

# Transportation workforce development

**April 27, 2021**

## Key public works transportation subsectors



Construction



Bus service and urban transit



Air transportation



Services incidental to transportation



Water transportation



Warehousing and storage



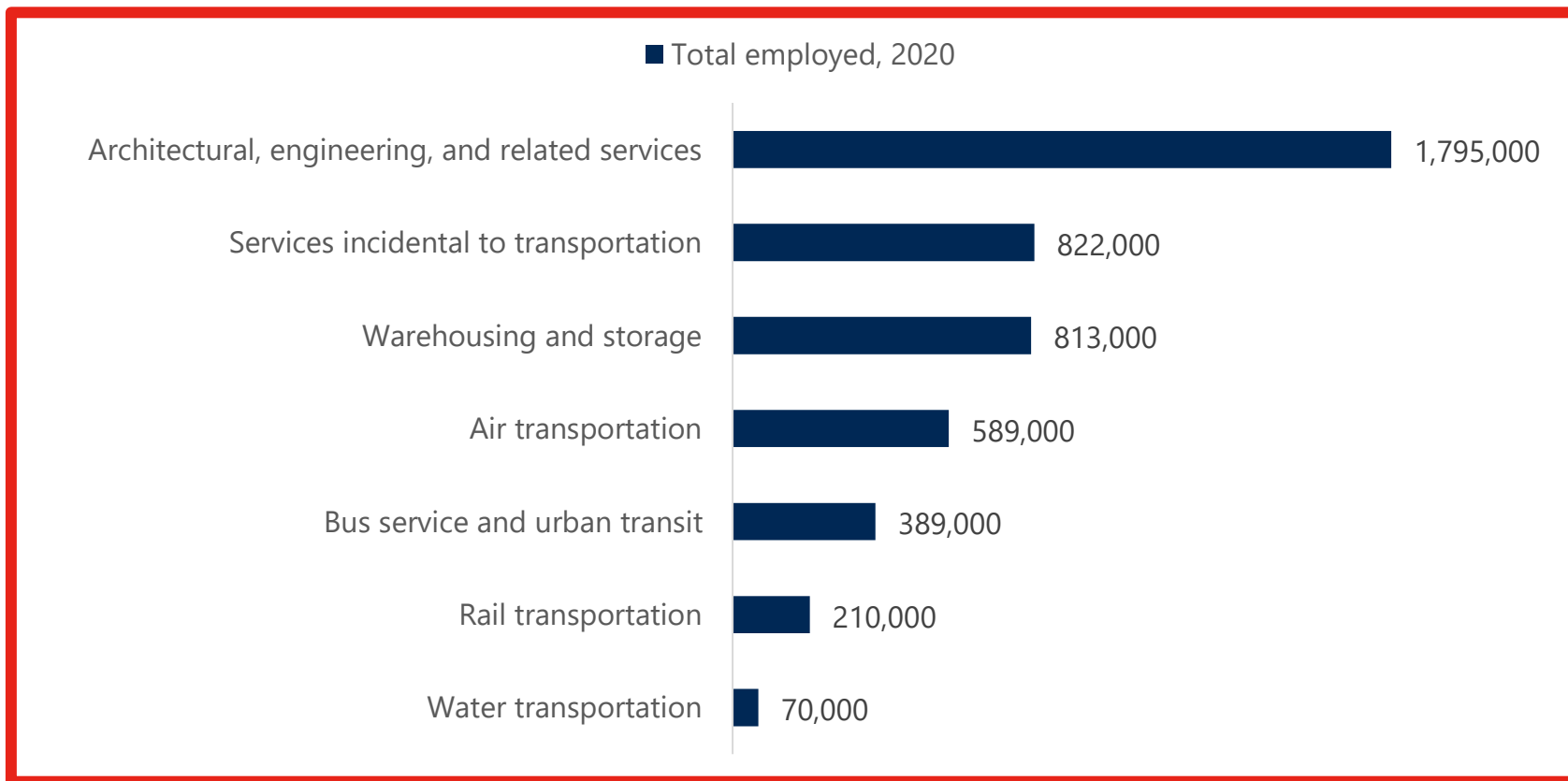
Rail transportation



Architectural, engineering, and related services

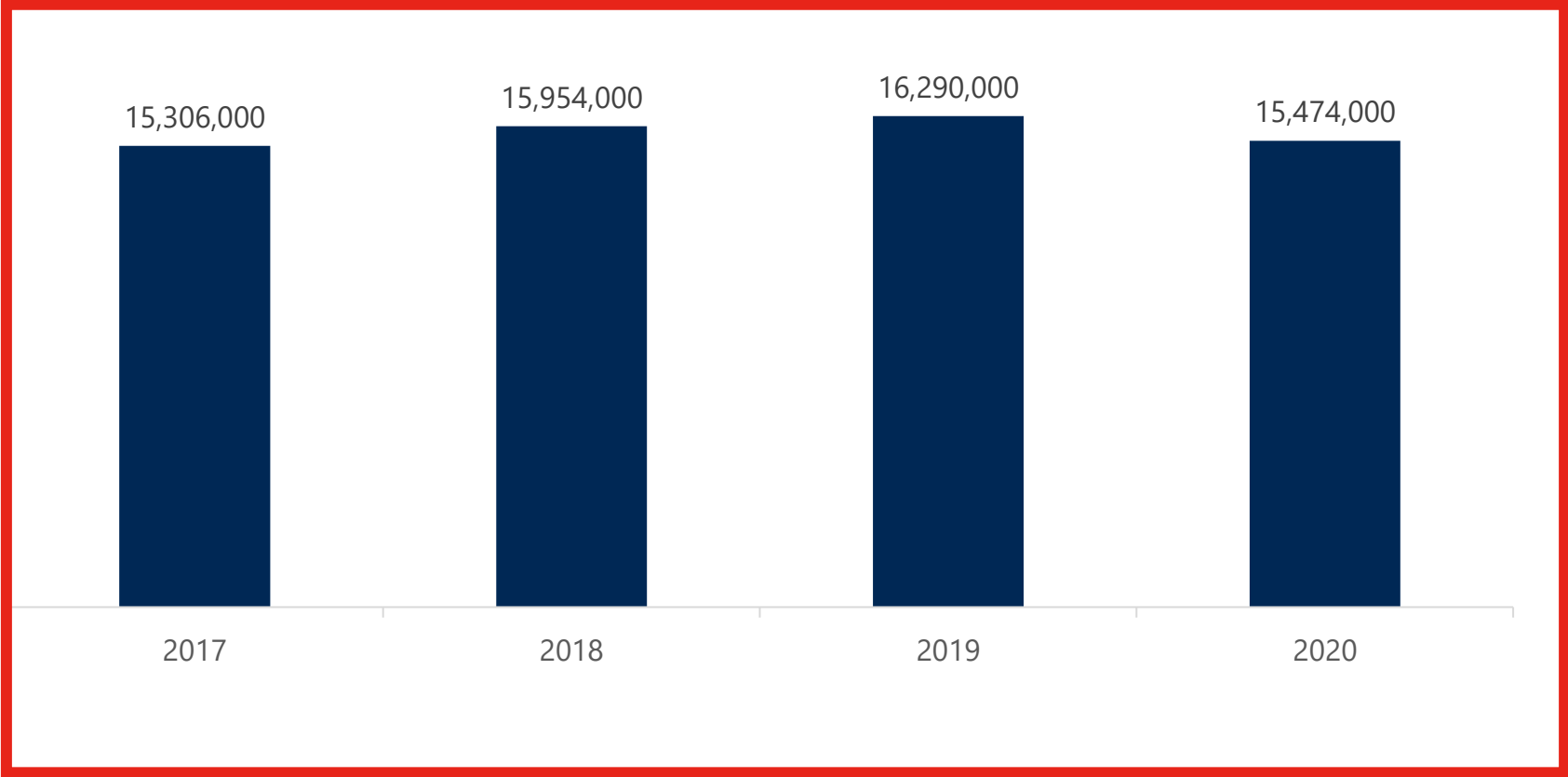
# Overall public works transportation workforce employed a total of 15.5 million people in 2020

