages, transit agencies will need to recruit younger workers, especially for management positions (Ivey et. al, 2012; Haas, 2007; Cronin and Alexander, 2019; Washington et. al, 2011). It will be critical for the public transit industry to engage with diverse candidates to fill the inevitable gaps and diversify its workforce.

Second, studies show that automation can improve operational efficiencies and decrease costs (ADD CITES). However, in the transit industry automation also can bring about workforce displacement and shifting job responsibilities (Borry and Getha-Taylor, 2019; Walk et. al, 2022). Indeed, in their review of workforce automation prediction models across 702 different occupations, Borry and Getha-Taylor (2019) found that transportation workers were among those with the highest vulnerability to automation; the study also noted that this change would have a disparate impact on women and minority workers (Borry and Getha-Taylor, 2019). In a 2022 Transit Cooperative Research Program report (CITE), researchers found that while transportation-based automation technology could improve rider experience, frontline operators, dispatchers, service and maintenance staff would be the most negatively affected by technology driven displacement, many of whom are women and people of color. Bus operators, most of whom are women and/or Black, may experience significant adverse impacts because of automation (Walk et. al, 2022). For the above reason, transit agencies should simultaneously consider how to retain and retrain workers whose jobs are threatened due to new technologies.

Lastly, the COVID-19 pandemic has shifted how riders and operators interact in public transportation environments. A combination of factors, including increased remote work, physical distancing and service cuts contributed to a decrease in transit ridership, which had been declining prior to the pandemic (Subramanya and Kermanshachi, 2021; Parker, et al, 2021; Manville, et al, 2023). Operators responded by improving the physical environment of light rail, buses, and trains to better accommodate rider health and safety (Subramanya and Kermanshachi, 2021; Mohebbi et. al, 2022). Compared to other workers, frontline transit workers, including vehicle operators, were and continue to be at a higher risk of contracting COVID-19, with women and people of color overly represented in these worker categories (Rho et al, 2020). Public transportation agencies should continue to protect the health and safety of transit riders, but also implement plans to protect the health and safety of their workers (Van Eyken, 2022). For example, some agencies have allowed operators time-off to get vaccinated, sick-pay, family-care leave, and inventory of free personal protective equipment (Rho et al, 2020; Freemark et al, 2021). Together, these observed trends can influence the strategies used by public transportation to protect the existing workforce and diversify the future workforce.

2.3   BARRIERS TO WORKFORCE DIVERSITY

Studies highlight three main barriers to advancing workforce diversity: inadequate allocation of resources, workplace culture and practices, and incomplete diversity data and corresponding evaluation. Stakeholders across public transportation agencies, as well as within transportation-related private, academic, and nonprofit sectors, are interested in bringing about greater diversity, equity, and inclusion (DEI) in the public transportation sector; however, the lack of dedicated funding to support DEI training, diversity workshops, dedicated DEI staff or consultants, and DEI capacity building (e.g., strategic planning, diversity programs) represent barriers to progress (Mohebbi et al, 2022; Jasek, 2010). In 2021, researchers conducted 59 interviews with individuals working with and for public transit agencies; the interviewees included representatives from academia, private industry, public sector agencies, and nonprofit organizations (Cantilina et al, 2021). Participants identified a lack of funding and capacity among DEI staff and consultants or among organizational leadership as major barriers to implementing and building capacity for DEI work (Ibid). Private industries often have "greater freedom and flexibility to shift organizational approaches" for additional DEI programming, compared to public agencies that often only seek to satisfy Equal Employment Opportunity (EEO) requirements (Cantilina et al, 2021, pg. 980; Keen et al; 2021). Additionally, there is insufficient and inconsistent funding for outreach programs to students and employees from underrepresented communities. Some agencies have made progress toward meeting DEI goals; however, the lack of dedicated funding limits the sustainability of long-term efforts (Jasek, 2010; Cantilina et. al, 2021; Ehteshami, 2020).

In some occupations, workplace culture and practices may act as barriers to diversity. These may include: masculine culture (National Academies of Sciences, Engineering, and Medicine, 2020), sexual harassment (Cech and Waidzunas, 2022; Lewis, 2006; National Academies of Sciences, Engineering, and Medicine, 2020; Turnbull et al., 2013), marginalization and devaluation of expertise (Cech and Waidzunas, 2022), safety and health concerns (National Academies of Sciences, Engineering, and Medicine, 2020), lack of accommodations for responsibilities outside work (Batac et al., 2012; National Academies of Sciences, Engineering, and Medicine, 2020), and lack of role models (National Academies of Sciences, Engineering, and Medicine, 2020). Additionally, discriminatory practices toward employees and prejudicial treatment in hiring and promotions (based on sex, race, or other protected characteristics) have a dampening effect on workforce diversity (Batac et al., 2012)

Another barrier is the lack of available and comprehensive data to better inform DEI planning and to evaluate DEI implementation. Given diverse job types, worker identities, and needs within the public transportation industry, agency staff need better data to understand their workforce and accurately identify where intervention is needed to promote DEI throughout the employee experience (Ivey and Reeb, 2021; Keen et al, 2021; Mohebbi et al, 2022). Ensuring that reported data are appropriately categorized and disaggregated (e.g., using specific race/ethnicity categories as opposed to a general "minority group" descriptor) can help employers and policymakers identify points of success and opportunities for growth (Ivey and Reeb, 2021). Additionally, public transit agencies required to follow EEO policy, at times report data in inconsistent or incomparable ways that disallow meaningful analysis that can inform future decision-making (Myers et. al, 2007).

2.4   RECOMMENDED BEST PRACTICES

Researchers have identified five best practices to advance workforce diversity: 1) engaging with students, 2) incorporating diversity goals during recruitment, 3) providing networking opportunities and mentorship, 4) creating inclusive work cultures and policies, and 5) intentionally establishing internal DEI practices.

Engaging with K-12 and College Students. Influencing and training the upcoming public transportation workforce begins long before recruitment (Cronin and Alexander, 2019). At early ages, students' perceptions of future careers are often based on exposure and experience with schools, communities, families, and the media (Ivey et. al, 2012; Le Grand and White, 2021; Guinea-Martin et al, 2018; Ng and Acker, 2020; Ivey, 2019). Such experiences, however, can be influenced by racialized and gendered messaging, as well as systemic forces of oppression that differentially affect groups of children and youth as they conceptualize their future careers (Guinea-Martin et al, 2018; Johnson et. al, 2019; Roberts and Mayo, 2019). Students of color, particularly girls, have faced structural, cultural, and relational barriers in higher education and/or applying for jobs in the public transportation industry (Stankovic and Nikolic, 2021, Ivey et al, 2012; Ehteshami, 2020). For example, traditionally stereotyped perceptions of gendered work within White, male-dominant industries like public transportation can discourage and prevent girls from being attracted to or feeling supported in choosing a public transportation career (Ng and Acker, 2020). Engaging with students from underrepresented groups is one way to provide greater exposure to wide-ranging career opportunities within the public transportation industry (Johnson et al, 2019).

Some public transportation agencies have adopted practices to spark interest in transit jobs and streamline the pipeline for students who want to enter the transit workforce. These include: increasing awareness of transportation jobs, creating more inclusive academic environments especially for Science, Technology, Engineering, and Math (STEM) students, providing academic scholarships or paid internships, partnering with local community and technical colleges, and offering summer programs or internships (Jasek, 2010; Ivey, 2019; Godfrey and Bertini, 2019; McFadden et. al, 2019; Ivey et. al, 2012; Le Grand and White, 2021; Agrawal and Dill, 2008). Shaping perceptions of public transportation jobs early on can help students understand the work involved in a possible career in the transit industry, and how they can bring their individual values and skills to the industry (Ivey et. al, 2012; Ripplinger and Hough, 2010). For example, the Northeast Transportation Workforce Center highlighted different types of transportation careers through profile interviews with current transit workers, to provide greater information on transportation jobs and "...build relationships between people who are serving in professional roles…and new recruits from younger, more diverse populations because they can physically see and read about professionals who are similar to them" (McFadden et. al, 2019). Partnerships between the public transportation industry and academic institutions can also allow co-creation of transportation-specific learning objectives and skills development (Haas, 2007; Agrawal and Dill, 2008). Offering informal and formal support for minority students in STEM is also important, as STEM environments tend to be less diverse and inclusive than other fields (Godfrey and Bertini, 2019). Supplemental summer programs or internships, including paid opportunities or scholarships, can also provide hands-on, experiential learning from current

professionals, which can continue to shape students' desire to work in public transportation (Le Grand and White, 2021; Jasek, 2010; Ivey, 2019; Ivey et. al, 2012; USDOT, 2019). Finally, providing student loan support and other financial incentives for the multiple years of required schooling and training can help reduce the economic barriers to entering the public transportation workforce, specifically for Black and Latinx students (Le Grand and White, 2021; Johnson et. al, 2019).

Incorporating Diversity Goals in Recruitment, Selection, and Hiring. Recruiting, selecting, and hiring diverse applicants and a new generation of incoming employees requires that public transportation agencies reshape their existing tactics. Transit agencies must develop social media strategies, reevaluate job descriptions, ensure diverse representation on hiring panels, and rebrand mainstream perceptions of what being a public transit employee entails (Godfrey and Bertini, 2019; Le Grand and White, 2021; TransitCenter, 2018; Kesler et. al, 2012; Mohebbi et. al, 2022; Hedman and Garriott, 2016). Additionally, recruitment of a diverse workforce cannot rely on a one-size-fits-all approach. Each of the recommended strategies above could be further tailored to better address the specific racial, ethnic, cultural, gender, and generational needs of potential hires (Ivey, 2019).

Social media platforms can help public transportation agencies connect with diverse audiences, especially during periods (such as during the COVID-19 pandemic), when it is more challenging to host in-person recruitment fairs (Godfrey and Bertini, 2019; Le Grand and White, 2021; Dickens, 2022; Mohebbi et. al, 2022). For example, Ohio's Metro Regional Transit Authority uses social media to visually share various aspects of the agency's work environment, attracting new employees with different images of jobs within the agency, while other Metro agencies use social media to directly post job openings and information on application processes (Le Grand and White, 2021; Dickens, 2022). Refashioned job descriptions and requirements also can be used to appeal to applicants of different backgrounds and experiences and establish expectations in ways that do not exclude applicants from applying because of their race, gender, or other characteristics (TransitCenter, 2018; Wang, 2019; Godfrey and Bertini, 2019; Le Grand and White, 2021). For example, at Los Angeles Metro (LA Metro), the internal Women and Girls Governing Council "[reviewed] job descriptions for arbitrary criteria or phrasing that might discourage female candidates" (TransitCenter, 2018). Upon revision, LA Metro saw an increase in female applicants, indicating that barriers to workforce diversity can be reduced through administrative changes (TransitCenter, 2018).

Including women and employees of color from all job levels in diverse hiring panels, as well as incorporating their feedback into final decision-making, can help reduce explicit and implicit bias in the selection process (Godfrey and Bertini, 2019; Mohebbi et. al, 2022; Roberson, 2019). Finally, attracting a diverse workforce to the public transportation industry also requires changing the public perception of the field of public transportation and what it could be (Mohebbi et. al, 2022). For example, increasing work-life balance and shifting the perception of the public transportation workforce away from being strictly male-dominated may help attract women to the field; at the same time there must be structural shifts to ensure that changes in perception align with true changes in organizational culture (Godfrey and Bertini, 2019; Hedman and Garriott, 2016).

Having Policies that Foster Inclusive Work Cultures. The aforementioned strategies also should be supplemented by policies that maintain safe and inclusive work environments and accommodate diverse employee needs (Cronin and Alexander, 2019). Researchers recommend: 1) maintaining worker safety, especially for women who disproportionately experience harassment in male-dominated workplaces; 2) ensuring equitable pay across and within job categories; and 3) instituting policies that allow greater work-life balance and flexibility when employees are ill or need to care for others in their household (Wright, 2015; Godfrey and Bertini, 2019; Stankovic and Nikolic, 2021; Cronin and Alexander, 2019; Rouhanizadeh and Kermanshachi, 2021). In traditionally White, male-led industries, women and employees of color, and specifically women of color, are more likely than men to be exposed to unsafe working conditions and even violence and harassment from colleagues and passengers, as a consequence of stereotyping (Ng and Acker, 2020; Mansfield et al, 1991). To prevent this, some agencies have practiced or recommend enforcing anti-harassment policies and training that include corrective action or involving unions to protect worker safety (Ng and Acker, 2020; USDOT, 2011; Mansfield et al, 1991).

The public transit industry can also leverage human resources to better guarantee equitable pay and livable wages for workers. These reforms are especially critical for frontline operators who have more demanding and unconventional shifts than other workers, need to work overtime and holidays, or have unpaid time-off, as well as for women and employees of racial or ethnic minority groups who have been historically burdened with an earnings gap compared to their White and male counterparts (Bolotnyy and Emanuel, 2020; Bishu and Headley, 2020; Storer et al, 2020; Diaz-Fanas, 2020). For employees with caretaking responsibilities, and especially women who are part of "work cultures that are not family friendly [with] demand levels that are not favorable for working mothers," having scheduling flexibility, sufficient maternity leave time, and resources for childcare can prevent attrition of new mothers from the industry, and alleviate barriers associated with being a working parent (Godfrey and Bertini, 2019; Ng and Acker, 2020; Bishu and Headley, 2020).

Networking, Mentoring, and Professional Development Opportunities. As public transportation employees make their way through their careers, it is important for them to have networking opportunities with other professionals and partner organizations, robust formal and informal mentoring programs and relationships, and multiple points of ongoing training and professional development. These relationships and resources can help with on-the-job skill building and career advancement (Ng and Acker, 2020; Wright, 2015; Cronin and Alexander, 2019; Kelly et al, 2015). Professional networking, which can take many forms, can help employees develop and maintain professional relationships that can further their careers (Godfrey and Bertini, 2019; Le Grand and White, 2021). Networking either within or across public transit agencies and involvement with professional organizations can help their employees connect with one another, build relationships based on shared experiences, and increase visibility of leaders of diverse backgrounds and identities—all of which can help workers feel connected with and more likely remain in this industry (Godfrey and Bertini, 2019; Washington et. al, 2011; French and Strachan, 2009; Pinarowicz et al, 2011). Public transit leaders should allot time for and otherwise encourage employee networking.

Formal and informal mentoring programs also can ensure that information and expertise is shared and used as the basis for innovation, especially with the shift in workforce demographics and the increase in new technologies (Le Grand and White, 2021; Ivey, 2019; Cronin and Alexander, 2019). In a series of interviews with transportation staff, transportation leaders reported that "retirement-eligible employees are far more likely to share knowledge with younger employees … that will help prepare [them] for future success" (Cronin and Alexander, 2019). Mentoring also can facilitate internal pathways to promote current workers of diverse backgrounds into more senior leadership roles, which is important since, as we note previously, current public transit executive boards are not as representative as the riders or communities the agencies serve (Washington et. al, 2011; Mohebbi et. al, 2022; Pinarowicz et. al, 2011). Creating space for employee mentorship and support by other employees and leaders who hold similar identities allows for more transparent and representative communications about what to expect from a public transportation career (USDOT, 2011; Le Grand and White, 2021). Having a mentor, especially for women and cultural minorities who choose nontraditional careers, helps increase self-confidence, feelings of belonging, and rates of recruitment and retention in the field (Godfrey and Bertini, 2019; Hedman and Garriott, 2016). Formal professional development opportunities enhance skill-building over the course of a worker's career, which is especially important given changes in technology. For example, the North Carolina Local Technical Assistance Program partners with public transportation agencies in the state to provide continuing education and training workshops, which shifted online due to COVID-19, offering sessions on "technical roadway maintenance, operations training, professional and supervisor skill development, interdisciplinary and managerial skills training, professional writing workshops, basic planning concepts, introductory geographic information systems, and professional ethics" (Steiner et al, 2022). Contextual and continuous opportunities to connect and learn can help develop and retain a diverse public transportation workforce.

Diversity, Equity, and Inclusion (DEI): Training, Policies, and Evaluation. DEI practices have long been used to advance racial- and gender-based equity goals in the workplace (Johnson et al, 2019; Roberson, 2019). Over time, the public transportation industry has been more intentional in incorporating DEI, but barriers—such as those listed above regarding inadequate funding and data—can lead to gaps (Mohebbi et. al, 2022; Keen et. al, 2021; Cantilina et al, 2021). The following paragraphs offer ideas for public transit agencies to engage with and overcome these challenges.

At the very least, agencies can commit to DEI through establishing workforce development goals that include "comprehensive assessments of existing conditions, constant communication with employee groups, establishment of a diverse leadership team…and learning from innovative practices and policies across the country," while ensuring support from the executive staff (Mohebbi et. al, 2022 Cronin and Alexander, 2019).

One way to incorporate DEI practices is through consistent and adequately funded DEI training, which could include virtual or in-person workshops, conflict-resolution counseling programs, and/or staff retreats (Keen et. al, 2021). Such training should not place an undue burden on employees of racial, ethnic, and gender minority backgrounds to do the additional work of educating other staff, should be grounded in theory, evidence, and lived

experiences, and should focus on the value of diversity and shifting the work culture, rather than on training employees to better adapt within the existing culture (Roberts and Mayo, 2019; Devine and Ash, 2022; Roberson, 2019). Public transit agencies can also partner with or hire DEI consultants, who can "bring outside perspectives, ask new questions, and prompt new thinking, which may illuminate long-standing issues that have gone unaddressed," which can then be addressed during DEI training (Keen et al, 2021, pg. 47).

