

# Emerging Trends

Public transportation is a forward-looking industry that continues to evolve to meet the needs of its passengers and the world in which it operates.

## Workforce Shortage

- Widespread and severe transit workforce shortages are reported by 96% of agencies, with 84% saying it affects their ability to provide service.
- 43% of transit workers are over the age of 55, nearly double the percentage in the broader transportation sector. Departures in the first two years of employment occur at twice the rate of retirements.
- Compensation and work schedules are key to retaining and attracting workers. Half of current transit workers say their benefits are competitive with previous jobs.
- Transit agencies face fierce competition for workers, with applicants rejecting offers 35% of the time –2X more than in all other industries.

## Electrification

- 20% of fleet vehicles are now hybrid-electric or battery electric, with more zero-emission buses in transit agencies. Electric buses produce no tailpipe emissions and will become more environmentally friendly as electricity generation shifts to renewables.
- By 2040, transit electrification goals would make 75% of buses zero-emission.



## Autonomous Technology

- Automated vehicle technologies range from simple systems to fully autonomous systems without a human driver. In 2023, 1,567 buses were equipped with collision warning/mitigation, 284 with lane-keeping assist, and 2,297 with pedestrian/bicyclist detection.
- Transit agencies are adopting various levels of automated tech into their fleets to enhance service. Many U.S. cities are testing automated vehicle services using small, low-speed shuttles.
- Predictive software now monitors and analyzes sensor data in real-time with advanced algorithms to detect issues early and perform repairs before incidents occur, reducing vehicle downtime.

## Contactless Technology

- About 25% of U.S. public transit systems use open payment tech, with the pandemic likely speeding up adoption. Open payment tech includes contactless cards, mobile payments, and digital smart cards. In 2022, 47% of transit systems provided digital smart cards.



## Policy/Other Issues

- Bipartisan Infrastructure Law provides more than \$108 billion for public transit and \$102 billion over the next five years.