



# MARYLAND STATE & D.C. AFL-CIO

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**SB 511 - Labor and Employment - Apprenticeship Standards - Ratio of Apprentices to  
Journeypersons  
Senate Finance Committee  
February 22, 2024**

**OPPOSE**

**Donna S. Edwards  
President  
Maryland State and DC AFL-CIO**

Madame Chair and members of the Committee, thank you for the opportunity to submit testimony in opposition to SB 511. My name is Donna S. Edwards, and I am the President of the Maryland State and District of Columbia AFL-CIO. On behalf of Maryland's 300,000 union members, I offer the following comments.

SB 511 raises the ratio of apprentices to journeymen to 3 to 1 in "nontraditional" trade occupations and each newly registered occupation moving forward. The bill further invents nontraditional trade occupation as one of 28 specified occupations listed in the bill, some of which already have existing apprenticeship programs throughout the country. SB 511 effectively strikes the current Maryland Apprenticeship Training Council evaluation process to review, consider, and potentially approve applications seeking ratios other than one to one.

The bill includes language in (B)(2) that exempts the 3 to 1 ratio from future occupations where the ratio may pose "a risk to the safety of workers in the workplace." This language is a recognition that excess apprentices will not be able to be properly supervised in safety sensitive positions. Despite that recognition in the bill, the proposed list of occupations defined as nontraditional includes several dangerous jobs that may be made even more dangerous by the new ratio.

Workers at wastewater treatment plants face danger every day. There were five deaths in 2020. In 2019, Trina Cunningham died after she fell through a walkway. The Maryland Occupational Safety & Health Administration issued a report finding that, "Employees were exposed to inhalation, fire, and explosion hazards from toxic atmospheric gases such as hydrogen sulfide, methane and carbon monoxide ... the ventilation system was inoperable, electrical equipment was damaged ... gas sensors were broken."<sup>1</sup>

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<sup>1</sup> Barry Simms, "State report details serious safety issues at facility where DPW employee died." WBAL-TV. November 2019.

The bill also proposes additive manufacturing technicians as explicitly nontraditional occupations. Industrial additive manufacturing can use flammable and combustible liquids and are at increased risk for inhalation of fine powders.<sup>2</sup> One report argued that, “[Additive Manufacturing] also presents unique potential occupational health and safety challenges due to the variety of processes, the increasing use of novel materials and processes, and characteristics particular to places and purposes for which it is used.”<sup>3</sup>

Even automobile mechanics, which are not a “nontraditional” occupation considering there are apprenticeship programs for them already operating in Maryland, will be at risk of dealing with high voltage automobile batteries in the future. The Scientific American reported that, “Battery repair is dangerous and shouldn’t be attempted at home or by novices, experts say. If battery cells are damaged during a repair attempt, it can cause a short circuit that leads to a fire or explosion. If the person attempting the repair isn’t wearing the proper high-voltage gloves, they could be electrocuted. ‘You’d be playing with fire’ if you didn’t know what you were doing, said John Mathna... noting that some e-bike batteries contain enough current to kill someone. At a bare minimum, battery repair requires high-voltage training, electrical experience, personal protective equipment, and ‘a baseline understanding of the architectures and how the battery works.’”<sup>4</sup>

The bill’s recognition of decreased safety with increased apprentices under the supervision of a single journeyman and the need for exemptions to the proposed 3 to 1 ratio rings hollow when it fails to extend the same protections to the proposed nontraditional occupations that are already dangerous.

COMAR 09.12.43.05 (H) reads, “(1) Each program shall have a minimum ratio of one journeyman regularly employed for one apprentice consistent with proper supervision, training, and continuity of employment and applicable provisions in collective bargaining agreements. (2) Deviation from the minimum ratio, including the bargaining agreements, is not permitted unless first submitted to the Council in writing for its approval.” SB 511 removes the valuable oversight of the Maryland Apprenticeship and Training Council over programs to determine whether higher ratios really benefit the apprentices and the state’s interest.

Proposals to water down apprenticeship ratios are not new. The Maryland State and DC AFL-CIO participated in the Apprenticeship 2030 Commission along with representatives of AFT-MD, AFSCME MD, and the Baltimore DC Building Trades. One commission working group suggested changing apprenticeship ratios to 1 apprentice to 20 journeymen. These proposals are dangerous and threaten changing apprenticeship programs from high quality on the job training to low-wage workforce training options with limited opportunities to learn from experienced journeymen.

We urge an unfavorable report on SB 511.

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<sup>2</sup> NIOSH, “Additive Manufacturing/3D Printing.” August 2019.

<sup>3</sup> Roth, Gary A et al. “Potential occupational hazards of additive manufacturing.” *Journal of occupational and environmental hygiene* vol. 16,5 (2019): 321-328. doi:10.1080/15459624.2019.1591627

<sup>4</sup> Maddie Stone, “EV Batteries Are Dangerous to Repair. Here’s Why Mechanics Are Doing So Anyway.” *Scientific American*. December 25, 2023.