Evaluating the effectiveness of particular DEI programs is key in determining the types of adjustments or strategies that agencies need to adopt. Public transit agencies should conduct periodic surveys to elicit staff feedback on what they perceive to be effective or ineffective, establish clear and measurable indicators to quantify whether diversity goals are being met, establish diversity baselines, and internally track patterns of recruitment, retention, and promotion. These approaches can help agencies better comprehend areas of success and opportunities for growth within their DEI initiatives (Godfrey and Bertini, 2019; US EEOC, 2010; French and Strachan, 2009; Haas, 2007; Myers et. al, 2007; Ivey and Reeb, 2021; Keen et. al, 2021). Because transit agencies often have funding constraints, the long-term success of DEI programs requires the support of advisory boards and management and efforts to "divert project funding and build support within the organization to reorient project goals to include equity" (Cantilina et. al, 2021; Godfrey and Bertini, 2019, pg. 11).

2.5   CONCLUSION

Public transit is key to connecting communities with opportunities. A diverse workforce and leadership team that represent the demographic characteristics of the transit agency service area is one way that the industry can ensure that the needs of transit riders are being met. Advancing and maintaining diversity in the public transportation workforce requires multiple and consistent points of thoughtful intervention, from engaging with potential students, to recruiting diverse applicants, to establishing inclusive work environments and policies, to measuring the effectiveness and impacts of DEI practices. Moving forward, transit agency DEI efforts will require dedicated funding, resources, training, and time, with the ultimate goal of creating just public transit environments for employees and riders.

III. WEBSITE REVIEW OF OPERATOR WORKFORCE DIVERSITY MATERIALS

We conducted a scan of the websites of the 50 largest transit operators in the U.S. to examine the policies related to workforce diversity that these operators post online. One goal of this website review was to identify how many of these operators post any information at all about workforce diversity on their websites. For information posted online, we examined the type of information the agency offered to assist and recruit potential applicants and the type of content included in operators' diversity plans and progress reports. We also paid close attention to any promising practices posted on websites, aiming to increase diversity. Additionally, we sought to examine the racial/ethnic and gender diversity of transit agencies' CEOs, if self-reported and/or evidenced from their websites.

We relied on the *National Transit Database 2020 Top 50 Agencies Summary* to identify the 50 U.S. transit agencies that had the highest number of annual unlinked passenger trips in 2020 (see Appendix 2). For these operators, we carefully searched the websites for relevant information, including the federally required EEO diversity statement (e.g., "X agency is an equal employment opportunity employer"), baseline employee demographic data, DEI progress evaluation, and other EEO plans, strategies, or programs (e.g., programs specifically recruiting women, job fairs targeting specific underrepresented communities, and mentoring programs). For a first level review, we scanned the agency's "About Us" page (or equivalent) and drop-down categories from the main page to examine if they contained DEI information. Next, we searched the entire agency website using the following keywords and phrases: diversity statement, diversity policy, diversity program, DEI, employee demographic, employee race/ethnicity, workforce race/ethnicity, employee gender, and workforce gender. For each relevant webpage or linked document, we examined the content to see if it was indeed relevant to our search.

We were able to find relatively little documentation on the agencies' websites about diversity programs. The only information we could find on most of the agency websites (41) was the required formal statement that they are an equal-opportunity employer and do not discriminate in hiring or advancement on the basis of race, sex, religion or other categories protected under federal law. Just over half (27) of the examined agencies provided information about strategies and programs they use to achieve their DEI goals. For example, Cleveland RTA provided information on community college partnerships that the transit operator uses to recruit a diverse workforce. Only about a quarter of the agencies (13) provided baseline employee demographic data on their websites, and only 13% (6) provided documentation showing their evaluation of progress in achieving their DEI goals. Readers should note that this discussion presents the information we were able to find. Although we used a comprehensive search process, it is possible that we missed some relevant content on agency websites that did not include the key words used for searching.

Finally, we also looked for information about the agency's CEO in an attempt to identify the person's gender and race/ethnicity. Based on the researchers' review of photos and biographies posted on agency websites, we can say with reasonable confidence that 35 of the 50 agencies had a male CEO, and 23 of the CEOs were White.

IV. EXPLORING PUBLIC TRANSIT WORKFORCE DIVERSITY THROUGH EQUAL EMPLOYMENT OPPORTUNITY DATA

Our literature review in Chapter 2 shows that the public transit workforce, and especially its leadership teams, have been less diverse than their surrounding communities (Ivey, 2019; Meyers et al., 2007). However, the available research is not comprehensive, so we supplement these studies by conducting a careful analysis of recent transit workforce demographic data collected by the FTA. Larger transit operators periodically submit to the FTA data on their employees' race, ethnicity, and gender, reports required to comply with federal Equal Employment Opportunity (EEO) law and FTA reporting requirements. The 2018 and 2022 data used for this study allow for comparisons with the findings from previous analyses, particularly Meyers et al. (2007). Moving forward, the current study findings will aid in efforts to assess if and how the transit workforce diversifies with respect to race, ethnicity, and gender.

The special value of EEO workforce diversity data is that they provide a large set of nationally representative longitudinal data on the race/ethnicity and gender diversity of the public transit workforce across each of multiple occupational categories. The reporting program has for years required agencies to report the same specific set of metrics, which allows for comparative analysis across transit agencies and also for longitudinal analysis to pinpoint changes over time. Because of both the size of the data set and consistency over time, the EEO data offer an unusually rich set of opportunities for comprehensive analysis that can reveal patterns in the extent to which a transit agency's workforce is diversifying over time—or not. By contrast, other studies of racial and occupational segregation have tended to draw on occupational surveys of individuals, firm personnel records, and specialized surveys of organizations, all data sources with significant weaknesses that include small sample sizes, a lack of consistent measures across employers, and/or no longitudinal data (Robinson et al., 2005).[1] A final value of the EEO data is that transit agencies submit the workforce analysis as part of larger reports on their EEO program and goals, potentially allowing researchers to combine data on workforce diversity with data on the specific organizational practices of the agency (Robinson et al., 2005).

In what follows, we first describe the FTA reporting requirements related to the collection of workforce demographic data. Next, we assess the quality of that data for research and analysis purposes. The remaining parts of Chapter 4 present our findings from an analysis of EEO data from 152 transit agencies that had submitted usable data during the 2018 and 2022 reporting cycles (see Appendix 3 for a list of those agencies).

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[1] These include U.S. Census, Current Population Survey, National Longitudinal Survey of Youth, Panel Study of Income Dynamics (Robinson et al 2005).

4.1   FEDERAL TRANSIT ADMINISTRATION EQUAL EMPLOYMENT OPPORTUNITY DATA REPORTING REQUIREMENTS

Passed as part of the Title VII of the Civil Rights Act of 1964, Equal Employment Opportunity law (EEO) protects both public and private sector employees from employment discrimination based on "race, color, religion, sex (including pregnancy), or national origin" (U.S. Equal Employment Opportunity Commission, 1964):

> A person may not be excluded from participating in, denied a benefit of, or discriminated against under, a project, program, or activity receiving financial assistance under this chapter because of race, color, religion, national origin, sex, disability, or age (49 U.S.C. § 5332(b)).

Transit operators are subject to two sets of EEO reporting requirements. First, state and local governments with more than 100 or more employees must submit workforce diversity data every two years to the U.S. Equal Employment Opportunity Commission as part of "EEO-4" reporting requirements. These data include information on the sex, race, and salary band of employees categorized by various government functions including workers in "utilities and transportation," a large category that includes some transit employees. However, the EEO-4 public data are not disaggregated further and, therefore, do not provide data specifically on transit employees. Moreover, these data do not include all transit employees since not all work for state and local governments.

As a federal agency, the Federal Transit Administration (FTA) is responsible for ensuring that recipients of federal transit funds do not engage in employment discrimination. Since EEO-4 reporting requirements are inadequate to monitor the transit workforce, the FTA requires employee demographic reports from all organizations that (1) apply for or receive FTA funds, and (2) meet particular thresholds to establish Equal Employment Opportunity (EEO) programs.

FTA requires different reporting requirements depending on agency size and FTA funding received. Agencies with 100 or more transit-related employees that received more than $1 million in federal funding or planning assistance of more than $250,000 in the previous fiscal year are "full reporters" and must submit to FTA an EEO program plan with all of the program elements. Smaller agencies with 50 to 99 transit-related employees that received similar levels of federal assistance are "abbreviated reporters" who must prepare and maintain a more limited set of program elements, but these materials do not have to be submitted to FTA (FTA, 2017).[2] Agencies that are too small to meet the requirements for either the full or abbreviated reporters do not submit EEO data to the FTA at all. However, many transit agencies are subject to the EEO reporting requirements because so many of them—particularly the larger agencies—receive substantial federal funds (Congressional Budget Office, 2022).

Full reporters must have and submit an EEO program plan that includes the following elements: a policy statement, dissemination plan, staffing (including the designation of an EEO Officer), utilization analysis, goals and timelines to correct previous deficiencies, assessment of current employment practices, and a plan to monitor and report on the

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2 Abbreviated reporters are required to have the following: statement of policy, dissemination plan, designation of personnel, assessment of employment practices, and a monitoring and reporting system.

program. As part of these materials, agencies are required to provide data on the race and sex of their transit-related workforce, which the FTA defines as "an employee of an FTA applicant, recipient, subrecipient, or contractor who is involved in any aspect of an agency's public transit operation funded by FTA" (FTA, 2018). Agencies can report their data either in pdf format or using an Excel spreadsheet. Agencies are required to report demographic data using the categories required for the EEOC EEO-4 report that state and local governments must submit. As set in FTA's 2017 Circular, transit agencies that meet the threshold must submit their EEO program plans to the FTA every four years (FTA, 2017).

Of particular relevance to this research is the requirement that EEO programs include workforce diversity data, including a utilization analysis. This analysis "identifies job categories that have an underutilization or concentration of minorities and women in relation to their availability in the relevant labor market" (FTA, 2017: 2-5). Attachment 4 of the Circular includes an [example utilization analysis Excel spreadsheet](#).[3] *The U.S. Equality Employment Opportunity Commissions' Data Collection Instruction Booklet* contains detailed instructions for this analysis, including the eight standard EEO-4 job categories for which government agencies must report demographic data (U.S. Equal Employment Opportunity Commission, n.d.):

- Officials and administrators (e.g., executive directors, construction managers)

- Professionals (e.g., engineers, lawyers)

- Technicians (e.g., rail or ferry transportation workers)

- Protective service (e.g., police, investigators)

- Paraprofessionals (e.g., transportation security screeners),

- Administrative support (e.g., sales, clerks)

- Skilled craft (e.g., operator supervisors, metal workers)

- Service and maintenance (e.g., sanitation, bus operators)

FTA C 4704.1A (2017) also describes FTA's oversight role:

FTA is charged with ensuring that applicants and recipients receiving federal transit funding develop and implement an effective EEO Program that will prevent discrimination against employees or applicants for employment based on a protected class. FTA is also charged with ensuring that applicants and recipients require their subrecipients and contractors to develop an effective EEO Program and that the applicants and recipients monitor the implementation of these EEO Programs.

FTA EEO program plan reviews (49 CFR § 21.11(a)) are completed by the FTA Office of

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3 The race/ethnicity categories include: non-Hispanic White, American Indian/Alaska Native, black, Asian, Native Hawaiian and other Pacific Islander, two or more races and Hispanic.

Civil Rights (FTA conversation, 2023). FTA recipients meeting the EEO threshold submit their EEO program plans through FTA's Transit Award Management System (TrAMS). Attachment 6 in FTA C 4704.1A (2017) is a "Sample EEO Program Contents Checklist," which provides a table for reviewers to identify whether reporting agencies have adequately addressed their EEO program requirements. The form also provides space for reviewers to comment on any of the program elements.

If the Office of Civil Rights uncovers a deficiency during a program plan review, it sends the agency an "in-review letter" requiring corrective actions. The FTA also conducts Civil Rights Specialized Reviews based on specific risk factors, such as when there have been significant numbers of complaints about workforce discrimination or if the agency has not made sufficient progress in remedying deficiencies identified in prior review cycles (Federal Transit Administration, 2017). Additionally, as mandated by Congress, FTA conducts Triennial Reviews of all recipients of Urbanized Area Formula Program funds and State Management Reviews (also on a three-year schedule) of state Departments of Transportation (DOTs) to assess whether they are meeting statutory and administrative requirements in 23 areas, including EEO program requirements (FTA, 2023).

If the FTA review finds EEO deficiencies, the FTA requires that the recipient agency implement corrective actions. If recipients do not fix deficiencies, the FTA can initiate proceedings to suspend, terminate, or refuse to grant or continue federal financial assistance. Additionally, the FTA has the option of referring cases to the Department of Justice (DOJ) for other legal proceedings.

4.2 DATA PREPARATION AND APPROACH TO THE ANALYSIS

For this study, we analyzed the workforce diversity data included in transit agency program plans submitted to the FTA for the 2018/2020 and 2022 reporting cycles. The FTA provided a total of 218 program plans to us after we filed two Freedom of Information Act (FOIA) requests. We analyzed only those reporters that submitted demographic data for all the required characteristics by job category.[4] For program plans where an agency submitted workforce data for multiple years, we analyzed only the most recent year of data. After the data-cleaning and review processes described below, we had a usable set of data for 152 agencies.

To produce a dataset for analysis, we manually transcribed and entered almost all of the data from the 152 program plans into a spreadsheet. Only four agencies submitted both a program plan and an excel file with their utilization data. The other agencies submitted the required workforce demographic data as part of their overall EEO program plans in a single PDF document, making it difficult and time-consuming to assemble the workforce diversity data.

Our dataset captured all data on the sex, race, and ethnicity of employees, disaggregated by the eight required job categories (officials/administrators, professionals, technicians,

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4   For example, a few agencies did not report data for all of the racial/ethnic groups included on the EEO-4 form; they reported data for White and black workers or for White and non-White workers only.

protective service, paraprofessional, administrative support, skilled craft, service-maintenance). This allows for analyses as fine-grained as the numbers of Black vs. White male skilled craft workers or a comparison of White vs. Asian female skilled craft workers.

For each reporter, we added the year of data reported, geographic designations (state, metropolitan area, and FTA region), and agency size. To characterize agency size, we used thresholds based on bus and rail fleet size, an approach recommended by a public transit executive with whom we consulted. Table 4.2 shows the size classification criteria. We used data from the National Transit Database to determine the fleet size for each of the 152 reporting agencies.

Table 4.2 Agency Size Criteria

Agency Size	Criteria
Small	< 101 bus and < 51 rail
Medium	101 - 500 buses and no rail 101 - 250 buses and some rail No bus and 51 - 100 rail
Large	501+ buses and no rail 251+ bus and some rail No buses and 101+ rail

We analyzed the data in two ways. We first present data on the gender and racial/ethnic diversity of transit agency reporters in total and then by the eight job categories.[5] We then refine our analysis by calculating "utilization rates," a comparison of the diversity of an operator's workforce to the diversity of the surrounding region. These rates account for the fact that transit agencies may not be able to recruit workers from some racial-ethnic groups if members of these population groups are not represented in the service area. For example, if a small fraction of the workforce in a region identifies as a particular race, it is likely unrealistic to expect the local transit agency's workforce to have a large proportion of employees of that race. In other words, ideally the demographic composition of the transit agency workforce should reflect the demographic composition of workers in the service area rather than the national proportion of people of different races and ethnicities.

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5   These categories are: officials and managers, professionals, technicians, protective service, paraprofessionals, administrative support, skilled craft workers, and protective service (maintenance) workers.

4.3   EEO PROGRAM DATA QUALITY

Through the process of manually assembling our data set, we were able to assess the quality of the underlying data. A 2007 study of racial and gender diversity in state departments of transportation and in the 50 largest transit agencies had identified concerns with the validity and reliability of EEO-4 data for conducting a comprehensive analysis of workforce diversity (Myers et al., 2007), and we explored whether these issues were still of concern. We did indeed identify concerns similar to those raised by Myers et al (2007). Figure 4.3 summarizes the data quality issues we identified in the program plans, which include missing and inaccurate data and data submitted in formats that do not allow for aggregation.

Table 4.3. EEO Data Quality Problems

Type of problem	Examples
Missing data	• Agencies submit demographic data for the total workforce but do not disaggregate the data by job category • Agencies do not submit data for some required categories of workers (e.g., no data on technicians/paraprofessionals) • The data in the agency program plan is illegible (e.g., the typeface on the PDF was too small to read and expanding the view on the screen reduced resolution so much that the numbers could not be read)
Inaccurate data	• Agencies that provide many functions beyond transit services submit data for all agency employees rather than for transit-related employees only (e.g., a county that operates transit service submits demographic data for all county employees) • Agencies request but cannot require employees to provide information on race, so that data most likely does not accurately represent racial composition of the agency's workforce • Agencies do not identify the year of data reported in the triennial plan • Agencies report data aggregated across multiple years instead of presenting data from the single required year
Data format	• Agencies provide workforce data as percentages rather than raw numbers, making it impossible to aggregate data across agencies or job categories • Agencies submit data for occupational categories different from the standard job-type classifications required by FTA (e.g., agencies present data for bus operators as a separate category instead of including them under the "service-maintenance" category)

4.4 CHARACTERISTICS OF THE TRANSIT AGENCY REPORTERS

In this section, we describe the characteristics of the transit agencies included in our analysis. As we note above, we received usable EEO workforce data from 152 agencies. These agencies represent 151,886 employees and are diverse across multiple characteristics:

- *Geography*: The agencies come from 41 states, all 10 FTA regions, and 108 metropolitan areas. About half of the transit agencies are located in six states: California, Florida, Illinois, Pennsylvania, Texas, and Washington.

- *Data year*: The most common years of data reported were 2019 and 2020 (Figure 4.1).

