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RAILROAD INDUSTRY WORKFORCE DEVELOPMENT SURVEY

SUMMARY

The Federal Railroad Administration (FRA) Workforce Development Survey collected responses from across the railroad industry to improve and reinforce the understanding of current workforce challenges identified and tracked in the FRA's biennial [Railroad Industry Modal Profile: An Outline of the Railroad Industry Workforce Trends, Challenges, and Opportunities](#).

This initial survey included participants from major rail industry segments, including; academia, passenger rail, freight rail (Class I and shortline), labor unions, and associations. An online survey tool (Survey Monkey) was used to distribute 25 survey questions to each industry segment. This Office of Management and Budget (OMB)-approved survey provides the potential to reach significantly more participants and validate established workforce related challenges tracked and reported in the modal profile. The survey was necessary to increase the range of input from across industry to improve updates to the profile. Historically, input from industry was limited to comply with the Paperwork Reduction Act of 1995, which limits surveys to the public without OMB approval.

Survey questions were designed to address a range of workforce related issues. These issues included; workforce population, aging workforce, workforce diversity, workforce development data, industry image considerations, training in the industry, work-life balance, and technology adoption.

Although survey responses did not meet targeted response rates, the responses that

were received did validate FRA's understanding of workforce challenges and trends in the industry. Common themes identified in the survey responses included concerns related to training and emerging technologies, the aging workforce and the need to improve diversity of the workforce. Responses related to workforce data and data sharing also highlight a need to improve data collection and sharing across the industry to better address workforce challenges.



The 2017–18 survey data also validates established workforce problem areas and identifies themes addressed in this report.

BACKGROUND

The Department of Transportation (DOT) established an initiative to develop an analytical foundation and a national cross-modal approach to improve transportation workforce development. The result of this initiative required each DOT Operating Agency to develop a biennial Modal Profile for its respective industry. The FRA published its first modal profile in 2011. It established the workforce related industry challenges and was informed by available industry data and dialogue with key industry experts. The Modal Profile has been



subsequently updated with the identified workforce challenges addressed, trends tracked and challenges refreshed with the latest workforce data and input from industry. The FRA workforce development effort, led by Monique Stewart, has compiled and supported these updates to the railroad modal profile. However, based on the limited availability of data and restrictions on requesting data from the public, the need for an OMB approved survey was determined essential to capturing input from a broader spectrum of railroad stakeholders. Survey data would help validate and improve upon our shared understanding of current workforce challenges. The survey is structured to address these challenges and these results reflect our initial survey to industry. FRA anticipates expanding outreach and improving response rates going forward, to adjust and improve the approach.

OBJECTIVE

The objective of the 2017–18 survey was to collect data from a broad range of railroad stakeholders to better understand the challenges and risks to workforce development strategies. FRA’s prior research indicated that the survey should address the following workforce topics:

- Workforce Population and Composition
- Aging Workforce/Knowledge Transfer
- Workforce Diversity
- Quality of Workforce Development Data
- Industry Image Considerations
- Training in the Industry
- Work-Life Balance
- Technology Adoption

METHODS

The 2011 Railroad Industry Modal Profile provided a comprehensive overview of the railroad industry workforce and established trends within the industry. The most common challenges were identified and considered the key workforce challenges outlined in the survey. The survey limited data collection to the specific workforce challenges listed above. The 2017-2018 survey population consisted of 318 entities across all industry segments, targeting rail personnel with workforce management and/or

development expertise. These railroad segments (e.g., Class I freight and passenger railroads, short line and regional railroads, labor unions, major rail associations, academia) received 30 questions that were tailored to their industry segment, via Survey Monkey. FRA did not receive its desired response rate; therefore subsequent surveys will petition a larger group of respondents.

RESULTS

Input from each industry segment was represented in the survey responses. The supporting data was aggregated and trends were analyzed in each focus area. Commonalities in responses revealed challenges with the following overarching themes:

- Training/Emerging Technology
- Aging Workforce/Succession Planning
- Diversity
- Data Sharing

Workforce Training/Emerging Technology

Considerations: The significant influx of technologies in recent years transformed railroad operations and the workforce.

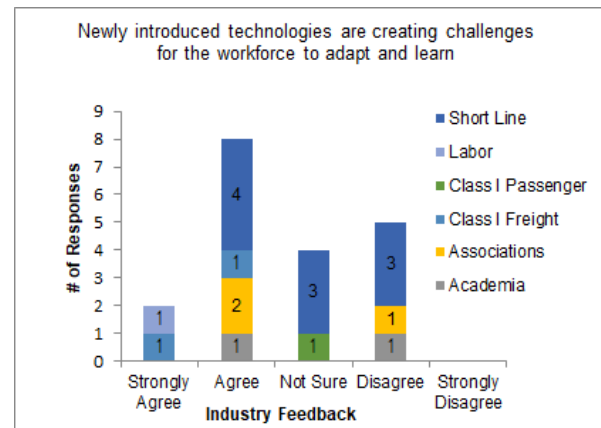


Figure 1. Technology Adoption and Impact Considerations

The survey responses received validated our prior understanding of the workforce challenges. Figure 1 illustrates the industry concerns regarding how new training is evaluated and shared. However, there’s not enough information to determine the type of training



needed to promote educational programs to address the impact of rail industry technology.

