

**Report on analyzing the apprenticeship mentoring ratio for all
nontraditional apprenticeable occupations in the State**

SB 511 and/or Chapter 307, 2024
HB 650 and/or Chapter 308, 2024.

Maryland Department of Labor

November 27, 2024

The Honorable Bill Ferguson
President of the Maryland Senate
3 W. Miller Senate Office Building
Annapolis, MD 21401

The Honorable Adrienne A. Jones
Speaker of the Maryland House of Delegates
House Office Building, Room 121
Annapolis, MD 2140

RE: SB 511/Ch. 307, 2024 HB 650/Ch. 308, 2024 - Final Report on analyzing the apprenticeship mentoring ratio for all nontraditional apprenticeable occupations in the State

Dear President Ferguson and Speaker Jones,

The Maryland Department of Labor (MDL) is pleased to transmit the enclosed final report on analyzing the apprenticeship mentoring ratio for all nontraditional apprenticeable occupations in Maryland. Pursuant to Chapter 308 passed by the Maryland General Assembly during the 2024 legislative session, MDL studied the ratio of Registered Apprentices (RAs) to Journeyworkers and its impact on the apprenticeship system.

This report provides a summary of:

- The total number of RAs and the number of apprentices by employer, in nontraditional occupations in Fiscal Year 2024;
- An analysis of all nontraditional occupations that could operate with an increased mentorship ratio;
- A list of all ratio waiver requests received by the Maryland Apprenticeship and Training Council in the previous five years; and,
- MD Labor's recommended strategies to streamline the expansion of apprenticeship ratios for all newly registered, nontraditional occupations.

We hope that this report can be a catalyst for change as we consider how to best deliver support to Maryland's businesses via Registered Apprenticeship solutions. Any questions about this report may be directed to Andrew Fulginiti at andrew.fulginiti@maryland.gov.

Sincerely,



Portia Wu
Secretary

Introduction

During the 2024 legislative session, the Maryland General Assembly passed Chapter 380, [Maryland Department of Labor - Report on Apprenticeship Mentoring Ratios](#). The law established the requirement that the Maryland Department of Labor (MDL, or the Department) analyze the apprenticeship mentoring ratio for all apprenticeable occupations in the State.

The legislation text directed MDL to analyze specific components of apprenticeship ratios, to include:

- The total number of apprentices, and the number of apprentices by employer, that participated in nontraditional apprenticeships, which are apprenticeship occupations outside of the building trades, in the immediately preceding fiscal year;
- An analysis of, including identification of, all nontraditional apprenticeship occupations that could operate with a higher than one-to-one mentorship ratio without posing a risk to the safety of workers in the workplace;
- A list of all apprenticeship ratio waiver requests received by the Maryland Apprenticeship and Training Council (MATC) in the immediately preceding five calendar years, the respective outcomes for the requests, and the reasons for a denied waiver request; and,
- Recommended strategies to streamline the expansion of apprenticeship ratios for all newly registered nontraditional apprenticeship occupations for the purpose of meeting the goals of the Apprenticeship 2030 Commission.

By request of the General Assembly, the Department has authored this report to provide analysis on apprenticeship ratios in Maryland.

Section I

Total number of apprentices and number of apprentices by employer that participated in nontraditional apprenticeship occupations outside of the building trades, in the immediately preceding fiscal year

Based on an analysis of all RAs, the Department determined that, during the 2024 Fiscal Year, approximately 694 apprentices were employed by 119 employers in “nontraditional occupations.” Maryland concluded FY24 with approximately 11,520 RAs in the State; therefore, this figure (694) represents approximately 6% of all active apprentices at that time.

Section II

Analysis of, including identification of, all nontraditional apprenticeship programs that could operate with a higher than one-to-one mentorship without posing a risk to the safety of workers in the workplace

MDL individually analyzed all 375 registered occupations in Maryland and determined that 135 occupations were considered “nontraditional” and could operate with an increased ratio without posing a safety risk to workers, consumers, or the public. The list of identified occupations may be found at the conclusion of this report in *Appendix A: Nonhazardous Programs that may Operate with an Expanded Ratio*.

To conduct this analysis, MDL considered three factors: 1) alignment with federal ratio guidance, 2) worksite safety based on recent fatalities, as determined by the U.S. Department of Labor (USDOL), and 3) whether the duties required to be executed in the occupation involved situations where health and safety of the consumers or the public might be at risk.

MDL utilized USDOL Apprenticeship Circular 2021-02, [Guidelines for Reviewing Apprentice to Journeyworker Ratio Requests](#), issued January 12, 2021, to assess potential ratio expansion for each “nontraditional” occupation. For inclusion in *Appendix A*, an occupation must align with the framework described in the Circular (safety, supervision, and training).

Second, as suggested by the above USDOL guidance, MDL considered how hazardous an occupation might be based on fatal work injuries. If, according to USDOL’s Bureau of Labor Statistics, a job had a work injury rate exceeding five deaths per 100,000 full-time equivalent workers over the three most recent calendar years (for which such statistics are available), MDL *would not* consider it eligible for an expanded ratio.

In alignment with USDOL guidance, MDL considers the following industries hazardous:

- Construction;
- Transportation and Warehousing;
- Mining, Quarrying, and Oil and Gas Extraction; and
- Agriculture, Forestry, Fishing, and Hunting.

All registered occupations within these industries are *not identified as initially* eligible for an expanded ratio on *Appendix A*. Requests for an expanded ratio within these industries would be met with increased scrutiny by both MDL and MATC.