- *Agency size*: As Figure 4.2 shows, 60% of the agencies are small, 26% are medium, and 14% are large. (See Table 4.2 for agency size classification.) Although the large agencies are only a small proportion of the *agencies* for which we have data, they represent 63% of the individual *employees* for whom we have data.
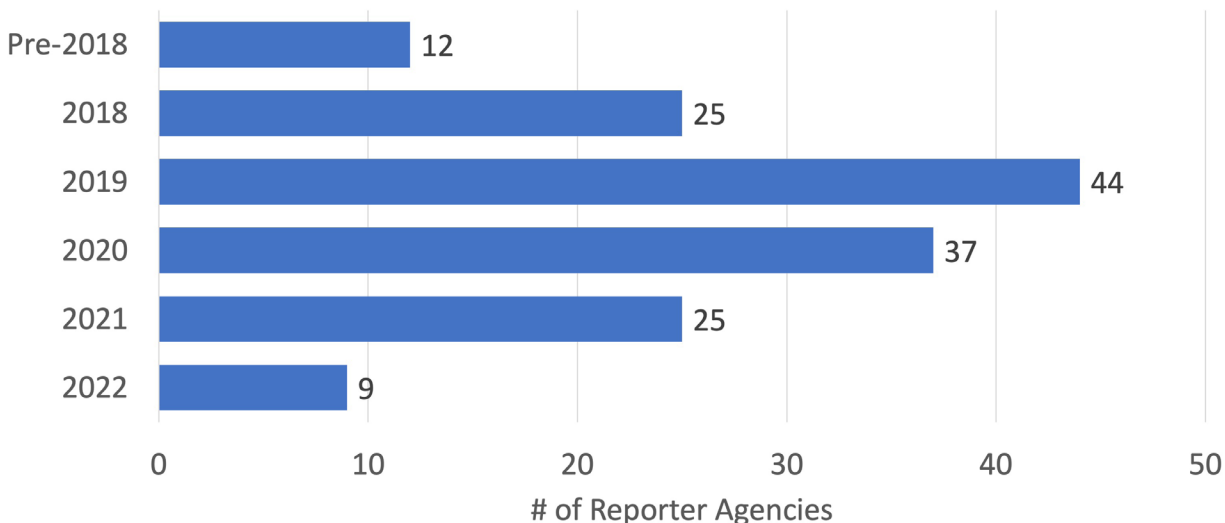

Figure 4.1 Year of Most Recent Data

Source: Authors' analysis of EEO program plan data submitted by transit agencies to the FTA from 2018 - 2022.
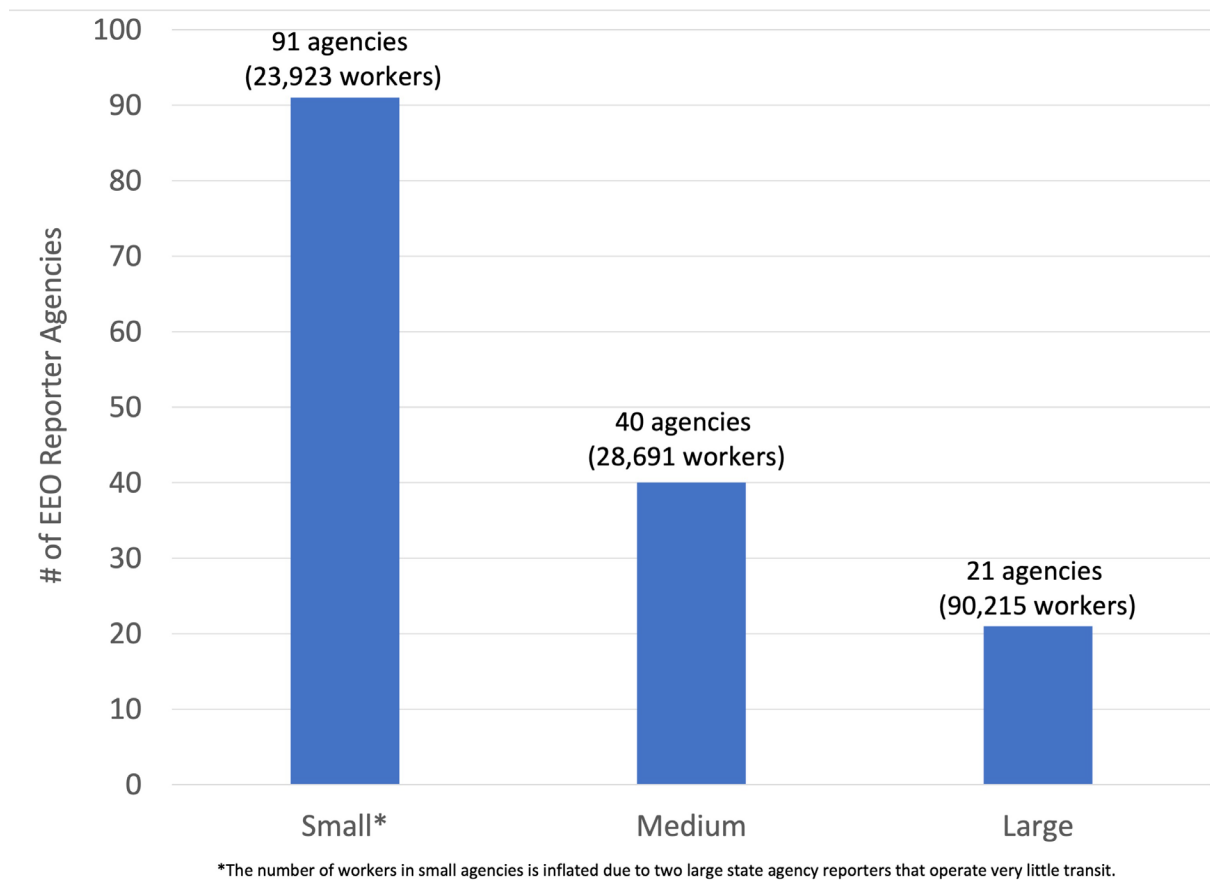
Figure 4.2 Agency Size

Source: Authors' analysis of EEO program plan data submitted by transit agencies to the FTA from 2018 - 2022.

4.5 TRANSIT AGENCY WORKFORCE DIVERSITY

This section presents the results of our analysis of the EEO data submitted by the 152 agencies. We begin by reporting the distribution of workers across job types, which helps to explain the overall gender and racial/ethnic composition of the industry. We then report the percentage of workers by sex, by race, and then by sex and race for each job type. In this analysis, we compare these distributions to the gender and racial composition of all reporters in our data (the top bar in each of the graphs).

As Figure 4.3 shows, about 45 percent of all transit workers are concentrated in service and maintenance jobs, another 19 percent are in skilled craft jobs, and only small percentages of transit workers hold professional, protective service, and administrative jobs. Consequently, the demographic characteristics of the total workforce is heavily influenced by the gender and racial composition of workers in those two job types.
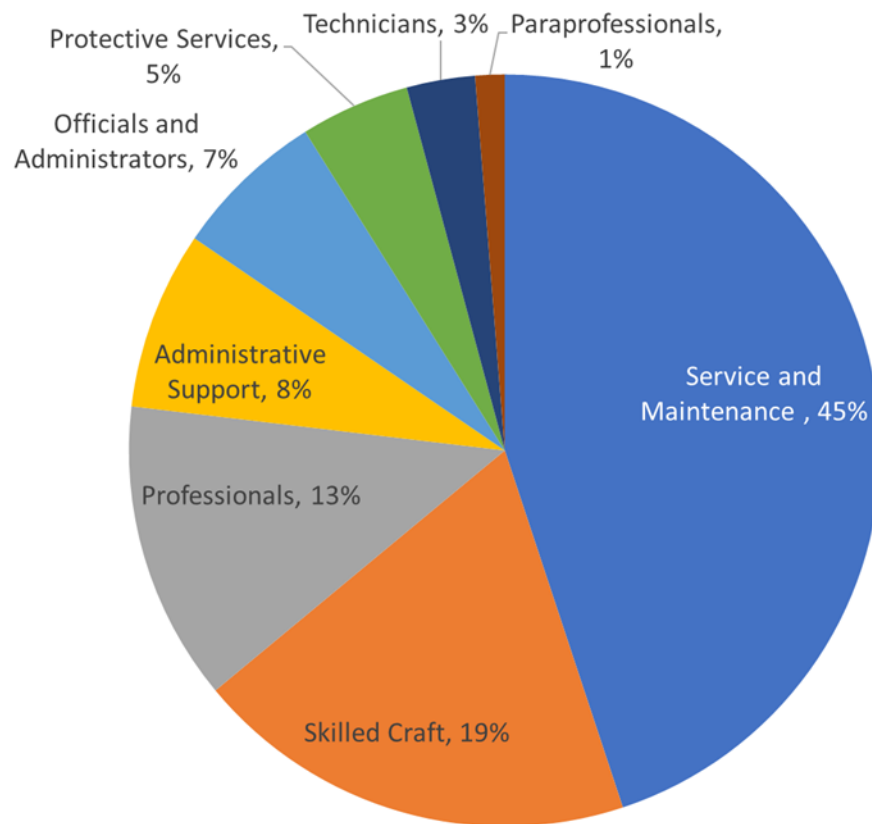
Figure 4.3 Distribution of Transit Employees Across Job Categories

Data Sources: Authors' analysis of EEO program plan data submitted by transit agencies to the FTA from 2018 - 2022.

Gender of the Transit Workforce

Women make up 47 percent of the U.S. workforce (Ruggles et al., 2023); however, almost three quarters (71%) of the transit workers in our data are male (Figure 4.4). Gender segregation by job type explains much of the disparity by gender. For all but one job type (administrative support), men comprise a majority of workers. Men make up more than two-thirds of all officials and administrators, technicians, protective service workers, skilled craft workers, and service and maintenance workers. In the most extreme case of gender imbalance, skilled craft jobs, men are more than eight times as likely as women to hold these positions. Since these craft jobs comprise almost one-fifth of all transit workers (Figure 4.3), this imbalance in a single job category has a significant influence on the overall gender balance of the transit workforce. The only job type where women hold the majority of positions is administrative support work, at 66%. Women are the least well represented among skilled craft workers (5%).
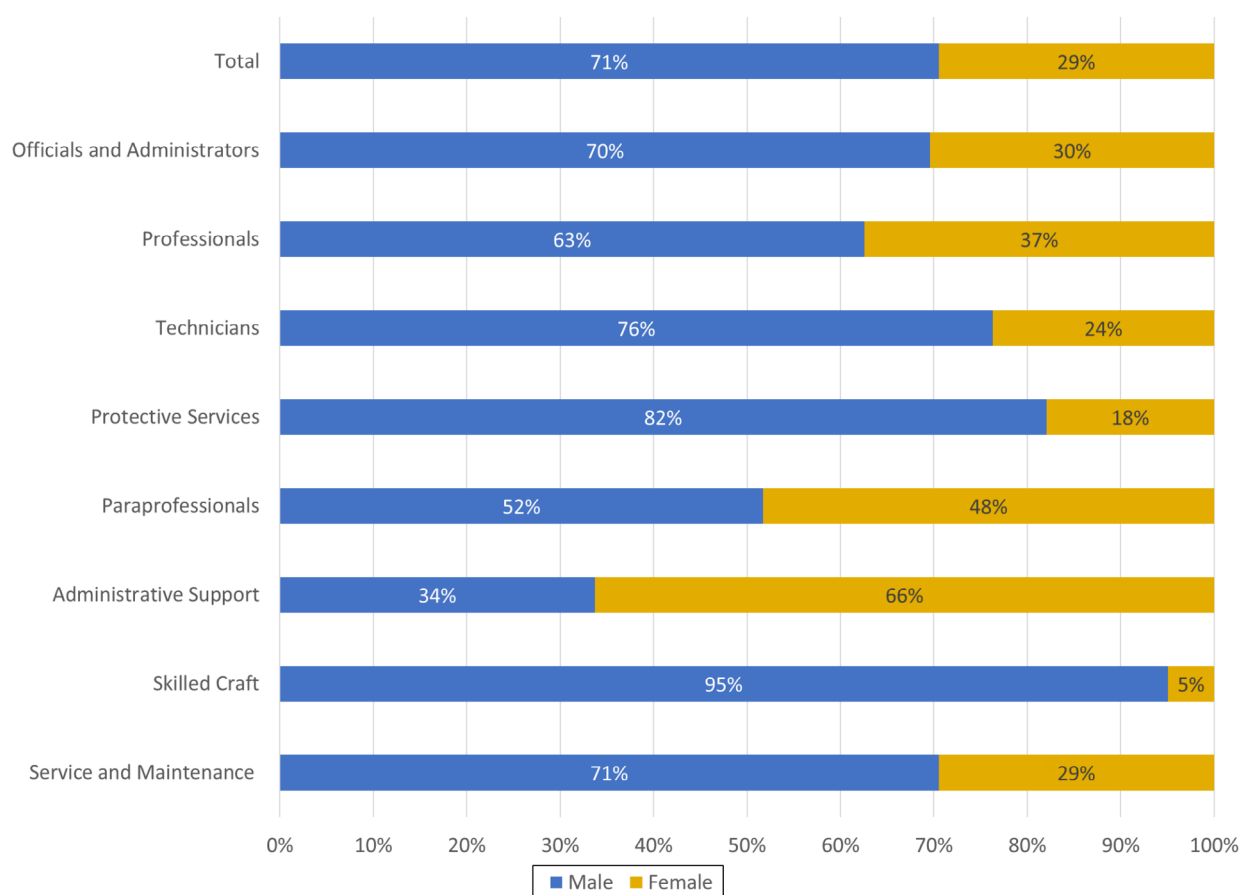

Figure 4.4 Transit Employees by Sex and Job Category
Source: Authors' analysis of EEO program plan data submitted by transit agencies to the FTA from 2018 - 2022.

Race and Ethnicity of the Transit Workforce

With respect to race and ethnicity, 64 percent of the workers in our data are non-White (Figure 4.5). Black workers comprise the largest group of workers (40%). As the graph shows, they are overrepresented in the transit workforce relative to their percentage in the U.S. labor force and relative to their use of public transit. Black workers comprise 12 percent of the U.S. labor force (Ruggles et al., 2022) and, according to data from the 2022 National Household Travel Survey, make 27 percent of all transit trips (Federal Highway Administration, 2023). In contrast, Hispanic workers are underrepresented relative to their percentage in both the U.S. labor force (19%) and relative to their transit use (21%). Finally, while the percentage of Asian transit workers reflects their percentage in the U.S. labor force (6%), it is lower relative to their transit use (11%).

Other category: Other and multiple races (labor force), American Indian/Alaska Native, Native Hawaiian, Pacific Islander, and Mulitracial (NHTS and Transit Reporters)

Figure 4.5 Labor Force, Transit Trips, and Transit Employees by Race

Data Sources: 2022 One-Year American Community Survey (Ruggles et al., 2023); 2022 National Household Travel Survey (Federal Highway Administration, 2023); 2022 Authors' analysis of EEO program plan data submitted by transit agencies to the FTA from 2018 - 2022.