## Number of individuals employed by selected industries



# The public works transportation workforce declined from 2019 to 2020

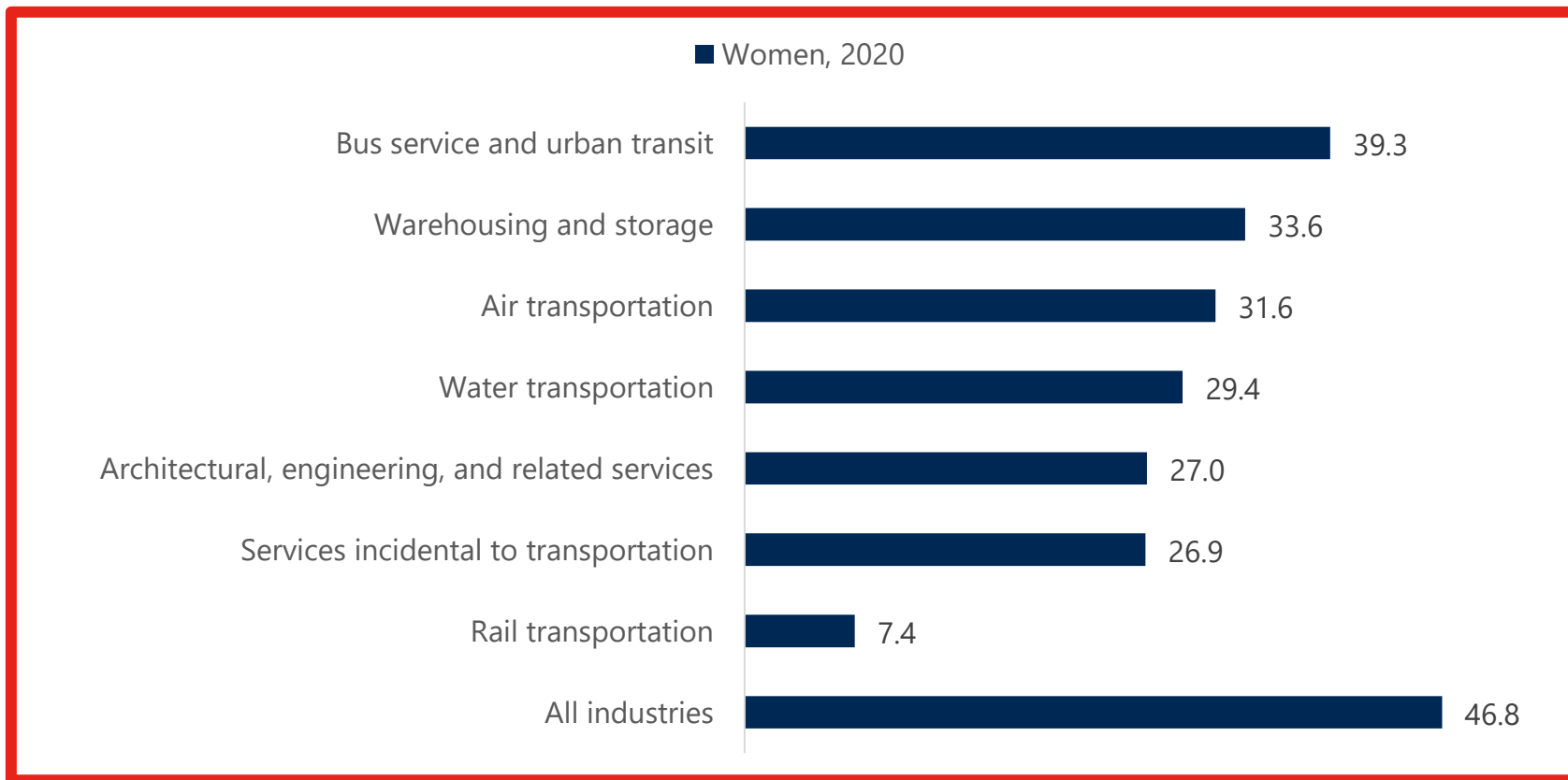
Number of individuals employed (total for key public works transportation subsectors)