Aging Workforce: As the workforce ages and retires from the rail industry, significant experience will be lost if knowledge is not effectively transferred to and socialized among the next generation of employees.

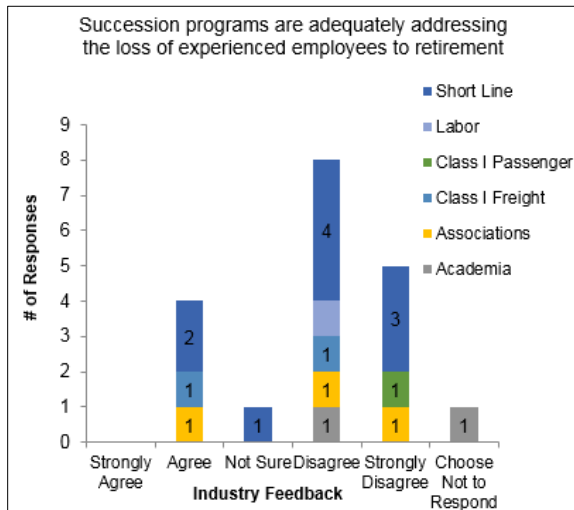


Figure 2. Aging Workforce Considerations

Figure 2 reflects responses to a pertinent aging workforce statement. The data indicates that overall, succession planning programs are not adequate. The industry continues to struggle in capturing job-related knowledge from retirement-eligible employees.

Workforce Diversity: Increasing ethnic and gender diversity are two primary industry human resource targets. Successfully recruiting and retaining a diverse representation of employees remains a persistent issue.

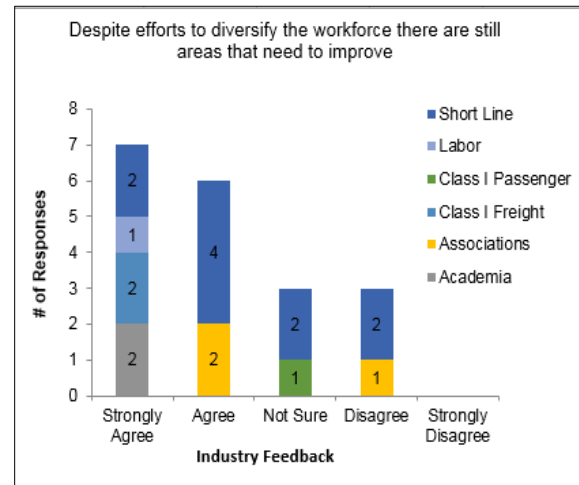


Figure 3. Workforce Diversity Considerations

Figure 3 indicates respondents agree that the industry's workforce is not representative of the overall U.S. demographic.

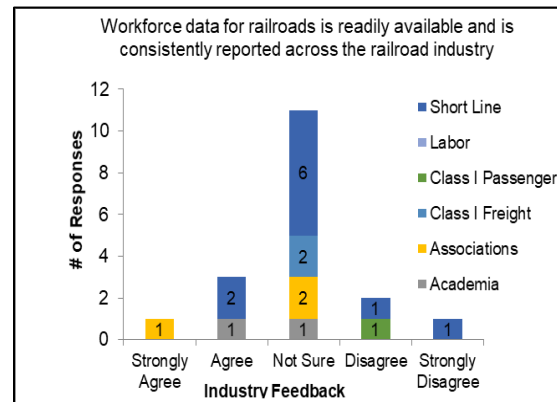


Figure 4. Workforce Development Data

Workforce Data Sharing: Figure 4 indicates respondents are unsure about the accessibility of future workforce data that measures workforce composition.

CONCLUSIONS

Since the first Modal Profile in 2009, succession planning and knowledge transfer have remained challenging for the railroad industry. Advanced technologies have introduced additional complexity to the training needed to maintain and enhance safe operation. As the railroad industry attempts to improve diversity, it acknowledges more work needs to be done. The



industry also still grapples with its ability to track and share meaningful data.

FUTURE ACTION

The next update of the Modal Profile will:

- Capture industry feedback regarding workforce trends, identify workplace best practices for all age and seniority cohorts, and consider ways to attract and retain future generations.
- Research and develop a deeper understanding of how the rail industry can close the talent gap and gain skills necessary to accelerate the adoption of advanced technologies.
- Continue fostering stakeholder collaboration to improve workers' skills and knowledge, attract qualified talent to the industry, and promote use of advanced technologies.

REFERENCES

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