Figure 4.6 shows that people of color comprise the majority of workers in all job types, with the exception of officials/administrators, the job category with some of the highest average wages (See Appendix 5). For this job type, 58% of the workers are White. Black workers are the largest non-White population group across all job categories. There are particularly large proportions of Black workers in service and maintenance jobs (53%) and administrative support jobs (42%). Hispanic workers make up 17% of the overall transit workforce, with the proportion for each job category ranging from 11% (officials/ administrators) to 24% (technicians). Finally, Asian workers make up only 6% of the overall workforce, with the proportion by job type ranging from 4% (service and maintenance) to 12% (professionals).
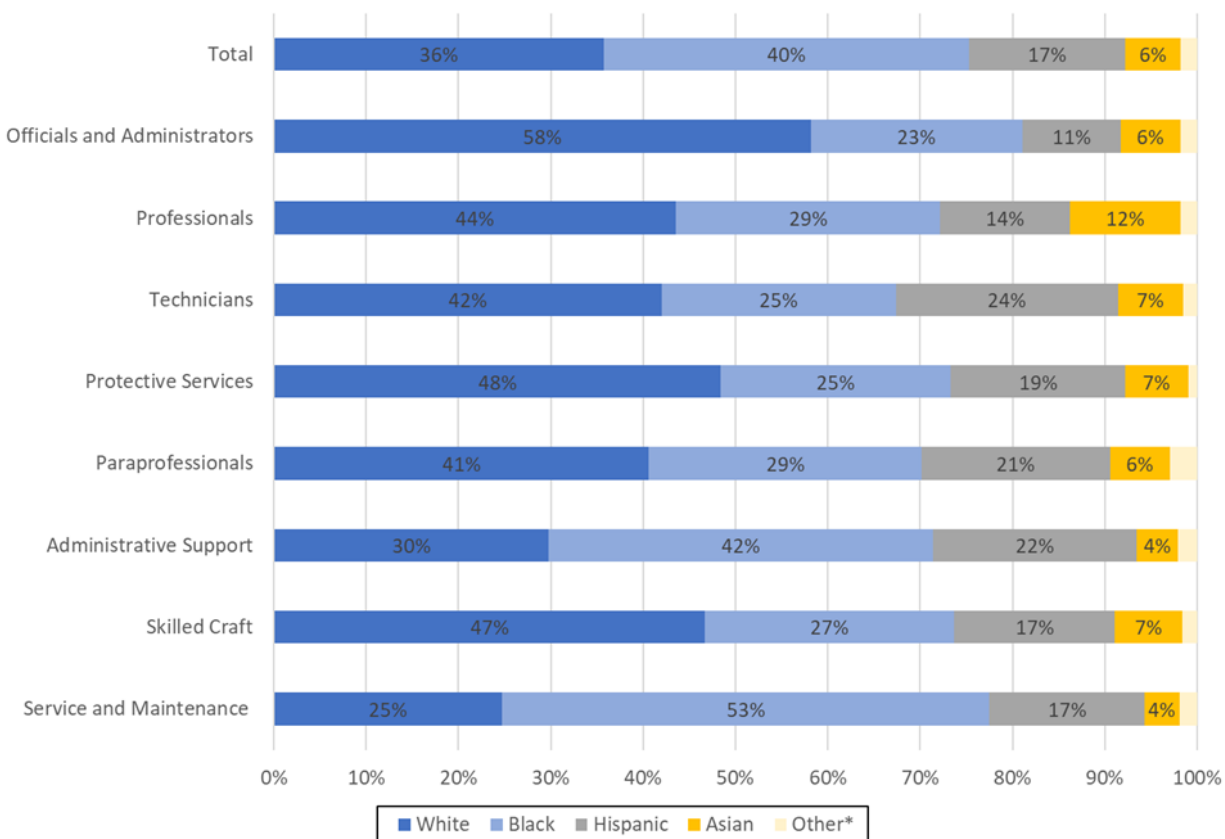
*Other includes American Indian/Alaska Native, Native Hawaiian and other Pacific Islander, and multiracial
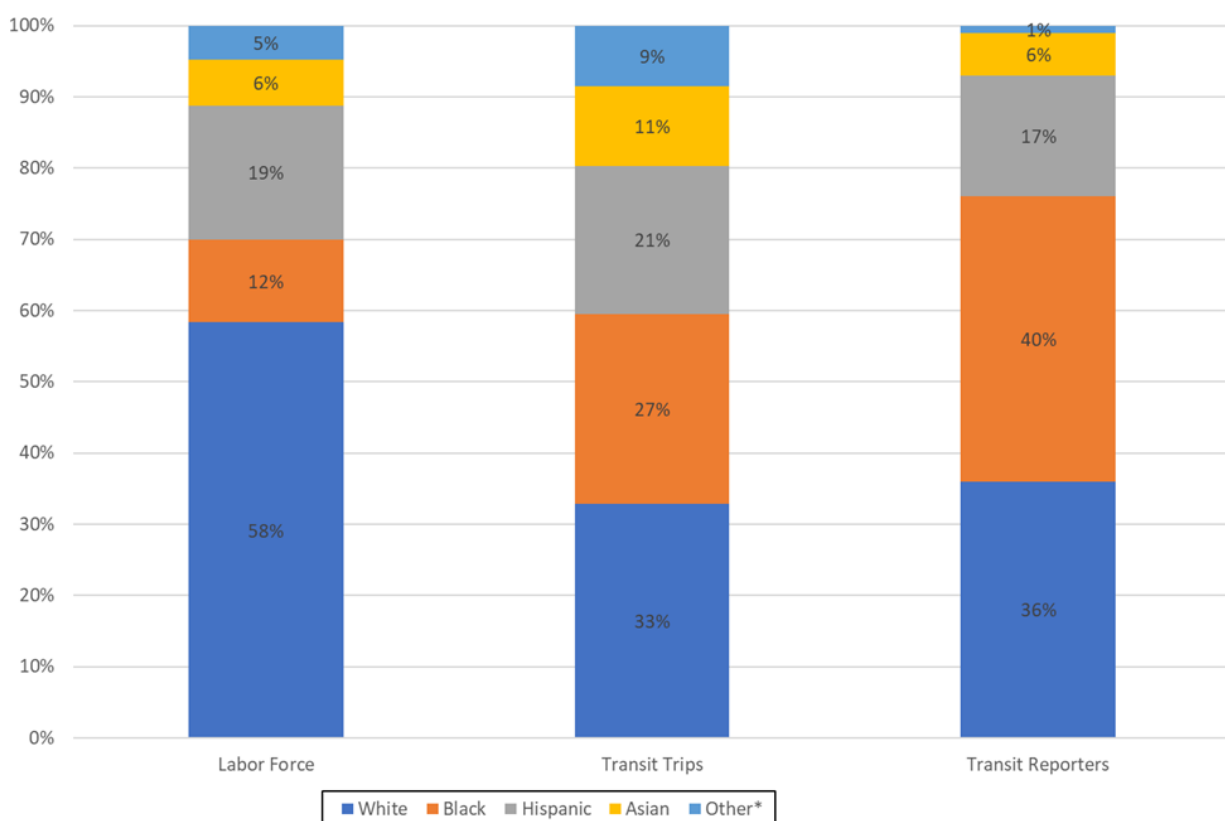
Figure 4.6 Transit Employees by Race, Ethnicity, and Job Category
Data Source: Authors' analysis of EEO program plan data submitted by transit agencies to the FTA from 2018 - 2022.

To summarize, as we note above, relative to the demographic composition of the transit workforce, White workers are overrepresented as officials and administrators but also in skilled craft jobs. Asian workers are overrepresented as professionals, and Black workers are overrepresented in service and maintenance jobs. Black workers are underrepresented across most job categories except service and maintenance.[6] Finally, Hispanic workers are underrepresented as officials and administrators.

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6   In a study from the 1980s, Dye and Renick (1981) found that minorities and women were underrepresented in administrative, professional, and protective city jobs. They attributed this finding to the lack of minority representation on the city council and the size and percentage of the minority population in the city.

Workforce Diversity by Both Gender and Race/Ethnicity

Figure 4.7 shows transit workforce diversity in our data when gender and race/ethnicity are considered together. The race/ethnicity categories used are Black, White, Hispanic, and Other. Unlike earlier analyses, which broke out Asian employees separately, for Figure 4.7 we collapsed data on workers of either "Asian" or "Other" race into a single category. While it would be preferable to analyze Asian and Other race workers separately, there were too few workers represented in each group (for example, female Asian technicians) to make for a meaningful analysis. Similarly, because there were so few people even in the new Asian+Other category, we did not disaggregate the race category by gender (men vs. women).
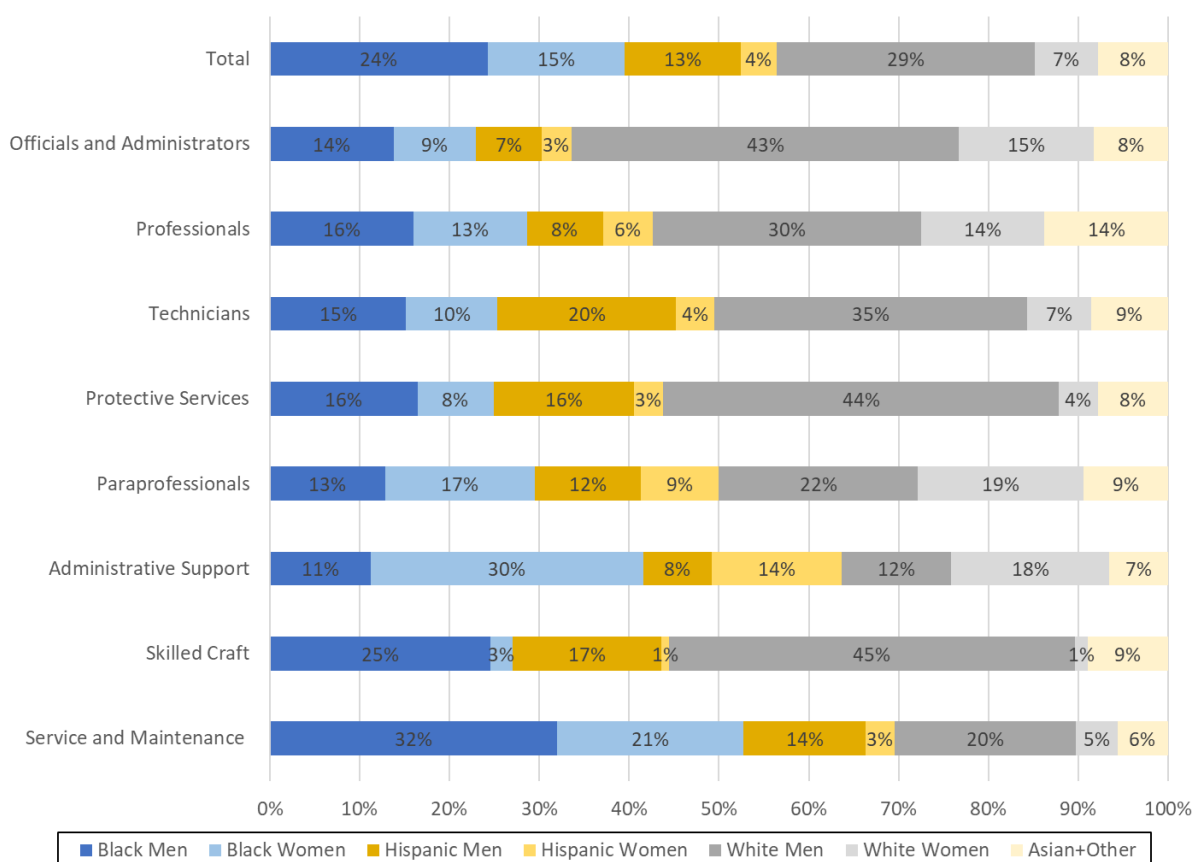
Figure 4.7. Sex and Race/Ethnicity of Transit Workforce, by Job Category

Data Source: Authors' analysis of EEO program plan data submitted by transit agencies to the FTA from 2018 - 2022.

Once again to summarize, most notably, women across all racial and ethnic groups tend to be concentrated in administrative support jobs and (to some extent) as paraprofessionals and are rarely employed in craft jobs. However, race seems to dominate disparities in other job types. Compared to other workers, White workers of both genders are significantly more likely to be officials and administrators. Black workers of both genders are more likely to have service and maintenance jobs compared to other workers. Finally, Black men are underrepresented across the greatest number of job types, in large part because of their significant overrepresentation among service and maintenance workers.

4.6 COMPARISON OF TRANSIT WORKFORCE TO REGIONAL DIVERSITY (UTILIZATION RATES)

Next, we analyze the extent to which agencies are under- or over-utilizing workers relative to the demographic composition of the service area in which they operate. To do this, we draw on the methodology used in Myers et al. (2007) and take the following steps:

1. We draw on our previous analysis of the number of employees (by race, sex) divided by the total number of employees.

    Equation 1 $\dfrac{\# \ of \ transit \ employees_i}{Total \ \# \ of \ transit \ employees}$ where *i* is each racial and sex category

2. We then drew on Census Bureau EEO data for 2014 to 2018 to identify the demographic composition of workers by job type in the metropolitan areas in which reporters are located. The Census Bureau tabulates demographic data for eight job categories included in private sector EEO reports (EEO-1). Transit agencies report data for six of these categories, which we use in our analysis.

3. We use the Census EEO data to calculate the number of available workers using the following formula:

    Equation 2 $\dfrac{\# \ of \ available \ workers_i}{Total \ \# \ of \ available \ workers}$ where *i* is each racial and sex category

    in the metropolitan area

4. Finally, we draw on the previous two formulas to calculate the utilization rates for White, Black, Hispanic, and Asian workers by gender and job type using the following formula:

    Equation 3 $\dfrac{Equation \ 1}{Equation \ 2}$

We report these data in two ways. First, we report aggregate findings, across all transit agencies in our data. Following the ranges used in Myers et al. (2007), percentages greater than 100 signify overutilization, percentages from 80 to 100 signify parity, and percentages lower than 80 signify underutilization.

As Table 4.8 shows utilization rates for the entire workforce. Black men and Black women are overutilized, whereas White women, Hispanic men, Hispanic women, Asian men, and Asian women are largely underutilized. White, Hispanic, and Asian women are underutilized in all six job categories; in contrast, Black women are overutilized in all job categories. The findings for men vary across racial/ethnic groups. Like Black women, Black men are overutilized in all six job types. White men are overutilized in two of the six job categories, as technicians and service workers. Hispanic men are underutilized in four of the six categories: officials and managers, professionals, administrative support workers, and craft workers. Asian men are also underutilized in four job categories, as officials and managers, professionals, technicians, and administrative support workers.

Table 4.8 Utilization Rates of Total Transit Reporter Workforce, by Job Categories

Job Category	White		Black		Hispanic		Asian	
	Male (%)	Female (%)	Male (%)	Female (%)	Male (%)	Female (%)	Male (%)	Female (%)
Total workforce	90	42	409	228	72	22	62	16
Officials and managers	97	72	375	326	36	27	46	30
Professionals	74	57	315	263	62	34	50	32
Technicians	139	42	208	117	118	12	62	10
Administrative support workers	65	48	213	229	29	23	23	14
Craft workers	99	74	418	364	55	22	175	7
Service workers	121	23	456	212	87	17	95	5

NOTE: >100% = overutilization; 80% to 99% = parity; <80% = underutilization
Data sources: EEO transit agency reporters and U.S. Census Bureau.

Table 4.8 presents data on the percentage of agencies that underutilize specific groups of workers by job category. The findings complement those in Table 4.9. White and Black men are underutilized by the fewest agencies across most of the job categories. For example, only 18 percent of reporting agencies showed that White men were underutilized in technical jobs and only 11 percent showed that Black men were underutilized in service jobs. By contrast, a high percentage of agencies had underutilized workers in the other race-gender groups across all job categories.

Table 4.9 Percentage of Transit Agency Reporters Underutilizing[a] Specific Groups of Workers, by Job Category

Job Category	White		Black		Hispanic		Asian		N[b]
	Male (%)	Female (%)	Male (%)	Female (%)	Male (%)	Female (%)	Male (%)	Female (%)	
Officials and managers	35	54	40	50	70	78	81	82	148
Professionals	43	85	42	49	57	70	81	84	140
Technicians	18	96	48	75	49	97	74	98	93
Administrative support workers	62	83	48	35	68	71	87	88	148
Craft workers	37	77	32	74	69	91	65	99	135
Service workers	32	97	11	33	49	98	74	100	128

[a] Utilization rates of less than 80 percent.

[b] The total number (N) of transit agencies differs across the six job type categories since some reporting agencies did not report employees in all job categories.

Data sources: EEO transit agency reporters and U.S. Census Bureau.

4.7 CONCLUSION

The transit industry is characterized by high concentrations of service and maintenance workers (such as vehicle operators) and skilled-craft workers (such as mechanics), but significantly lower concentrations of professional workers (e.g., engineers or lawyers).

The transit workforce is male-dominated; almost three-quarters of workers are male. Female employees are present in higher numbers than their male counterparts in only administrative-support occupations. While more than six out of ten transit workers are non-White, these workers are overrepresented in many of the lower-paying categories and occupations within them (Appendix 4). In contrast, White workers are overrepresented in leadership positions (as officials and administrators), and White and Asian workers are overrepresented in the more-highly paid professional and skill-craft occupations.

The EEO program provides important data on the demographic composition of the public transit workforce. However, the quality of the data suffers from missing, incomplete, and inconsistent reporting. Moreover, the submission of agency workforce data as part of larger PDF reports rather than in a table format makes it difficult for researchers to work with the data, including aggregating the data across agencies and/or comparing trends over time. These issues are not new and have been raised by previous researchers.

V. SURVEY METHODS AND FINDINGS

To dig further into workforce diversity issues in transit agencies, we developed and distributed a survey to public transportation agencies across the United States. The survey was designed to solicit staff insights on their workforce diversity and learn about diversity, equity, and inclusion (DEI) practices. More specifically, the survey asked questions about baseline information regarding diversity in public transit agencies, DEI data collection practices, and existing and proposed DEI strategies. The survey included a mix of close-ended (multiple choice) and open-ended questions. (See Appendix 5 for a copy of the survey instrument.) The following parts of this chapter describe the survey methodology and results.

5.1   SURVEY METHODOLOGY

The survey included 15 primary questions. Three open-ended questions asked respondents to list any successful recruitment and retention strategies at their agencies and to share their perceptions of the types of policies or strategies that would be most effective in helping the transit industry as a whole improve workforce DEI over the next 10 years. Other closed-answer survey questions asked respondents how their agencies collect and use workforce diversity data, perceived over/underrepresentation of specific population groups in the agency workforce, the agency's existing DEI resources, perceived barriers to workforce diversification, and strategies used for staff recruitment, hiring, retention, and promotion.

The survey specifically asked respondents for their consent to participate in the research. Further, we informed respondents that while we would record the name of their transit agency for administrative purposes, their responses would remain confidential and disassociated from their transit agency's name.

The survey was programmed into Qualtrics software for respondents to complete online. In February 2023, we sent the survey to the Human Resources Directors of 544 public transit agencies that are members of the American Public Transportation Association (APTA). These agencies represented a subset of the 1,500 public and private sector members of APTA. Following this initial outreach, APTA and the researchers sent three follow-up messages to increase the survey response rate. These included the following invitations:

- A general reminder to the original 544 individuals on the APTA mailing list.

- An initial invitation to the 50 largest public transportation agencies as of 2020 if they were not already included in the initial APTA mailing list.

- A targeted reminder to agencies on both lists (original mailing list *and* largest 50 transit agencies).

The survey opened for responses in early March 2023 and closed at the end of April 2023.

We received 152 responses, and after cleaning the data (e.g., removing non-transit agency responses and agencies that opened but did not complete the survey), 92 full responses remained. These 92 individual responses came from 68 unique public transportation agencies (Appendix 6), 27 of which were from the largest 50 public transportation agencies.

The 92 survey respondents reported job titles in human resources (36), DEI-based roles such as EEO officers or Directors of Belonging (22), and senior management positions such as CEOs or General Managers (10). Twenty-four survey respondents did not report their job title.

In our analysis, we analyze some questions by individual respondent and others by agency. For questions that were more factual in nature, such as whether the agency is governed by a Board of Directors, we used the individual agency as the unit of analysis, with a sample size of 68 agencies. For questions that were more subjective/perceptual in nature, such as evaluations of how useful different recruitment and hiring strategies had been for increasing diversity, the unit of analysis is the individual respondent, with a sample size of 92. We analyzed the open-ended questions using qualitative methods. We created thematic categories based on those derived from the literature review and other themes that emerged from the survey responses themselves. Below, we present our survey findings.

5.2   SURVEY FINDINGS

The first section of the survey asked respondents whether they collect data on the diversity of their workforce, and, if they do, how they use these data (Figure 5.1). Almost all the responding agencies (67 out of 68) collect these data. The most common uses of the staff diversity data were to meet FTA's EEO reporting requirements (82%) and DEI goal assessment (81%). The least common uses of the data were for recruiting or informing board members and community stakeholders, but even for these, more half of the agencies reporting using the data.