SOURCE - US Bureau of Labor Statistics.  
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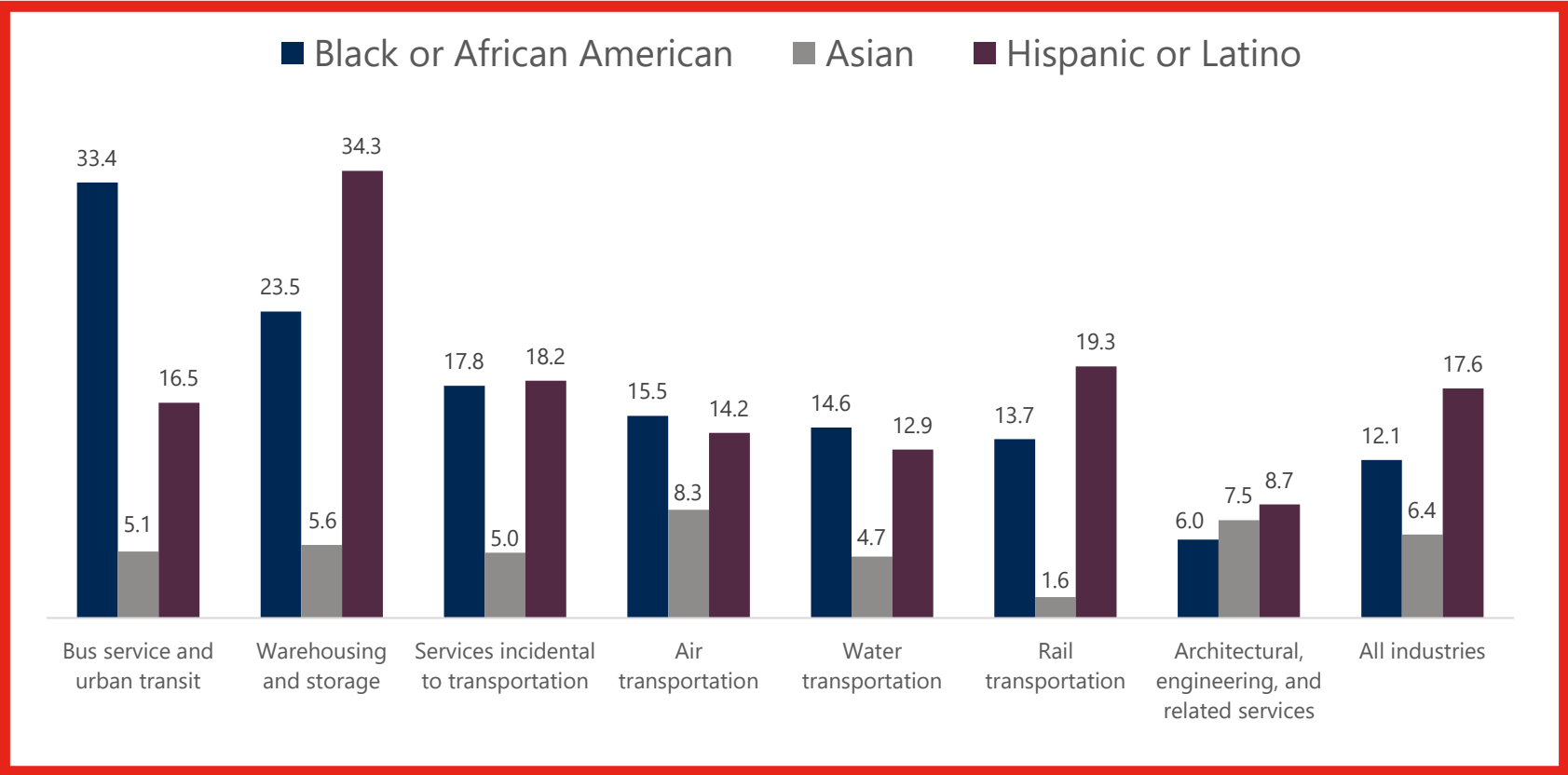
# Gender demographics in the public works transportation workforce

Percent of women among employed individuals in selected industries



# Racial demographics in the public works transportation workforce

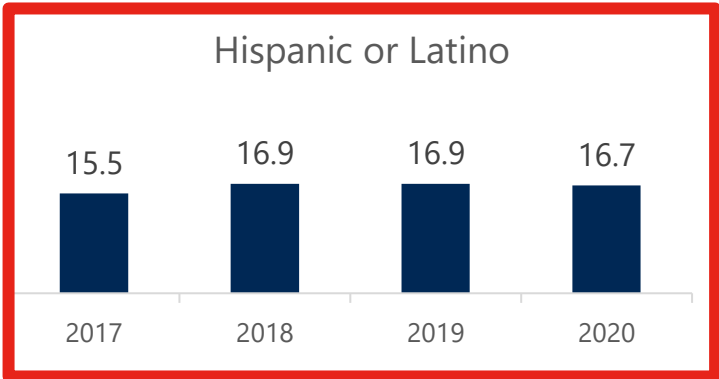
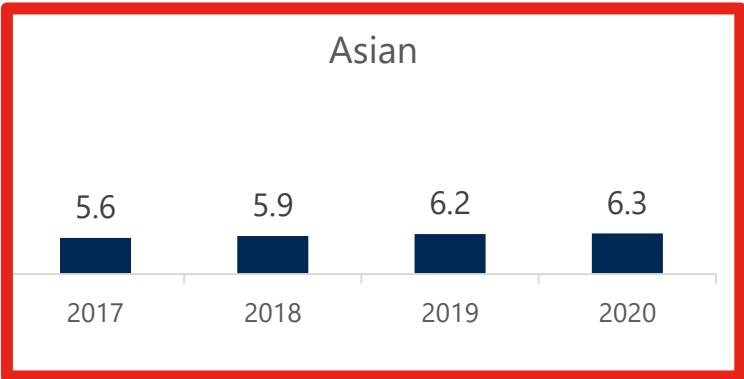
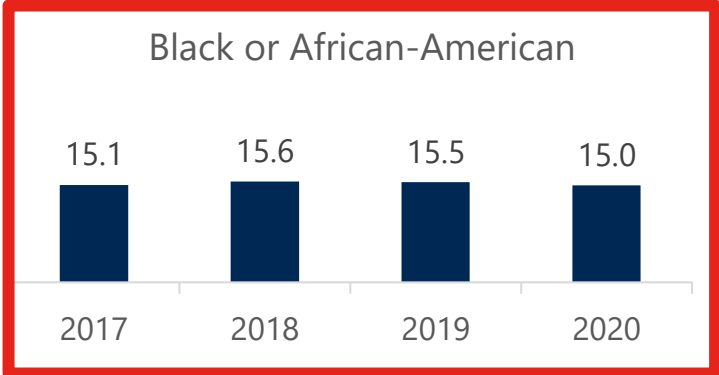
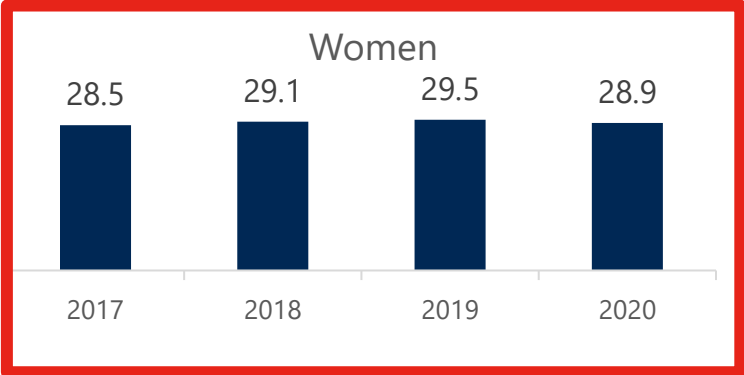
Percentage of different industries in the public works transportation workforce in 2020 represented by specific groups among employed individuals