Figure 5.1 Uses for Workforce Diversity Data (% of agencies; N = 68)
Source: Authors' survey.

As we noted previously, the EEO program requires transit agencies to report their workforce data by sex and race/ethnicity. However, we were interested in whether transit agencies also collect data on other workforce characteristics. Figure 5.2 shows the agency responses to this question. As expected, because of FTA/EEO data reporting requirements, the most common type of staff diversity data collected by the 68 agencies is for race/ethnicity (97%) and gender (93%). However, many transit agencies also collected data on other workforce characteristics such as veteran status (85%), criminal record (40%), immigration status (32%), and gender expression/identity (24%). Transit agencies were least likely to collect data on the housing status (sheltered or unsheltered) of their employees. Only one of the 68 agencies collected this information.
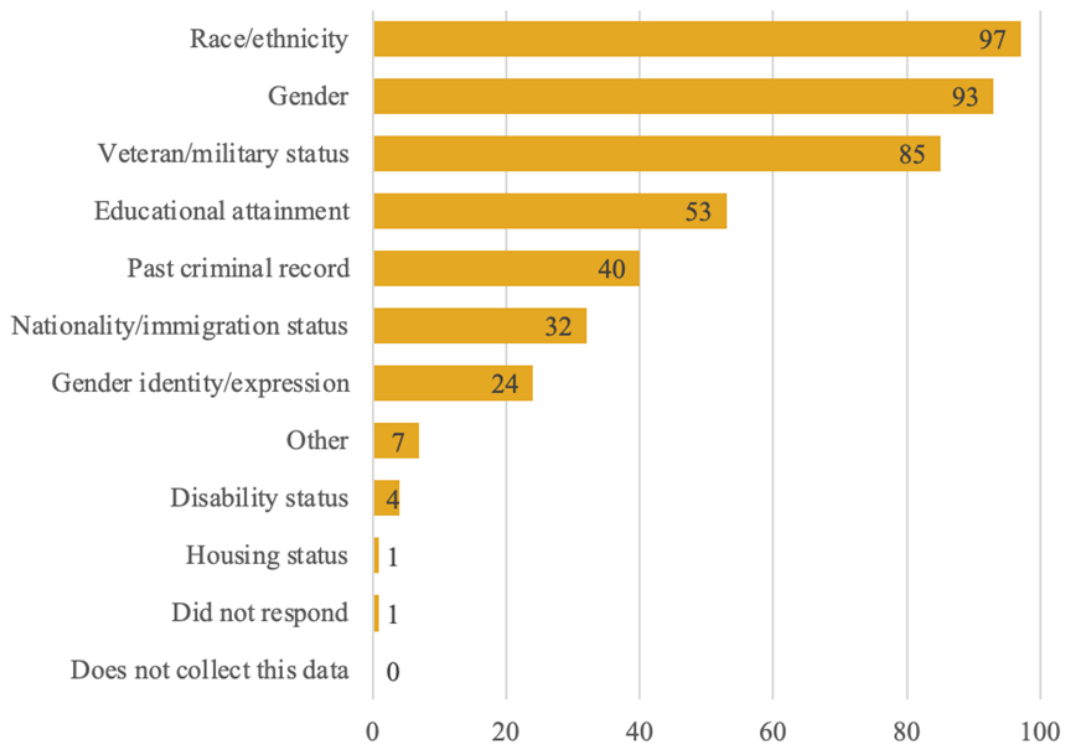
Figure 5.2 Types of Staff Diversity Data Collected (% of agencies; N=68)

Source: Authors' survey.

When asked if workforce diversity at their agency had increased over time (Figure 5.3), 13% of the survey respondents thought that diversity had increased a lot, 37% thought diversity had increased a little, and 20% of respondents reported that it remained the same. Only one respondent thought that diversity had *decreased* a lot in the agency. Finally, 30% of respondents either responded "I don't know" or skipped the question.

Figure 5.3 Perception of Change in Workforce Diversity Over the Last Few Years (% of respondents; N=92)

Source: Authors' survey.

We asked respondents whether they thought certain demographic groups were under- or over- represented among their agency's senior managers, compared to the characteristics of the labor force of the larger metropolitan area. Table 5.1 summa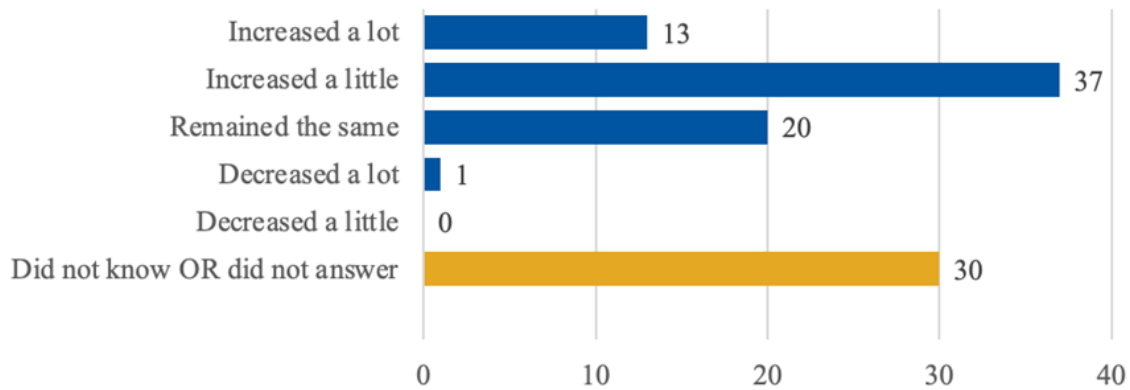rizes the responses to this question. Respondents reported that non-Hispanic White employees were more likely to be overrepresented in leadership positions, while persons of color were likely to be underrepresented (Black/African-American, Asian/Asian-American, Hispanic/ Latino, and American Indians, Alaska Natives, Native Hawaiians, and other Pacific Islanders). Regarding the presence of women in senior leadership positions, about 48% of the respondents reported that women were similarly represented as men, while 27% reported women were under-represented, and only about 11% reported women were over-represented. Although the survey did not clarify whether respondents based their opinion on their agencies' data collection or solely on their own perceptions, the results are similar to those found in the larger literature on this topic (National RTAP, 2020; Rouhanizadeh and Kermanshachi, 2021; Washington et al, 2011).

Table 5.1 Perceived Diversity of Agency's Senior Management Compared to the Regional Population Leadership Positions (% of respondents; N = 92)

Groups	Under-represented	About the same	Over-represented	I don't know	Did not respond
Women	27	48	11	7	8
Black/ African- American	43	35	8	7	8
Asian/ Asian-American	60	23	1	9	8
Hispanic/Latino	59	26	1	7	8
American Indian, Alaska Native, Native Hawaiian, or other Pacific Islander	65	14	1	11	9
White, Non-Hispanic	9	33	41	8	10

Source: Authors' survey. *Note*: Shaded cells show the highest frequency in each row

We also asked respondents whether their agency is governed by a board of directors and found that 91% of the agencies reported having such a board. Among agencies with boards of directors, we asked whether they believed that particular groups were under/ over represented on this board, compared to the population of the larger metropolitan area. Table 5.2 presents the responses to this question. The majority of respondents believed that their board overrepresented non-Hispanic White members and underrepresented Black/African-American, Asian/Asian-American, Hispanic/Latino, and American Indians, Alaska Natives, Native Hawaiians, and other Pacific Islanders. Regarding gender, 39% of respondents thought that women and men are equally represented on their board of directors, 23% reported that women are underrepresented, and 7% thought that women are overrepresented. These results are similar to the findings from other studies (National RTAP, 2020; Rouhanizadeh and Kermanshachi, 2021; Washington et al, 2011).

Table 5.2 Representation of Different Gender and Race/Ethnicity Groups on Agency Board of Directors (% of respondents; N = 92)

Groups	Under-represented	About the same	Over-represented	I don't know	Did not respond
Women	23	39	7	10	22
Black/ African American	42	22	3	13	20
Asian/ Asian-American	53	12	1	13	21
Hispanic/Latino	46	21	1	13	20
American Indian, Alaska Native, Native Hawaiian, or other Pacific Islander	54	8	0	18	20
White, Non-Hispanic	1	30	36	12	21

Source: Authors' survey. *Note:* Shaded cells show the highest frequency in each category.

Another question asked respondents what DEI program resources are available at their transit agencies (Figure 5.4). The most common response was support for DEI programs from the part of executive staff, with 99% indicating that they have such support. Following closely behind is data collection on diversity indicators (96%). Once again, this finding is likely due to FTA's EEO reporting requirements. The resources least likely to be available are employee climate surveys and annual DEI funding allocation. However, even these least common resources were reported as available by more than half of all agencies in our sample.
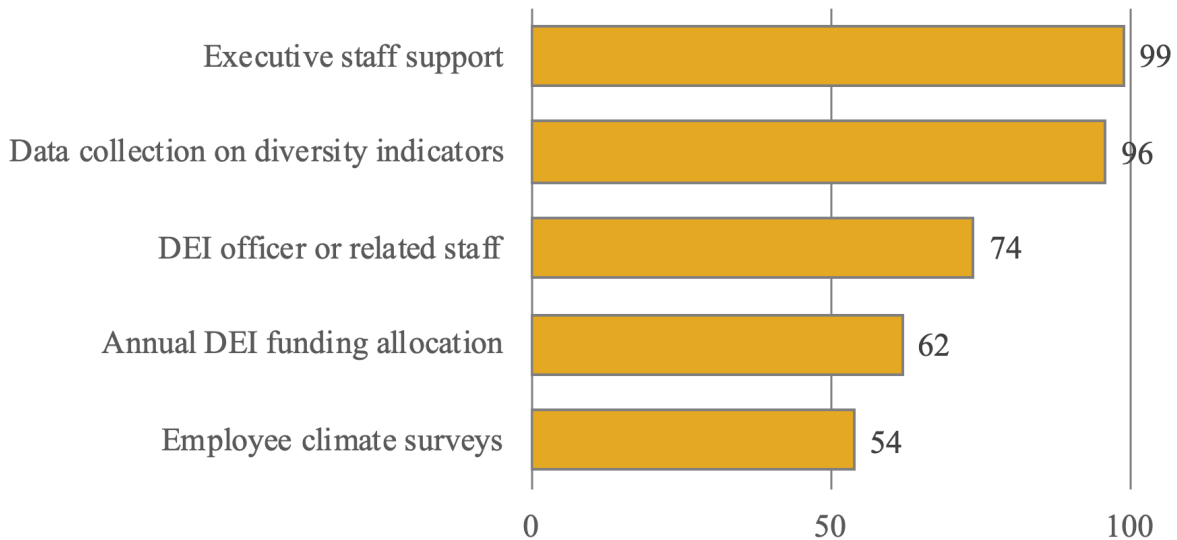

Figure 5.4 Existing DEI Program Resources (% of agencies; N=68)

Source: Authors' survey.

We asked respondents to identify the usefulness of DEI recruitment and hiring strategies (Figure 5.5). Respondents who answered this question viewed diversity-friendly job applications and interview processes as the most useful strategy. A majority of respondents found that advertising job opportunities using social media was somewhat useful, but that advertising job opportunities using print media was not useful. Additionally, most respondents also reported that they had not tried employing external DEI consultants as a recruitment and hiring strategy to promote DEI.
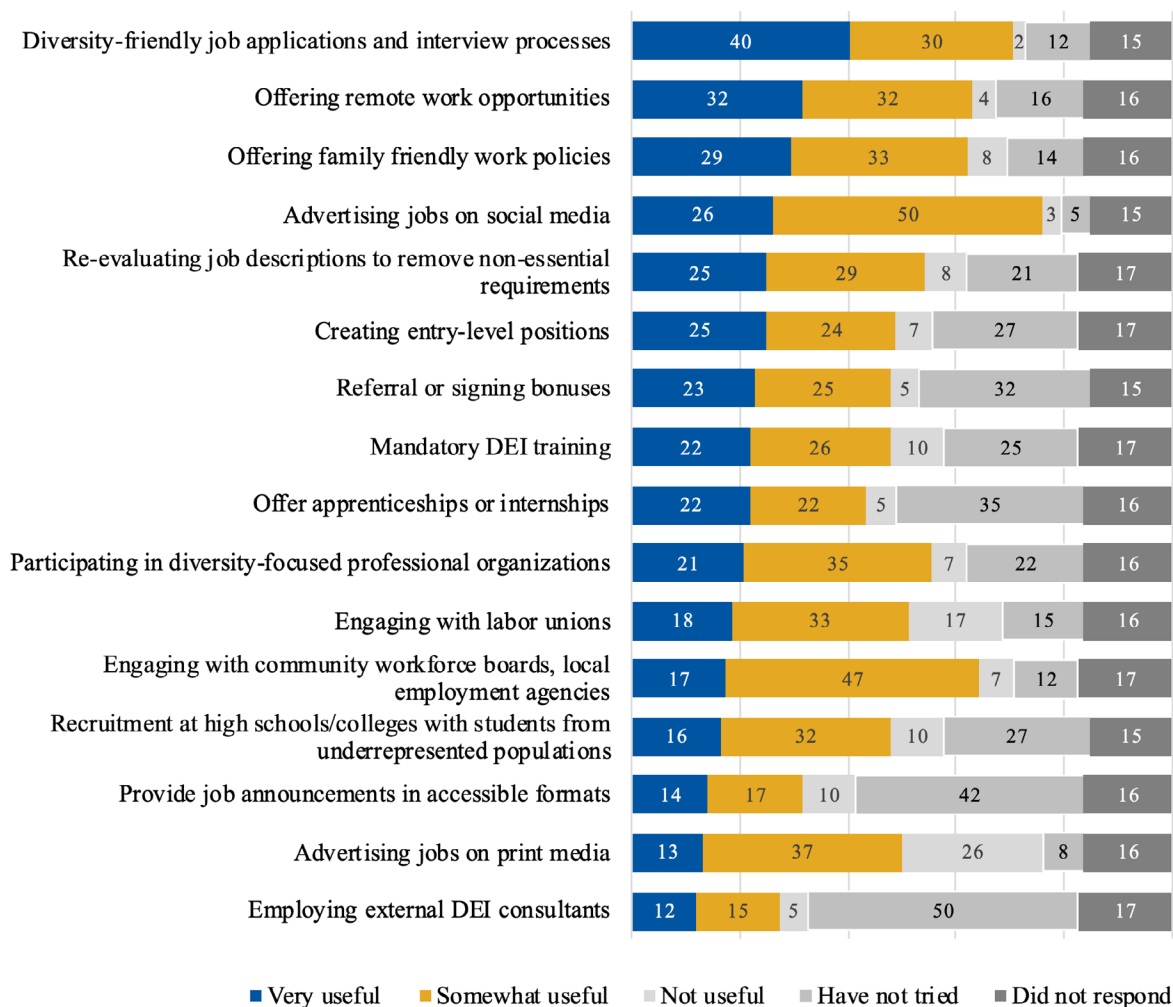
Figure 5.5 Perceived Usefulness of DEI Recruitment Strategies (% of respondents; N= 92)

Source: Authors' survey.

We asked a similar question about retention and promotion strategies (Figure 5.6). Those who responded to this question reported as the most useful strategy the facilitation of ongoing skills building and career development. In contrast, respondents reported that engaging with labor unions was not as useful. As with the previous question, most respondents reported that they had not tried engaging with external DEI consultants as a retention and promotion strategy to advance DEI.
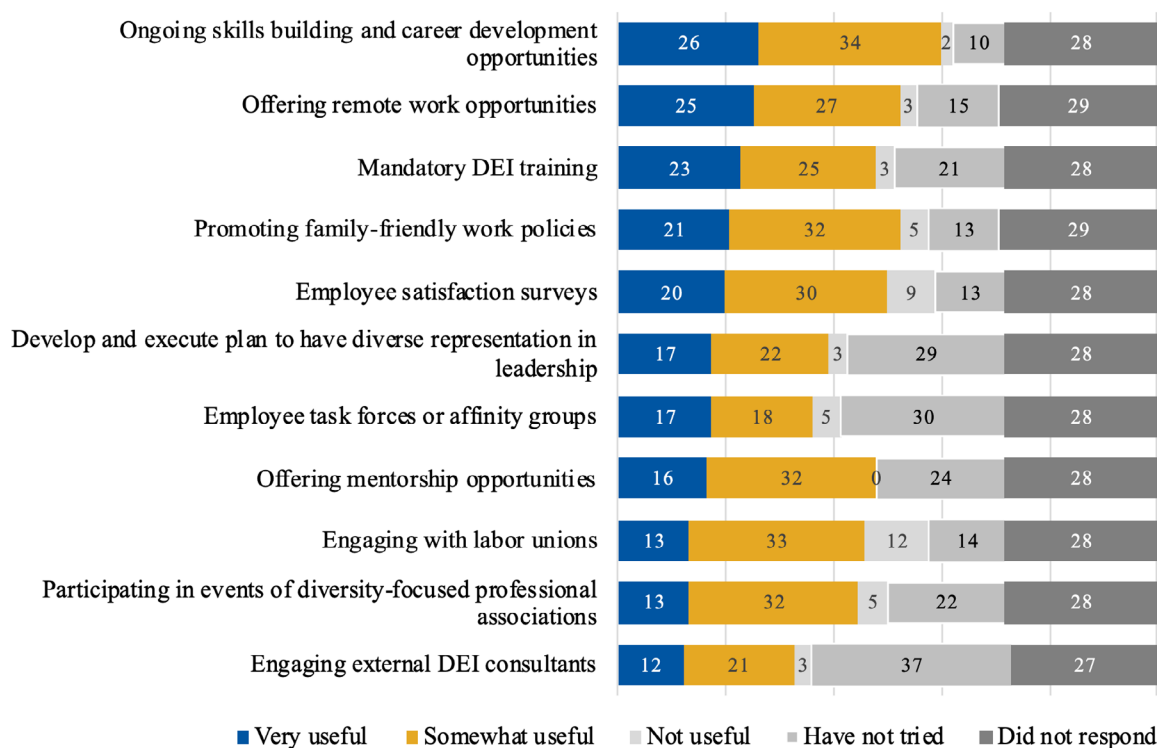
Figure 5.6 Perceived Usefulness of DEI Retention and Promotion Strategies (% of respondents; N= 92)

Source: Authors' survey.

Drawing from our literature review, we identified a set of strategies that agencies may use to promote workforce diversity and asked respondents to indicate the perceived helpfulness of these strategies in promoting workforce diversity. We summarize their responses in Figure 5.7. Respondents who answered this question listed as the most helpful approaches having additional staff support for DEI programs, having a more diverse pool of applicants, and expanded professional development opportunities for current staff.
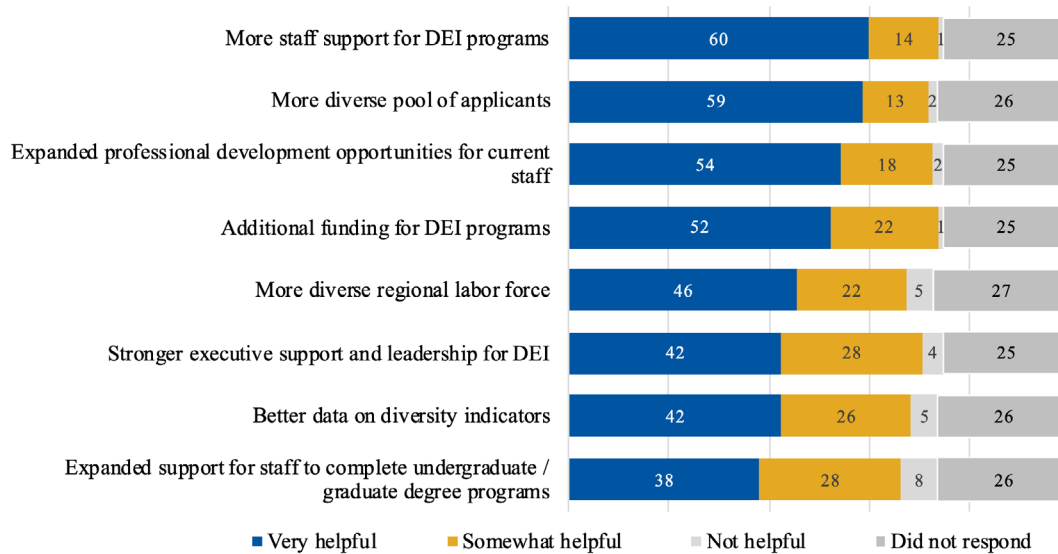

Figure 5.7 Perceived Helpfulness of DEI Strategies (% of respondents; N= 92)

Source: Authors' survey.

The survey also asked agencies what new DEI strategies, if any, they were planning to adopt in the coming decade. Forty-six respondents wrote in one or more answers to this open-ended question, and we coded these according to strategies identified in the literature (Figure 5.8). The most commonly strategy was efforts to improve work culture, such as implementing affinity groups, task forces, or employee resource groups. Some agencies are also planning to adjust their hiring and recruitment practices, with the goal of reaching out to less represented groups, engaging with school and community partnerships, and increasing accessibility within the job application and interview process. Eight agencies also intended to hire DEI consultants and advisors to increase their organizational capacity to engage and focus on DEI strategies, as well as to train existing staff. The "Other" category in this figure represents responses that do not cleanly fall into one of the categories identified in the literature. Many of the responses categorized as "other" related to making changes through strategic planning processes.
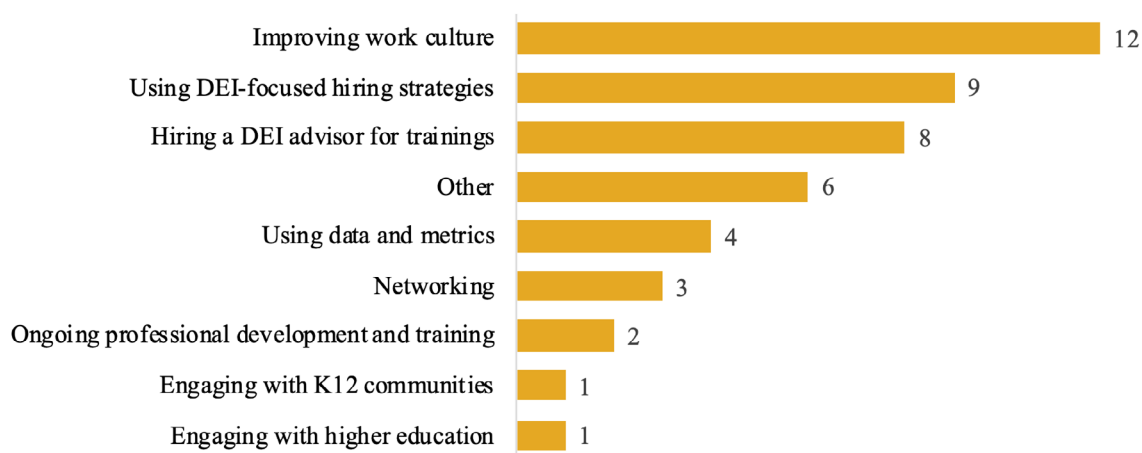
Figure 5.8 DEI Responses Currently Being Planned (# of respondents; N=92)
Source: Authors' survey.

Lastly, we asked agencies which strategies they perceive to be most helpful in advancing workforce DEI in upcoming years. Again, we compared and coded the responses using categories that we had identified in the larger workforce diversity literature. As Figure 5.9 shows, the most common responses were "Other," meaning that the reviewed literature did not readily identify these as strategies for transit workforce development and DEI. Two common responses in the "Other" category related to strategic planning processes and getting more state/federal funding for DEI efforts. One response described concern that DEI work is being rolled back in some states and/or nation-wide.

Figure 5.9 Policies and Strategies That Respondents Believe Would Increase Workforce Diversity (# of respondents; N=92)

* Includes incorporating DEI in strategic and succession planning, shared resources and funding, and one response described concern that DEI work is being rolled back in some states and/or nation-wide.
Source: Authors' survey.

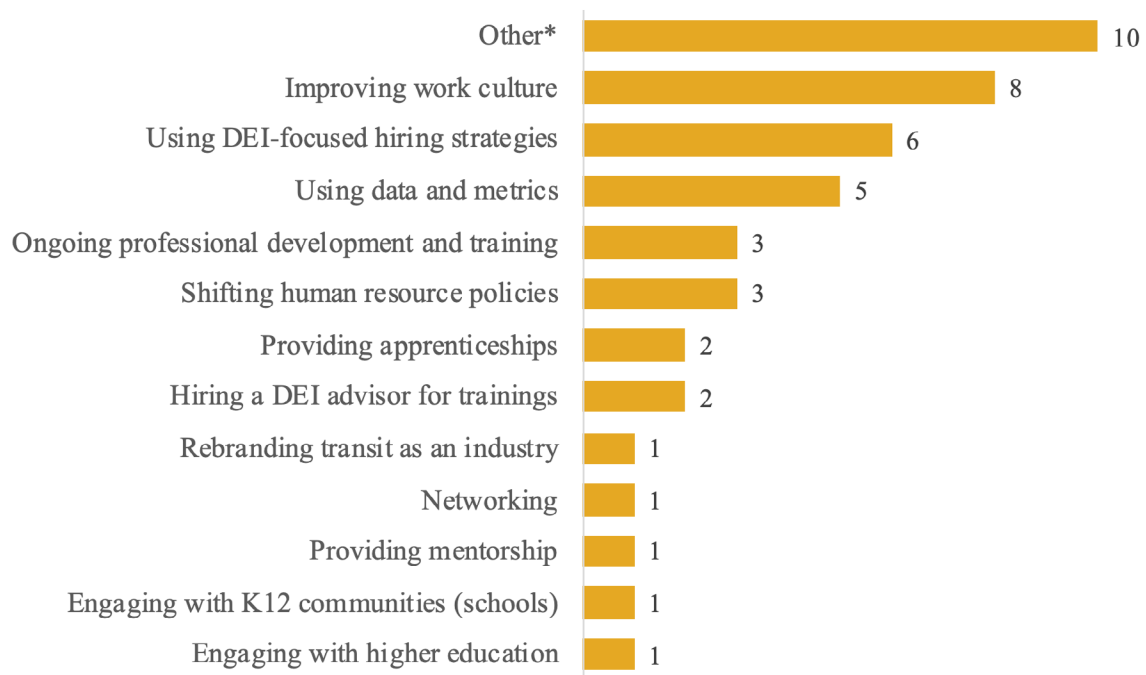Finally, for the agencies required to submit EEO data to the FTA, we asked respondents how easy it would be to submit their data either using an online form or in a spreadsheet. As Figure 5.10 shows, the majority of respondents reported that it would be easy to submit their data in a spreadsheet (67%) or as part of an online form (62%). Most of the others—around one-third of respondents—skipped the question.
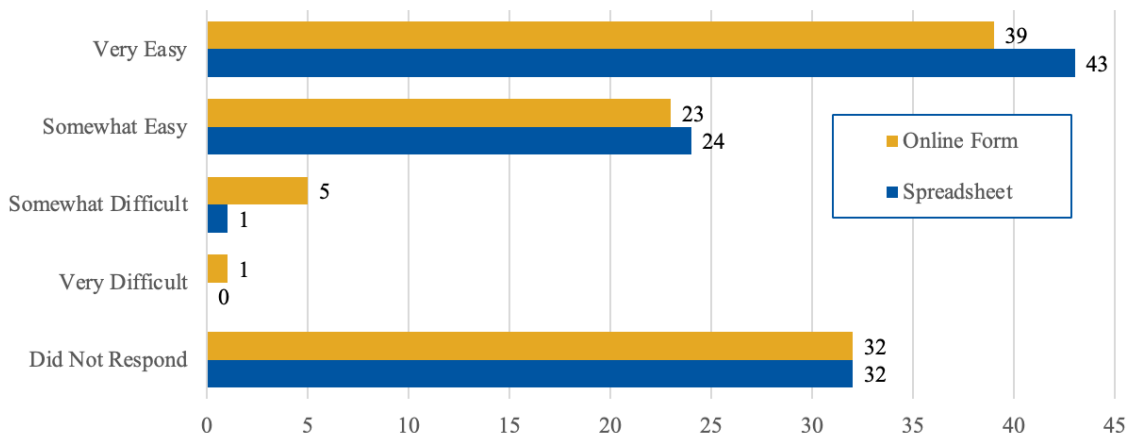
Figure 5.10 Assessment of How Easy it Would be to Submit EEO Workforce Data in a Spreadsheet or Online Form (% of respondents; N = 92)

Source: Authors' survey.

5.3 CONCLUSION

Our survey showed that the great majority of surveyed transit agencies regularly collect DEI data, as mandated by the FTA, and use them for a variety of purposes such as to help assess DEI goals and for recruitment and promotion efforts. In addition to the required data on workforce gender and race/ethnicity characteristics, the majority of agencies also collect data on the veteran status and educational attainment of their employees.

On the positive side, half of the survey respondents reported that their agency's workforce diversity has increased over the last few years, while only one person said it has decreased. Surprisingly, 22% of respondents did not respond to this question at all. Consistent to our findings from the analysis of EEO reporters, respondents reported that White employees are overrepresented in leadership positions.

Survey respondents reported that more staff support for DEI, particularly among leaders in the organization, as well as efforts to diversify the applicant pool, could go a long way toward increasing workforce diversity in their agency.

VI. CONCLUSION

6.1 SUMMARY OF FINDINGS

Through the employment of five distinct research tasks, this study aimed to identify the status of gender and race/ethnicity workforce diversity in the transit industry. A second aim was to identify the challenges that the industry is facing in achieving a highly diverse workforce and possible ways to address these challenges.

A comprehensive review of the scholarly and professional literature on the topic of workforce diversity found that women and some non-White workers (especially Black and Latino) continue to remain underrepresented in managerial and high-paid leadership posts in the transit industry, while they are significantly overrepresented in frontline staff and operator positions. According to the literature, there are a number of factors behind this inequitable representation of employees of different genders and race/ethnicity characteristics across the job spectrum. These include 1) inadequate allocation of resources to DEI training and capacity building; 2) workplace culture and practices for some specific occupations in the transit industry that have been historically occupied by men, and 3) incomplete data on workforce diversity along with a general lack of evaluation of such data that hinders DEI goals in decision-making. The literature discusses five strategies that can help recruit and retain a diverse workforce: 1) intensifying outreach to high-schools and colleges with high proportions of minority students; 2) incorporating diversity goals during employee recruitment, 3) providing networking opportunities and mentorship to employees, 4) creating inclusive work cultures and policies, and 5) intentionally establishing internal DEI practices.

A review of the websites of the 50 largest transit operators concluded that most provided little public information on their workforce diversity programs and progress. After a thorough search of each agency's website, we found that 41 agencies provided a formal statement that they are an equal-opportunity employer. About half of the agencies' websites provided information on the strategies and programs the agency uses to achieve workforce DEI goals, such as workforce recruitment strategies designed to reach non-White potential employees. One quarter of agencies (26%) provided employee demographic data on their websites, but even among these agencies, data was reported in very inconsistent formats. A very small number of agencies (12%) posted information documenting their progress toward achieving DEI goals.

Our analysis of public transit agency Equal Employment Opportunity (EEO) data from 152 transit agencies from the last reporting cycles (2018, 2020, and 2022) showed that, consistent with the findings of previous studies, the majority of transit employees are male, with female workers overrepresented only in administrative-support occupations. Black workers are overrepresented in the transit industry relative to other sectors, but they are highly concentrated in lower-paying service and maintenance jobs. At the same time, White employees are overrepresented in leadership positions, and White and Asian employees are overrepresented in the more-highly paid professional and skill-craft occupations. We also found that workforce demographic data reported to the FTA through EEO plans had inconsistent data quality and, in some cases, incomplete reporting.

Our analysis of 92 individual responses from a *survey sent to the human resources personnel of transit agencies* that are members of APTA showed that these agencies regularly collect the FTA-mandated DEI data on employee gender and race/ethnicity characteristics. The respondents reported making good use of these data to promote DEI goals. Around half of respondents indicated that their agencies had increased workforce diversity over the last few years, while one fifth reported no significant changes, and only one agency reported a decrease in its workforce diversity. Surprisingly, however, almost a third of the respondents (30%) did not answer the question or said they did not know. Consistent with the findings from the analysis of EEO program plans, the survey also indicated that White employees remain overrepresented in managerial positions at their agency. Survey respondents felt that for DEI goals to advance at their agency, they need more dedicated DEI funding from state and federal sources, an improvement of the overall work culture to be more inclusive of all employees, and hiring strategies with explicit DEI goals.

Finally, *our interviews with twelve experts* in transit workforce diversity research, management, and advocacy helped us to interpret the findings from the other research tasks and develop recommended actions for the industry. (See Appendix A for details about the interviews.)

6.2 STUDY LIMITATIONS

Our study provides baseline data on transit workforce diversity, drawing information from a large and diverse group of agencies. However, there are significant limitations to the data we had available. First, the EEO analysis does not include all transit agencies, but rather only a subset of agencies that were required to submit reports and data to the FTA. Second, analysis of transit agency workforce diversity would be strengthened by access to and analysis of longitudinal data—data that captures changes in the demographics of the transit workforce over time. Finally, while we surveyed transit agency staff to elicit their opinions on the types of strategies that are effective in increasing DEI, staff impressions ought to be validated with research measuring the effectiveness of specific interventions on diversity outcomes.

6.3 RECOMMENDATIONS FOR TRANSIT AGENCIES, FTA, AND PARTNER ORGANIZATIONS

We conclude the report by offering recommendations for transit agencies, the Federal Transit Administration, and other organizations interested in furthering a more diverse workforce. The first set of recommendations focuses on strengthening industry-wide practices, while the second set focuses on improving data collection and analysis. These recommendations draw heavily on what we learned from the interviews.

Now is an Optimal Time to Engage in Programs to Improve Diversity

Recent changes within the transit industry have created an unusually good opportunity for operators to successfully improve their workforce diversity. First, and most importantly, in the past few years, transit agencies have faced extreme staffing shortages due to increasing resignations and fewer applicants (American Public Transportation Association, 2023).

Operator staff may therefore be unusually invested in experimenting with new approaches to both recruitment and retention. Making jobs more appealing to underrepresented groups offers an important strategy to improve hiring and retention. Second, the transit sector is evolving due to new technological advances, creating the need for new skill sets that may better appeal to underrepresented groups. For example, as agencies replace internal-combustion engine buses with electric ones, there may be less need for skilled mechanics and more need for staff with advanced IT skills.

Tools for Building and Maintaining a Diverse Workforce

The literature review, survey findings, and interview findings all suggest promising approaches to improve workforce diversity in the transit industry. We draw from them to offer the following recommendations.

- *Foster strong executive-level support for diversity programs.* The support of transit agency boards and top administrators sets the tone and is critical for any agency's DEI efforts.

- *Dedicate more funding to DEI goals.* Our survey found that there was a particularly strong desire among survey respondents for more staff and funding to implement DEI programs and help at identifying new recruiting strategies that may generate a more diverse pool of applicants. Transit agencies hope to see dedicated funding and/or technical staff support from state or federal agencies to help them identify and implement the most promising recruitment and retention strategies.

- *Develop in-house agency staff expertise in DEI work*, rather than bringing in external consultants who complete planning or training efforts and then leave.

- *Design marketing strategies that better promote the diverse careers available in public transit.* Many Americans do not realize that the industry offers far more job opportunities than operating a bus or a train. The industry can work to clearly communicate that public transportation can be a fulfilling career for people with different qualifications and skills.