SOURCE - US Bureau of Labor Statistics.  
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# Demographic changes over time in the public works transportation workforce

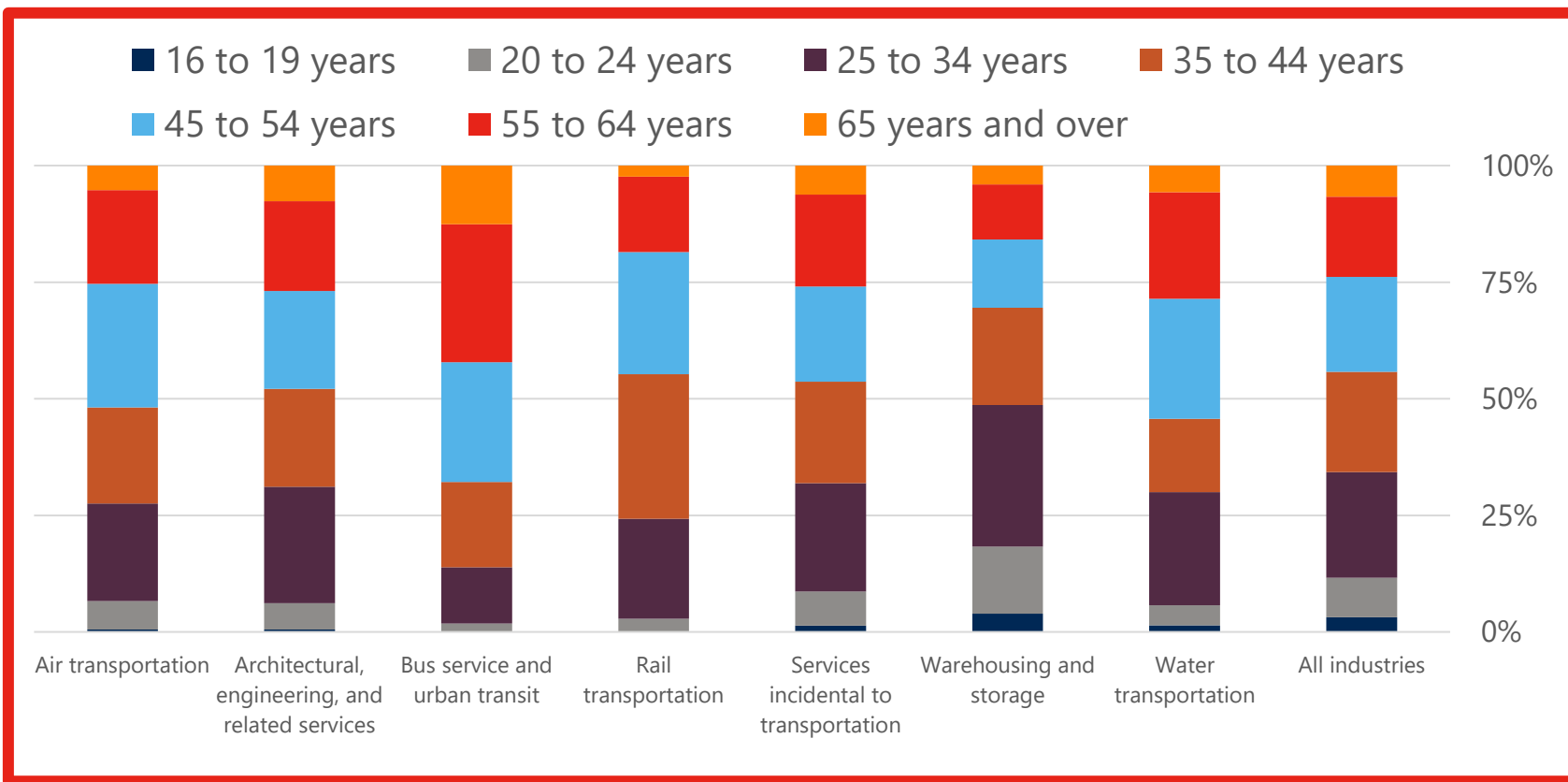
Percentage of the public works transportation workforce represented by specific groups among employed individuals, by year