- *Host job fairs at high schools, trade schools, and colleges with significant numbers of minority students.*

- *Experiment with types of programs that have been found to aid both hiring and retention,* including revising job descriptions to be more inclusive, family-friendly HR policies (e.g., predictable work schedules for operations staff, hybrid work opportunities), ongoing professional development opportunities that target employees in every job classification (e.g., trainings, mentorship, job shadowing, counseling to help employees identify growth opportunities within the organization, and support for employees to complete degree programs), and efforts to promote a more inclusive workplace culture.

- *Implement regular employee satisfaction surveys* that can help agencies identify both the policies that employees value and areas for improvement. These surveys can also be used to collect diversity data about employees.

Improving Workforce Diversity Data Collection and Analysis

A key component of achieving diversity goals is to measure the industry's progress. The EEO program plan process offers an excellent opportunity to collect the needed data, but implementation has been uneven, with the result that the data is unreliable at the industry level and for many individual transit agencies.

The following actions, which echo recommendations from Myers et al. (2007), could be adopted to improve the completeness and quality of workforce diversity data collected through the EEO planning process:

- *Require workforce diversity data be submitted in an electronic spreadsheet format.* Interviewees noted that transit operators already submit other types of data electronically, so this format for diversity reporting likely would not prove a barrier to agencies.

- *Change reporting guidelines to require agencies to submit workforce data as raw numbers as well as percentages.* This change would better allow industry-wide analysis.

- *Provide technical support and/or funding to help agencies develop an effective process for long-term data collection and monitoring.* Several interviewees noted that many transit operators, even large ones, collect diversity data during the hiring process but lack the software and/or management processes needed to monitor workforce diversity data effectively and efficiently. FTA and APTA are two organizations that could potentially educate transit operators on cost-effective options to better manage their data.

- *Improve routine data auditing to ensure data accuracy and completeness.* Though FTA does have a process for routine review, the audit process has not been successful at ensuring that the employee diversity data submitted are compete and follow FTA guidelines, potentially resulting in measurement errors (Robinson et al., 2005).

- *Increase the percentage of employees who share race and other demographic information about themselves.* Operators request but cannot require employees to share these data, and our interviews suggest that even in the best case an agency might not receive the data from more than two-thirds of employees. The key to increasing reporting is likely convincing employees that doing so will allow their employers to improve workforce diversity efforts. One promising strategy is for operators to regularly report to employees on agency demographics, so that employees know the agency makes use of the data. There is likely also an important role for unions and professional organizations like APTA, Latinos in Transit, WTS, and COMTO to regularly encourage their members to self-report demographic data.

- *Make the EEO workforce data publicly available in electronic spreadsheet format, without need for researchers to file a Freedom of Information Act (FOIA) request.* Publicly available data would help transit operator staff compare their own workforce demographics to peer agencies and would also make industry-wide analyses like this one much less labor intensive.

A further recommendation is to establish a policy mandating the production of an industry-wide evaluation of workforce diversity after every EEO reporting cycle. The FTA and APTA are organizations that could take on the responsibility to produce such a document. Benefits of such a report, which should be publicly available, include:

- Providing an industry-wide benchmark on workforce diversity efforts, so that progress can be tracked over time.

- Letting individual agencies better understand how their progress compares to that of peer agencies.

- Providing information that will help the industry to identify where it is most important to focus on diversity improvements.

Share Resources, Yet Acknowledge Unique Local Needs

The challenges of tracking and planning for a diverse workforce are daunting to many transit operators. One strategy to reduce such challenges is better sharing of information and tools among operators. Such information sharing can cover all the topics discussed in this chapter, from strategies to better monitor workforce demographics to programs that will recruit and retain a diverse workforce. Transit operators who are not far advanced in workforce diversity management will benefit the most from learning about best practices at peer organizations that can provide both practical tools and confidence that improvements are achievable. However, even operators with more experience in these areas would benefit from regular sharing of detailed information.

A related suggestion is to sponsor research into the effectiveness of DEI officers and programs across transit agencies. This work could explore the mandates for what DEI officers and offices are to accomplish, their location within the agency structure, staffing, and the nature of what these programs have (and have not) been able to accomplish.

Despite the great value of information sharing across agencies, it is also crucial to recognize that there are no "one size fits all" solutions. Transit operators face very different challenges and opportunities that require tailoring general approaches to local conditions. Factors that vary greatly across agencies include:

- *Political environment*: Some transit operators work under state governments and/ or board members who actively encourage DEI work, while other transit operators work under state governments and boards actively hostile even to documenting workforce demographics.

- *Diversity gaps*: Agencies have different diversity gaps that necessitate tailored solutions. For example, operators that need to focus on recruiting more women in operations might prioritize changing work requirements to offer dependable schedules that are attractive to employees who care for family members. Different strategies might be needed to improve recruiting and retention of minority employees, such as revising hiring processes to better support applicants who do not have strong English-language skills or reliable access to computers and the internet.

- *Partnership opportunities*: Many recruiting opportunities depend on partnerships with external organizations, thus requiring locally tailored solutions. For example, some operators may have opportunities to partner with local technical programs, tribal colleges, or high-schools, and such partnerships must be appropriate to the partnering organizations' specific opportunities and needs.

* * * *

In conclusion, our findings echo the findings of earlier studies on workforce diversity in the transit industry. In our view, this further underscores the need to do things differently, to make sure that the people who work in this industry accurately represent the rich diversity of their communities. Increasing workforce diversity is both a challenge and an exciting opportunity that the transit industry should strive to meet!

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APPENDIX 1: STAKEHOLDER INTERVIEWS

Towards the end of the project, we conducted six interviews with a total of twelve professionals who have expertise in transportation workforce diversity monitoring, management, and/ or diversity advocacy. The objective was to learn about current efforts being made in the transit industry to increase the diversity of the workforce, including what sources of data are used to track diversity progress and effective strategies that organizations use to support diversity within the national transit workforce. During these conversations, we shared key findings from the research and invited interviewees to comment, whether that was to explain the reasons for our findings or share how their own experiences either confirmed or differed from what we learned. In addition, interviewees received a copy of the draft report prior to the conversation and were invited to share comments either during the interview or in writing.

The interviews followed a semi-structured format, with the following questions asked:

1. What is the mission of your organization and how does it relate to transit workforce diversity?

2. Please tell me about your personal background working on transit workforce diversity issues.

3. What is your impression of trends in transit workforce diversity?

   a. Are trends changing for the better? Why or why not?

   b. What data lets you know this? Is there enough data? If not, what do you suggest?

4. We have some specific questions about Equal Employment Opportunity (EEO) workforce diversity data for the transit industry. We analyzed recent EEO data for our project.

   a. Does your organization or do your members make use of the EEO workforce diversity data in any way? (Does the data collection process itself help agencies? Are you aware of how individual transit agencies make active use of the EEO data once it has been collected?)

   b. Do you have ideas of how the EEO data that FTA collects could be more effectively used in future?

   c. Do you have ideas of other ways (beyond EEO) that the industry can better monitor trends in workforce diversity?

5. What strategies does your organization use to promote workforce diversity in the transit industry, and how effectively do those strategies work?

      a. What works and doesn't work?

      b. What resources would help you to be more effective in your efforts? (Better data? New research?)

6. What are the critical supports the industry needs to move towards a more diverse workforce?

7. Did you have any comments the draft report I emailed earlier?

8. Is there anything else you'd like to share that might help the research team as we finalize our report?

The interviewees, who are listed below, were selected to represent the perspectives of government agencies (transit operators and the Federal Transit Administration), labor, and advocacy organizations. Many interviewees held multiple roles, such as working for a transit operator or consulting firm and also serving on the board of an advocacy organization that promotes workforce diversity in transportation. To encourage frank discussion, interviewees were told that the report would not attribute specific opinions to any individual, and they also were offered the choice to remain anonymous, although none requested that.

Lina M. Aragon
Operations Manager, Palm Tran
Member, Latinos in Transit

Alva Carrasco
Rail and Transit Director, Burns Engineering
Board President, Latinos in Transit
Vice Chair, APTA Leadership Committee

Elizabeth Carter
Assistant Transit Director, Rio Metro
    Regional Transit District (Albuquerque,
    NM)
Board Secretary, Latinos in Transit

José C. Feliciano, Jr.
Intergovernmental Relations Officer,
    Greater Cleveland RTA
Board of Directors, Latinos in Transit

Michelle DiFrancia
Vice President, Parsons Corporation
Glass Ceiling Task Force (and past Chapter
    President), WTS – San Francisco Bay
    Area Chapter

Scott Giering
Deputy Associate Administrator, Office of
    Civil Rights, Federal Transit
    Administration

Jamaine Gibson
Amalgamated Transit Union
Director of Apprenticeships and Workforce
    Development

Herold Humphrey
Senior Transit Operations Specialist –
    Jacobs
Board Vice President, Latinos in Transit

Rosa Medina-Cristobal
Vice-President of Human Resources,
    Dallas Area Rapid Transit
Member, Latinos in Transit

Dawn Sweet
Headquarters Director, Office of Civil
    Rights, Federal Transit Administration

April Rai
President and Executive Director,
  Conference on Minority Transportation
  Officials (COMTO)

Jannet Walker-Ford
Chair, WTS International Board of Directors
Senior Vice President, WSP

APPENDIX 2: AGENCY WEBSITES REVIEWED

MTA New York City Transit
Massachusetts Bay Transportation Authority
Washington Metropolitan Area Transit Authority
New Jersey Transit Corporation
Chicago Transit Authority
San Francisco Municipal Transportation Agency (MUNI)
San Francisco Bay Area Rapid Transit District
Metropolitan Atlanta Rapid Transit Authority
Tri-County Metropolitan Transportation District of Oregon (TriMet)
MTA Bus Company
Metropolitan Transit Authority of Harris County, Texas (Metro)
King County Department of Metro Transit (King County Metro)
County of Miami-Dade, Transportation and Public Works
City and County of Honolulu, Department of Transportation Services
Alameda-Contra Costa Transit District (AC Transit)
MTA Long Island Rail Road
Metro Transit
Orange County Transportation Authority
VIA Metropolitan Transit
Bi-State Development Agency of the Missouri-Illinois Metropolitan District (St. Louis Metro)
Port Authority Trans-Hudson Corporation
Utah Transit Authority
City of Charlotte North Carolina, Charlotte Area Transit System
Washington State Ferries
City of Detroit, Detroit Department of Transportation
Broward County Board of County Commissioners, Broward County Transit Division
Long Beach Transit
Milwaukee County, Milwaukee County Transit System

Central Florida Regional Transportation Authority
Sacramento Regional Transit District (Sacramento RT)
Westchester County, The Bee-Line System
Northeast Illinois Regional Commuter Railroad Corporation, dba: Metra
Montgomery County, Maryland, Ride On - Montgomery County Transit
New York City Department of Transportation
Capital District Transportation Authority

APPENDIX 3. EEO TRANSIT AGENCY REPORTERS

This appendix lists the 152 transit agency reporters whose data we analyzed for the study.

FTA REGION	STATE	TRANSIT AGENCY
9	CA	Alameda-Contra Costa Transit District (AC Transit)
10	AK	Alaska Railroad Corporation
6	NM	Albuquerque, City of
5	MI	Ann Arbor Area Transportation Authority
10	WA	Ben Franklin Transit
5	IL	Bloomington Normal Public Transit
5	IN	Bloomington Public Transportation Corporation
5	MI	Blue Water Area Transportation Commission
6	TX	Brazos Transit District
4	FL	Brevard County / Space Coast Area Transit
2	NY	Broome County Department of Public Transportation
4	FL	Broward County Transit (BCT)
5	OH	Butler County Regional Transit Authority
3	PA	Cambria County Transit Authority
4	NC	Cape Fear Public Transportation Authority
6	TX	Capital Area Rural Transportation System
3	PA	Capital Area Transit (CAT)
5	MI	Capital Area Transportation Authority
2	NY	Capital District Transportation Authority
6	TX	Capital Metro Transportation Authority
1	VT	CCTA (Green Mountain Transit)
6	AR	Central Arkansas Transit Authority (Rock Region Metro)
9	CA	Central Contra Costa Transit Authority
4	FL	Central Florida Regional Transportation Authority (LYNX)
2	NY	Central New York Regional Transportation Authority
5	OH	Central Ohio Transit Authority
6	OK	Central Oklahoma Transportation and Parking Authority
3	PA	Central Pennsylvania Transportation Authority (formerly YCTA)
5	IL	Champaign-Urbana Mass Transit District
4	NC	Charlotte Area Transit System
3	VA	Charlottesville, City of
4	GA	Chatham Area Transit
4	TN	Chattanooga Area Regional Transportation Authority
7	IA	City of Ames / Ames Transit Agency (CyRide)
6	TX	City Transit Management, Inc. (Citibus)
10	WA	Clark County Ptba (C-TRAN)

10	WA	Community Transit (Snohomish County Public Transportation Benefit Area Corp)
5	IL	Connect Transit
1	CT	Connecticut Department of Transportation
6	TX	Corpus Christi Regional Transportation Authority
2	PA	County of Lackawanna Transit System (COLTS)
9	CA	Culver City, City of / Culver CityBus
6	TX	Dallas Area Rapid Transit
9	CA	Davis, City of / Unitrans
3	NJ	Delaware River Port Authority/Port Authority Transit Co.
3	DE	Delaware Transit Corporation
7	IA	Des Moines Area Regional Transit Authority
5	MI	Detroit Department of Transportation
5	MI	Detroit Transportation Corporation
5	MN	Duluth Transit Authority
5	OH	Evansville, City of / METS 2565 IN 5 2018 LAKETRAN
10	WA	Everett Transit
4	NC	Fayetteville Transit Department / Fayetteville Area System of Transit
8	CO	Fort Collins, City of / Transfort
6	TX	Fort Worth Transportation Authority (Trinity Metro)
9	CA	Fresno, City of
4	FL	Gainesville, City of / Gainesville Regional Transit System
9	CA	Gardena, City of / Gardena Transit
9	CA	Gold Coast Transit District
9	CA	Golden Gate Bridge, Highway and Transportation District
1	CT	Greater Bridgeport Transit Authority
5	OH	Greater Cleveland Regional Transit Authority (GCRTA)
5	IN	Greater Lafayette Public Transportation Corporation (CityBus)
5	Il	Greater Peoria Mass Transit District
7	ME	Greater Portland Metro
6	TX	Hill Country Transit District
5	IN	Indianapolis Public Transportation Corporation
10	WA	Intercity Transit
4	FL	Jacksonville Transportation Authority
3	WV	Kanawha Valley Regional Transportation Authority
7	MO	Kansas City Areas Transportation Authority
4	TN	Knoxville, City of / Knoxville Area Transit
4	FL	Lakeland Area Mass Transit (Citrus Connection)
6	TX	Laredo, City of
6	NM	Las Cruces city (Roadrunner transit)
4	FL	Lee County Transit
3	PA	Lehigh and Northampton Transportation Authority

7	NE	Lincoln, City of / StarTran
9	CA	Long Beach Transit
9	CA	Los Angeles County Metropolitan Transportation Authority (LACMTA)
3	PA	Luzerne County Transportation Authority
5	IL	Madison County Transit
4	FL	Manatee County
3	MD	Maryland Transit Administration
6	TX	Mass Transit Department-City of El Paso
1	MA	Massachusetts Bay Transportation Authority (MBTA)
1	MA	Merrimack Valley Regional Transit Authority
4	GA	Metra Transit System / Columbus Georgia Consolidated Government
7	MO	Metro BiState
5	OH	Metro Regional Transit Authority
4	GA	Metropolitan Atlanta Rapid Transit Authority (MARTA)
4	TN	Metropolitan Transit Authority (Davidson transit)
6	TX	Metropolitan Transit Authority of Harris County
6	OK	Metropolitan Tulsa Transit Authority
4	FL	Miami-Dade County Department of Transportation and Public Works
5	WI	Milwaukee County Transit System
9	CA	Montebello, City of
9	CA	Monterey-Salinas Transit
4	AL	Montgomery Area Transit System (The M)
4	MS	MS Coast Transportation Authority
2	NJ	New Jersey Transit
2	NY	New York City Department of Transportation
9	CA	North County Transit District
5	IL	Northeast Illinois Regional Commuter Railroad Corporation (Metra)
5	IN	Northern Indiana Commuter Transportation District
9	CA	Orange County Transportation Authority
6	AR	Ozark Regional Transit
5	IL	Pace, the Suburban Bus Division of the RTA
4	FL	Palm Beach County Board of County Commissioners
4	FL	Pinellas Suncoast Transit Authority
3	PA	Port Authority of Allegheny County
5	OH	Portage Area Regional Transportation Authority
4	PR	Puerto Rico Highway and Transportation Authority
9	CA	Regional Transit Authority (San Luis Obispo RTA)
5	IL	Regional Transportation Authority (Chicago RTA)
8	CO	Regional Transportation District (RTD)
4	NC	Research Triangle Regional Public Transportation Authority (GOTriangle)
9	CA	Riverside Transit Agency