SOURCE - US Bureau of Labor Statistics.  
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# Age breakdown for key public works transportation subsectors

Percent of individuals in selected industries, by age group

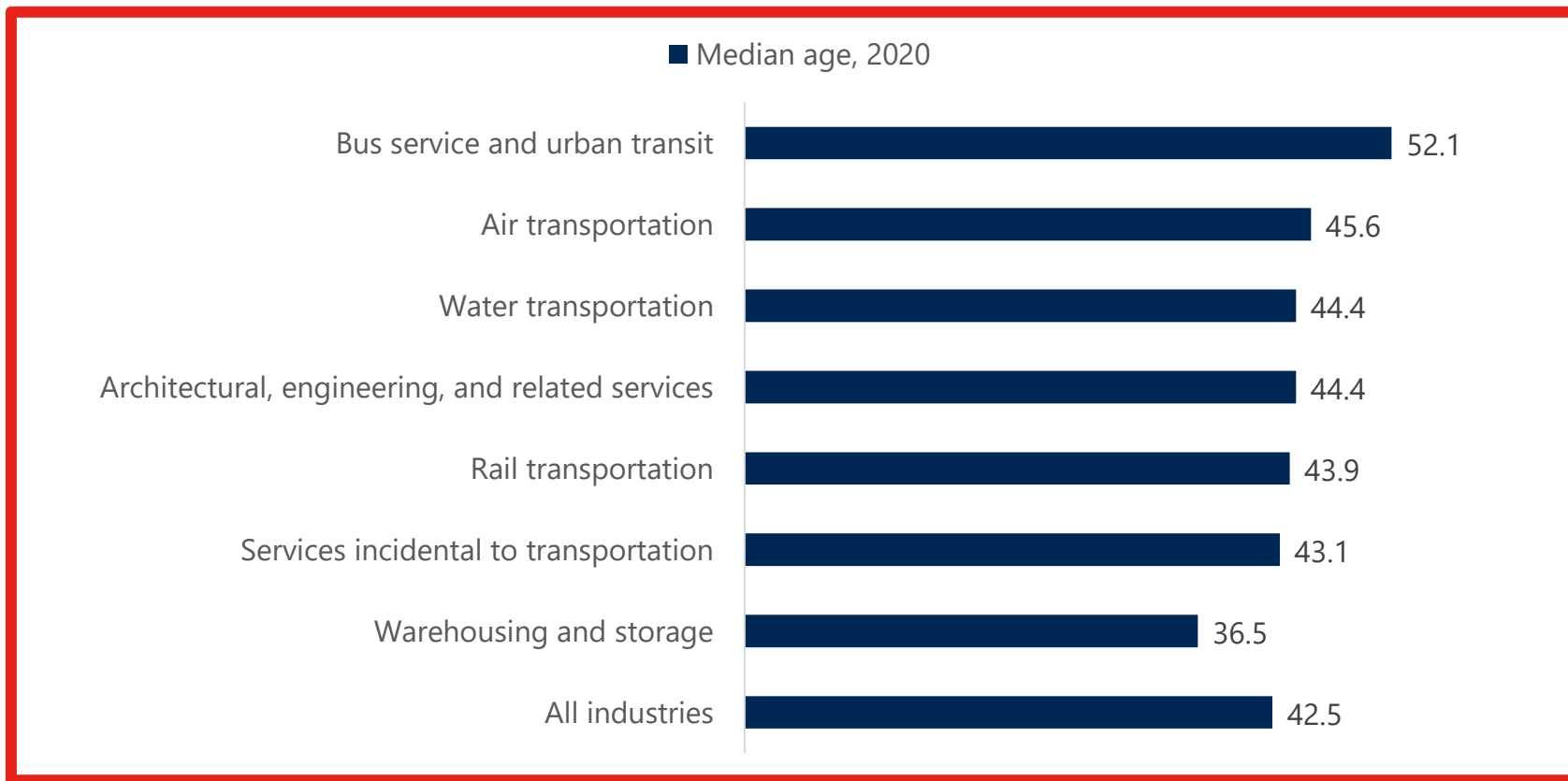


SOURCE: US Bureau of Labor Statistics.  
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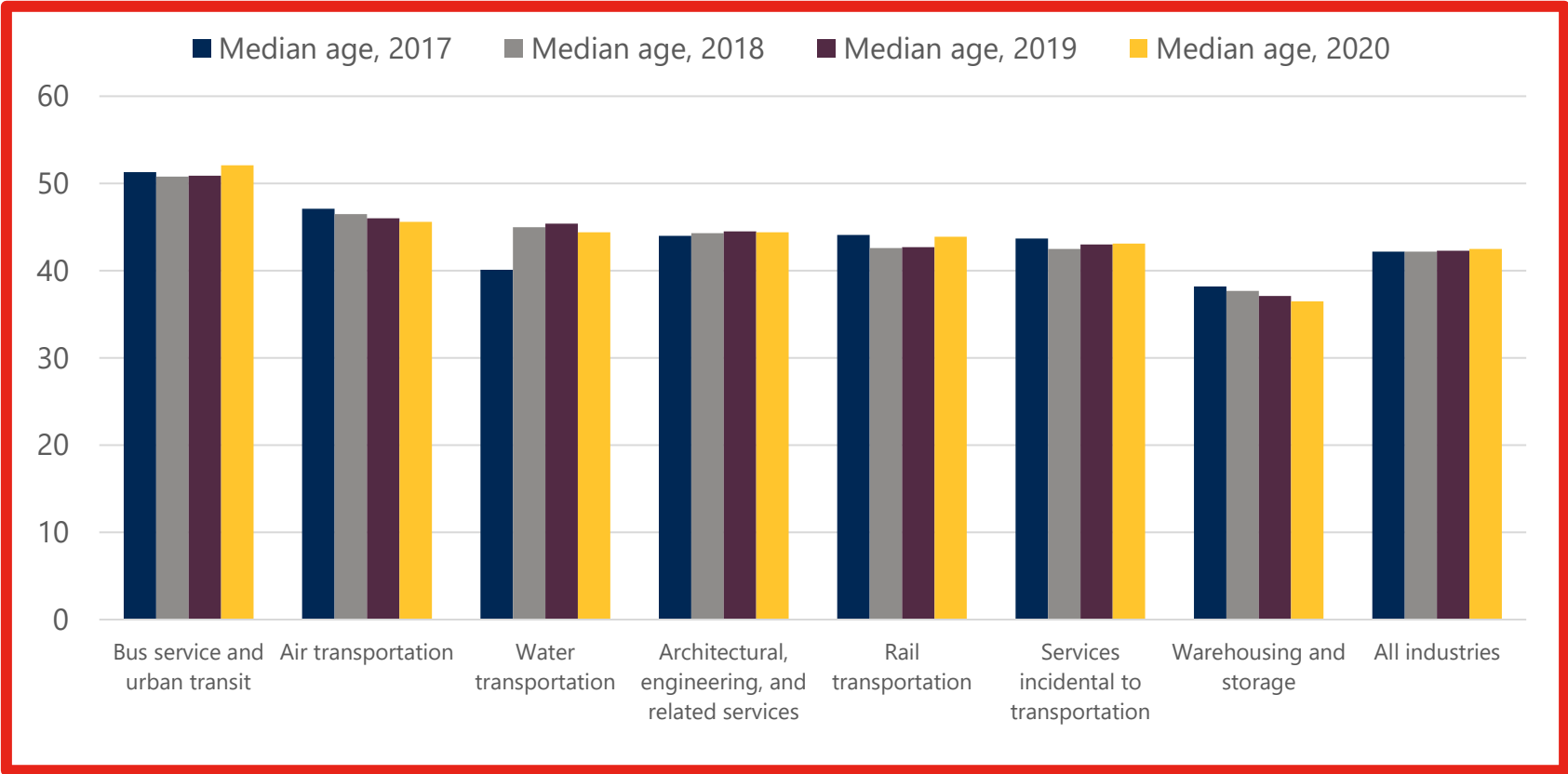
# The public works transportation workforce is aging

Median age among employed individuals in industry, in years



# Median age changes over time in the public works transportation workforce

Median age over time among employed individuals in selected industries, in years

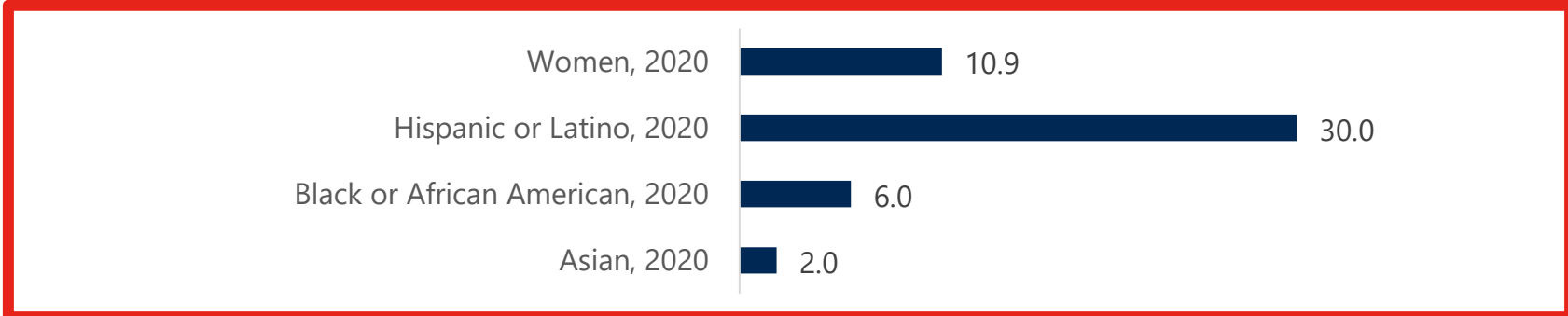


SOURCE: US Bureau of Labor Statistics.  
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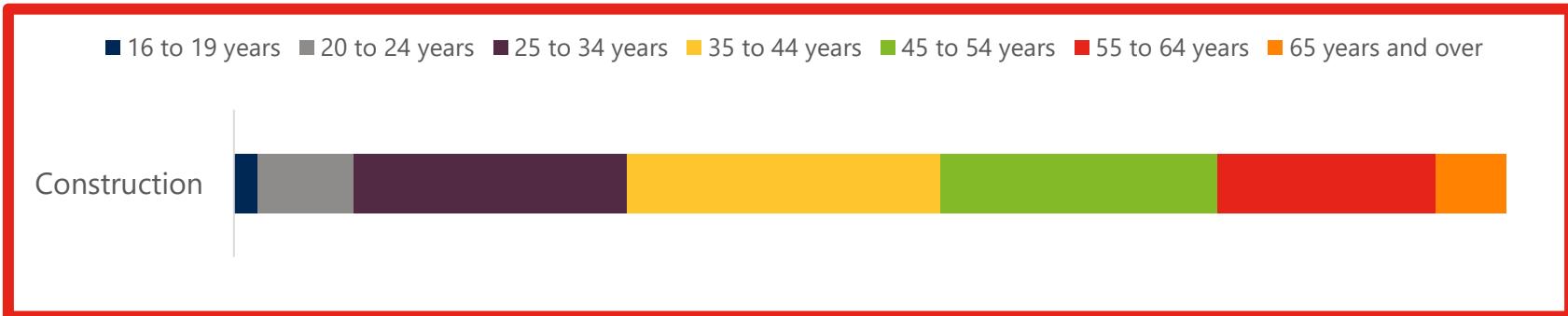
# A look at the construction industry

## The construction industry employed over 10 million individuals in 2020

Percent of construction industry represented by specific groups among employed individuals, 2020



Percent of individuals in construction industry, by age group



SOURCE US Bureau of Labor Statistics.  
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## Key transportation workforce challenges: retirements and separations

- The transportation sector is facing a **vacancy problem**, with a projected **4.2 million** hires needed to fill vacancies from 2012-2022
- Around **53% of transportation employees** were **45 years or older** in 2014

*Contributing factors to vacancy in the transportation workforce:*

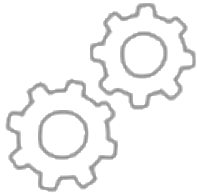
- Retirements
- Occupational transfers
- Other exits

### Unique subsectors:



Due to their smaller size, the **railroad and maritime subsectors** could be particularly affected by significant portions of retiring workers

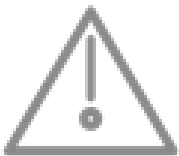
## Key transportation workforce challenges: skilled labor shortage



Jobs in **operations and maintenance** are in particularly high demand



Thirteen of 20 highest-demand jobs in transportation have **salaries above median wage**



Projections show that yearly job openings are **68% greater than student completion of relevant training**, indicating a **skills gap**



Some jobs require high school diplomas or **specialized certification**, while for other roles **on-the-job training or technical education** is sufficient

# Key transportation workforce challenges: career pathways

*A key aspect of developing career pathways for the transportation workforce is job training, including technical education programs, apprenticeships, pre-apprenticeship programs, and workplace trainings*

## Six key elements

- 1** Cross-agency partnerships and role clarity
- 2** Employee engagement
- 3** Education and training
- 4** Identifying funding
- 5** Policy and program alignment
- 6** Measurement of change and performance

Projected net growth in transportation industry jobs, 2012-2022