5	IL	Rock Island County Metropolitan Mass Transit District
9	CA	Sacramento Regional Transit District
10	OR	Salem Area Mass Transit District
9	CA	San Diego Metropolitan Transit System
9	CA	San Francisco Municipal Transportation Agency
9	CA	San Joaquin Regional Transit District
9	CA	Santa Barbara Metropolitan Transit District
9	CA	Santa Cruz Metropolitan Transit District
9	CA	Santa Monica, City of (Big Blue Bus)
4	FL	Sarasota County Area Transit
6	LA	Shreveport, City of - (Sporttran)
9	CA	Sonoma-Marin Area Rail Transit District (SMART)
10	WA	Sound Transit
5	IN	South Bend Public Transportation Corporation
4	FL	South Florida Regional Transportation Authority
4	TN	Southeast Tennessee Human Resource Agency (SETHRA)
3	PA	Southeastern Pennsylvania Transportation Authority (SEPTA)
9	CA	Southern California Regional Rail Authority
5	OH	Southwest Ohio Regional Transit Authority
5	MI	Suburban Mobility Authority for Regional Transportation (SMART)
9	CA	SunLine Transit Agency
3	PA	Susquehanna Regional Transportation Authority (SRTA)
4	FL	Tallahassee, City of /StarMetro
2	NY	The Port Authority of New York and New Jersey
4	KY	Transit Authority of Lexington-Fayette Urban County Government (Lextran)
4	KY	Transit Authority of Northern Kentucky
4	KY	Transit Authority of River City (TARC)
7	NE	Transit Authority of the City of Omaha (METRO)
3	VA	Transportation District Commission of Hampton Roads
8	UT	Utah Transit Authority (UTA)
6	TX	VIA Metropolitan Transit
4	FL	Votran / Volusia Transit Management, Inc.
3	DC	Washington Metropolitan Area Transit Authority
10	WA	Whatcom Transportation Authority

APPENDIX 4: STATE AND LOCAL GOVERNMENT WORKERS IN TRANSPORTATION AND WAREHOUSING OCCUPATIONS

Code	Occupation	# workers (weighted)	% of all trans-portation and warehousing workers	Sex		Race	Wage and Salary Income	
				Male	Female	% NH White	Median	Mean
20	General and operations managers	2,838	1%	82%	18%	59%	$74,458	$71,818
160	Transportation, storage, and distribution managers	3,393	1%	77%	23%	69%	$59,660	$63,434
440	Other managers	11,412	3%	72%	29%	64%	$79,902	$80,486
705	Project management specialists	1,665	0%	57%	43%	63%	$86,564	$83,345
800	Accountants and auditors	3,175	1%	40%	60%	46%	$60,430	$64,447
1360	Civil engineers	3,265	1%	86%	14%	52%	$90,556	$87,942
4220	Janitors and building cleaners	9,638	3%	78%	23%	34%	$35,634	$40,103
4600	Childcare workers	2,762	1%	16%	85%	34%	$14,063	$15,065
4720	Cashiers	8,312	2%	47%	53%	53%	$23,740	$26,575
5240	Customer service representatives	5,468	1%	43%	57%	26%	$28,057	$31,494
5410	Reservation and transportation ticket agents and travel clerks	3,871	1%	55%	45%	23%	$38,353	$40,992
5522	Dispatchers, except police, fire, and ambulance	3,498	1%	53%	47%	55%	$38,589	$50,186
5740	Secretaries and administrative assistants, except legal, medical, and executive	3,442	1%	4%	96%	60%	$45,000	$44,215
5860	Office clerks, general	3,529	1%	32%	68%	32%	$37,546	$39,554

6355	Electricians	3,911	1%	98%	2%	52%	$71,268	$72,722
6730	Highway maintenance workers	2,151	1%	99%	1%	82%	$38,353	$35,641
7000	First-line supervisors of mechanics, installers, and repairers	3,241	1%	94%	6%	60%	$66,748	$65,202
7200	Automotive service technicians and mechanics	2,463	1%	98%	2%	47%	$60,430	$57,264
7210	Bus and truck mechanics and diesel engine specialists	12,996	3%	97%	3%	47%	$60,000	$56,555
7220	Heavy vehicle and mobile equipment service technicians and mechanics	3,830	1%	97%	3%	45%	$60,000	$57,869
7340	Maintenance and repair workers, general	2,118	1%	97%	3%	64%	$55,000	$55,054
8990	Miscellaneous production workers, including equipment operators and tenders	2,228	1%	83%	17%	33%	$53,268	$64,869
9005	Supervisors of transportation and material moving workers	14,082	4%	73%	27%	50%	$64,662	$63,236
9121	Bus drivers, school	41,998	11%	54%	46%	46%	$28,057	$33,581
9122	Bus drivers, transit and intercity	63,329	17%	74%	27%	37%	$37,650	$39,350
9130	Driver/sales workers and truck drivers	13,843	4%	85%	15%	45%	$35,000	$39,825
9141	Shuttle drivers and chauffeurs	3,308	1%	68%	32%	43%	$27,587	$32,644
9142	Taxi drivers	3,929	1%	79%	21%	35%	$24,435	$26,701
9210	Locomotive engineers and operators	2,906	1%	90%	10%	39%	$79,902	$73,041
9240	Railroad conductors and yardmasters	5,292	1%	77%	24%	40%	$68,896	$75,606
9265	Other rail transportation workers	7,285	2%	80%	21%	28%	$63,922	$59,192
9300	Sailors and marine oilers, and ship engineers	1,713	0%	83%	17%	76%	$55,000	$60,536

9410	Transportation inspectors	3,931	1%	92%	8%	54%	$66,905	$61,163
9415	Passenger attendants	5,761	2%	49%	51%	27%	$24,819	$33,724
9610	Cleaners of vehicles and equipment	3,096	1%	64%	36%	29%	$40,725	$39,842
9620	Laborers and freight, stock, and material movers, hand	11,225	3%	86%	14%	36%	$24,000	$32,419
9645	Stockers and order fillers	2,555	1%	70%	30%	28%	$34,531	$37,604
Subtotal	Total # of Workers in Occupations with > 100 sample	283,459	76%	70%	30%	43%	$40,725	$46,105
Total	**Total Transportation and Warehousing Employees**	**372,946**	**100%**	**70%**	**30%**	**45%**	$43,164	$48,969
The table includes data from only those occupations with 100+ observations in each occupational category.								
Data: 2015-2019, ACS 5-Year Sample								
Source: Steven Ruggles, Sarah Flood, Matthew Sobek, Danika Brockman, Grace Cooper, Stephanie Richards, and Megan Schouweiler. *IPUMS USA: Version 13.0 [dataset].* Minneapolis, MN: IPUMS, 2023. https://doi.org/10.18128/D010.V13.0								

APPENDIX 5: SURVEY INSTRUMENT

Researchers at the Mineta Transportation Institute at San Jose State University are conducting a study on employment diversity across U.S. transit agencies. The study is titled *Understanding Diversity within the Transit Industry: Establishing a Baseline of Diversity Demographics.*

We would like to get your insights on your agency's diversity, equity, and inclusion (DEI) practices. The short survey that follows takes about 15 minutes to complete. Your responses will inform our understanding of current efforts to advance workforce diversity across U.S. public transportation agencies.

You are free to skip any question except for the first, which asks you to identify the agency where you work. Your responses will be kept strictly confidential. Research publications may include a list of all transit agencies from which we received a response, but no survey results will be connected with any individual transit operator or with any specific person.

If you have any questions or concerns, please reach out to the research team by contacting Professor Asha Weinstein Agrawal at asha.weinstein.agrawal@sjsu.edu.

Please complete this survey no later than April 3.

Thank you very much for taking the time to share your insights with us.

1. Do you agree to the above terms? By clicking "Yes," you consent that you are willing to answer the questions in this survey.

    a. Yes, I consent
    b. No, I do not consent

2. Transit agency:

3. Job title (optional):

4. Name (optional):

5. Email address (optional):

6. If your agency collects data on workforce diversity, for what purposes does your agency use these data? (select all that apply)

    a. Reporting to the Federal Transit Administration (FTA)
    b. Assessment of agency diversity, equity, and inclusion (DEI) goals
    c. Recruitment
    d. Promotion and retention
    e. Staff training

    f.   Informing board members and/or community stakeholders
    g. Informing internal human resources and other executive staff
    h. Other - please describe:
    i.   Does not collect staff diversity data

7. Does your agency collect data on the following employee characteristics? (select all that apply)

    a. Gender
    b. Gender identity or gender expression
    c. Race and/or ethnicity
    d. Veteran or military status
    e. Nationality and immigration status
    f.   Past criminal record
    g. Housing: sheltered/unsheltered
    h. Educational attainment
    i.   Other - please describe:
    j.   Does not collect staff diversity data

8. Are the following groups under-represented or over-represented among your agency's **senior managers**, as compared to the labor force of your larger metropolitan area? Please consider only individuals who report directly to the CEO, General Manager, or equivalent.

	Under-represented	About the same	Over-represented	I don't know
Women	○	○	○	○
Blacks or African-Americans	○	○	○	○
Asian-Americans	○	○	○	○
Hispanics or Latinos	○	○	○	○
American Indians, Alaska Natives, Native Hawaiians, or other Pacific Islanders	○	○	○	○
Whites, non-Hispanic	○	○	○	○

9. Is your transit agency governed by a Board of Directors?

    a. Yes
    b. No

10. Are the following groups under-represented or over-represented on your agency's **Board of Directors** as compared to the labor force of your metropolitan area?

	Under-represented	About the same	Over-represented	I don't know
Women	○	○	○	○
Blacks or African-Americans	○	○	○	○
Asian-Americans	○	○	○	○
Hispanics or Latinos	○	○	○	○
American Indians, Alaska Natives, Native Hawaiians, or other Pacific Islanders	○	○	○	○
Whites, non-Hispanic	○	○	○	○

11. Does your agency have the following diversity, equity, and inclusion (DEI) program resources?

	Yes	No	⊘ Don't Know
Annual DEI funding allocation	○	○	○
DEI officer or related staff position	○	○	○
Support for DEI efforts from the General Manager, CEO, or equivalent	○	○	○
Data collection on diversity indicators (examples: demographics of new hires or promotion trends)	○	○	○
Regularly-administered employee climate survey that includes DEI questions	○	○	○

12. How useful have the following **recruitment and hiring** strategies been for increasing workforce diversity, equity, and inclusion (DEI)? (Responses include: Very useful, Somewhat useful, Not useful, and Have not tried)

    a. Advertising job opportunities on social media (examples: Instagram, Facebook, LinkedIn)
    b. Advertising job opportunities in newspapers and other print media
    c. Recruiting at high schools and colleges with large number of students from underrepresented populations
    d. Participating in events sponsored by diversity-focused professional organizations (examples: COMTO, WTS, Latinos in Transit)
    e. Diversity-friendly job application and interview processes (examples: diverse interviewing panels or blind review of applications)
    f. Engaging with labor unions
    g. Employing external DEI consultant(s)
    h. Offering family-friendly work policies (examples: parental leave, lactation rooms)
    i. Offering remote work opportunities
    j. Re-evaluating job descriptions to remove non-essential requirements
    k. Creating entry-level positions that do not require previous work experience and/or do not require a high-school degree
    l. Offering referral or signing bonuses
    m. Engaging with community workforce boards or local employment agencies
    n. Mandatory DEI training for staff involved with recruitment and hiring
    o. Providing job announcements and hiring documents in accessible formats, including non-English languages
    p. Offering apprenticeship or internship programs targeted at underrepresented groups

	Very useful	Somewhat useful	Not useful	Have not tried
Advertising job opportunities on social media (examples: Instagram, Facebook, LinkedIn)	○	○	○	○
Advertising job opportunities in newspapers and other print media	○	○	○	○
Recruiting at high schools and colleges with large number of students from underrepresented populations	○	○	○	○
Participating in events sponsored by diversity-focused professional organizations (examples: COMTO, WTS, Latinos in Transit)	○	○	○	○
Diversity-friendly job application and interview processes (examples: diverse interviewing panels or blind review of applications)	○	○	○	○
Engaging with labor unions	○	○	○	○
Employing external DEI consultant(s)	○	○	○	○
Offering family-friendly work policies (examples: parental leave, lactation rooms)	○	○	○	○
Offering remote work opportunities	○	○	○	○
Re-evaluating job descriptions to remove non-essential requirements	○	○	○	○
Creating entry-level positions that do not require previous work experience and/or do not require a high-school degree	○	○	○	○
Offering referral or signing bonuses	○	○	○	○
Engaging with community workforce boards or local employment agencies	○	○	○	○
Manadatory DEI training for staff involved with recruitment and hiring	○	○	○	○
Providing job announcements and hiring documents in accessible formats, including non-English languages	○	○	○	○
Offering apprenticeship or internship programs targeted at underrepresented groups	○	○	○	○

13. Please describe any other successful recruitment and hiring strategies your agency has used to improve workforce diversity:

14. How useful have the following <u>retention and promotion</u> strategies been for increasing workforce diversity, equity, and inclusion (DEI?) (Responses include: Very useful, Somewhat useful, Not useful, Have not tried)

    a. Participating in events of diversity-focused professional associations (examples: COMTO, WTS, Latinos in Transit)
    b. Engaging with labor unions
    c. Offering mentorship opportunities (example: partnering new hires with managers for relationship building and leadership development)
    d. Ongoing skills building and career development opportunities (examples: technical classes, managerial skills training)
    e. Engaging external DEI consultants
    f. Promoting family-friendly work policies (examples: parental leave, lactation room)
    g. Offering remote work opportunities
    h. Employee satisfaction surveys
    i. Employee task forces or affinity groups
    j. Mandatory DEI training for staff involved with retention/promotion decisions
    k. Developing/executing plan to have diverse representation in leadership positions

	Very useful	Somewhat useful	Not useful	Have not tried
Participating in events of diversity-focused professional associations (examples: COMTO, WTS, Latinos in Transit)	○	○	○	○
Engaging with labor unions	○	○	○	○
Offering mentorship opportunities (example: partnering new hires with managers for relationship building and leadership development)	○	○	○	○
Ongoing skills building and career development opportunities (examples: technical classes, managerial skills training)	○	○	○	○
Engaging external DEI consultants	○	○	○	○
Promoting family-friendly work policies (examples: parental leave, lactation room)	○	○	○	○
Offering remote work opportunities	○	○	○	○
Employee satisfaction surveys	○	○	○	○
Employee task forces or affinity groups	○	○	○	○
Mandatory DEI training for staff involved with retention/promotion decisions	○	○	○	○
Developing/executing plan to have diverse representation in leadership positions	○	○	○	○

15. Please describe any other retention and promotion strategies your agency has used to increase workforce diversity, equity, and inclusion:

16. The Federal Transit Administration (FTA) requires some transit agencies to submit workforce composition data as part of Equal Employment Opportunity (EEO) reporting requirements. Does your agency submit these data?

    a. Yes
    b. No

17. How easy would it be for your agency to submit EEO workforce composition data to the FTA in the following formats?

	Very easy	Somewhat easy	Somewhat difficult	Very difficult
Spreadsheet (Google forms, Excel, etc.)	○	○	○	○
Online form	○	○	○	○

18. In the last 5 years, has workforce diversity at your agency:

    a. Increased a lot
    b. Increased a little
    c. Remained the same
    d. Decreased a little
    e. Decreased a lot
    f. I don't know

19. Is your agency planning any **new strategies or initiatives** to develop a more diverse workforce?

    a. No
    b. Yes - briefly describe these strategies or initiatives:

20. Here is one last question to conclude: In your view, what policies or strategies might best help **the transit industry as a whole** improve/increase workforce diversity, equity, and inclusion (DEI) outcomes in the coming decade? Please also explain why these approaches would be effective.

APPENDIX 6: LIST OF AGENCIES RESPONDING TO SURVEY

STATE	TRANSIT AGENCY
CA	Alameda-Contra Costa Transit District (AC Transit)
CA	Bay Area Rapid Transit (BART)
MO	Bi-State Development
MI	Capital Area Transportation Authority
TX	Capital Metropolitan Transportation Authority (CapMetro)
FL	Central Florida Regional Transportation Authority (d/b/a LYNX)
OH	Central Ohio Transit Authority
PA	Centre Area Transportation Authority
IL	Champaign-Urbana Mass Transit District
IL	Chicago Transit Authority
TX	Dallas Area Rapid Transit
CA	Foothill Transit
IN	Fort Wayne Public Transportation Corporation (Citilink)
CA	Golden Empire Transit District
CA	Golden Gate Transit
OH	Greater Cleveland Regional Transit Authority
VA	Hampton Roads Transit
IN	Indianapolis Public Transportation Corporation (IndyGo)
MI	Interurban Transit Partnership (The Rapid)
FL	Jacksonville Transportation Authority
WA	King County Metro
CA	Los Angeles County Metropolitan Transportation Authority (LA Metro)
OH	Laketran
OR	Lane Transit District
CA	Long Beach Transit
GA	Metropolitan Atlanta Rapid Transit Authority (MARTA)
MD	Maryland Department of Transportation/Maryland Transit Administration
IL	Metra
OH	Metro RTA (Akron Metropolitan Regional Transit Authority)
MN	Metro Transit
TX	Metropolitan Transit Authority of Harris County
NY	Metropolitan Transportation Authority (MTA and MTA Headquarters)
MT	Missoula Urban Transportation District
PA	Monroe County Transit
LA	New Orleans Regional Transit Authority
NY	Niagara Frontier Transportation Authority (NFTA)
CA	North County Transit District

CA	Omnitrans
CA	Orange County Transportation Authority
IL	Pace Suburban Bus
CA	Pasadena Metro
WA	Pierce Transit
FL	Pinellas Suncoast Transit Authority
NY	Port Authority
VA	Potomac and Rappahannock Transportation Commission (PRTC)
NE	Regional Transit Authority of Omaha
NY	Regional Transit Service
NV	Regional Transportation Commission of Southern Nevada
IL	Rockford Mass Transit District
CA	San Diego Metropolitan Transit System
CA	San Francisco Municipal Transportation Agency
CA	San Joaquin Regional Transit District
CA	Santa Clara Valley Transportation Authority
CA	Santa Cruz Metropolitan Transit District
CA	Sonoma-Marin Area Rail Transit
PA	Southeastern Pennsylvania Transportation Authority
WA	Spokane Transit Authority
OH	Stark Area Regional Transit Authority
CA	SunLine Transit Agency
PA	Susquehanna Regional Transportation Authority (rabbittransit)
SC	The Central Midlands Regional Transit Authority (COMET)
CA	Unitrans (UC Davis and City of Davis)
TX	VIA Metropolitan Transit
VA	Virginia Passenger Rail Authority
VA	Virginia Railway Express

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