Third and finally, the Department considered if an occupation prepares individuals for roles that directly interact with consumers and whether required work activities involve potential safety or health risks to consumers or members of the public. As such, healthcare occupations, such as Certified Nursing Assistant and Patient Care Technician, that may have met the criteria in USDOL guidance were further evaluated and NOT included in *Appendix A* because MDL determined they pose a public safety risk if not done properly and therefore require a 1:1 ratio. MDL considers these occupations to be hazardous and requests for an expanded ratio within these industries would be met with increased scrutiny by both MDL and MATC.

Section III

A list of all apprenticeship ratio waiver requests received by the Maryland Apprenticeship and Training Council in the immediately preceding 5 calendar years, the respective outcomes for the requests, and the reasons for a denied waiver requests

In the immediately preceding five calendar years, MDL has received two requests for expanded ratios in established programs (Note: The Department does not separately retain these records, so this is based on recollection of MDL staff). Both of these requests were for a 2:1 ratio and were approved. The requests came from Howard Community College and Multiverse (both RA Sponsors). Details of each request are noted below:

1. Howard Community College

- Occupations Requested:
 - Information Systems Security Engineer
 - IT Field Support Specialist
- Approval Date: November 2020
- Total apprentices registered since approval:
 - Information Systems Security Specialist - 5
 - IT Field Support Specialist - 20

2. Multiverse

- Occupations Requested:
 - Data Analyst
 - Software Engineer
 - Digital Marketer
 - Business Analyst
- Approval Date: November 2023
- Total apprentices registered since approval:
 - No apprentices have been registered as of the writing of this report.

Section IV

Recommended strategies to streamline the expansion of apprenticeship ratios for all newly registered nontraditional apprenticeship occupations for the purpose of meeting the goals of the Apprenticeship 2030 Commission

In order to streamline apprenticeship ratio expansion for nontraditional/nonhazardous occupations, MDL proposes two recommendations:

1. Reconvene the MATC Subcommittee on Expanding Ratios to formally revise the *Maryland Ratio Guidelines* in a manner consistent with the USDOL Office of Apprenticeship (OA) Circular 2021-02, as well as additional criteria to evaluate consumer and public safety, allowing for the use of expanded ratios in nonhazardous occupations upon registration; and
2. As part of this revision, update “Section II A: Ratio Application Process” of the *Guidelines* to remove the requirement for new or existing sponsors in nonhazardous occupations to meet the same ratio requirements as programs with hazardous occupations.

MDL intends to reconvene the Subcommittee and utilize the following *PROPOSED DRAFT* language to initiate the revision:

New and existing apprenticeship programs that utilize or seek to utilize expanded ratios and that do not operate within the high-hazard industry sectors described in section II.A.1 may request an expanded ratio. This request may be approved by the Council, provided that such programs demonstrate quality training, performance, and/or satisfactory completion rates (see Section II.C), follow proper safety and training standards (Section II.A.5), and receive approval from the Council. Any program seeking an expanded ratio must still justify the use of an expanded ratio under the applicable criteria set forth in this guidance and in COMAR 09.12.43.

This potential revision will allow entities to propose an expanded ratio for nonhazardous occupations *upon initial registration*, removing the currently required demonstration period that often results in a one to three year wait for expansion approval. Additionally, with a journeyworker able to mentor more than one apprentice, when it is safe to do so, this modification will support the rapid growth of the RA model as outlined in the Blueprint for Maryland’s Future and advised by the Apprenticeship 2030 Commission.

Conclusion

Expanding ratios in nonhazardous occupations will increase Registered Apprenticeship participation across the State. MDL is committed to overseeing the above recommendations and looks forward to working closely with the Maryland General Assembly, MATC, and other workforce stakeholders to ensure that all Marylanders have access to the fulfilling careers and family-sustaining wages accessible through Registered Apprenticeship.

Appendix A: Nonhazardous Programs that may Operate with an Expanded Ratio

Dot Code	Occupational Title
210132010	ACCOUNTING TECHNICIAN
436011000	ADMINISTRATIVE SPECIALIST
45107058	ALCOHOL AND DRUG TRAINEE
151252000	APPLICATION SPECIALIST
173011010	ARCHITECTURAL DRAFTER/ESTIMATOR
373267640	ARSON INVESTIGATOR
279357062	AUTO PARTS COUNTER CLERK
526686010	BAKER
330371010	BARBER
413161010	BEEKEEPER
292053000	BEHAVIORAL HEALTH AIDE (classroom)
30167014	BUSINESS ANALYST
319093000	CENTRAL STERILE PROCESSING TECHNICIAN
151121000	CERTIFIED CYBER ANALYST OPERATOR
334374010	CERTIFIED MASSAGE THERAPIST
715381094	CERTIFIED WATCHMAKER TECHNICIAN
359342540	CHILD CARE DEVELOPMENT SPECIALIST
639281014	COIN MACHINE SERVICE REPAIRER
131067010	COLUMNIST/COMMENTATOR
173024010	COMMERCIAL DRONE PILOT
195367018	COMMUNITY HEALTH WORKER
30162010	COMPUTER PROGRAMMER, BUSINESS
111199020	COMPUTER SYSTEMS ENGINEER/ARCHITECT
332271010	COSMETOLOGIST
45107010	COUNSELOR (YOUTH DEVELOPMENT)

151212020	CYBER DEFENSE INCIDENT RESPONDER
151122000	CYBER SECURITY LEVEL 1
151122001	CYBER SECURITY LEVEL 2
151210010	CYBER SECURITY SUPPORT TECHNICIAN
33362010	CYBERSECURITY SUPPORT TECHNICIAN
39162014	DATA ANALYST
151141000	DATA SCIENCE & ANALYTICS LEVEL 1
151111090	DATA SCIENCE PRACTITIONER
151199070	DATA WAREHOUSING SPECIALIST
79361018	DENTAL ASSISTANT
712381018	DENTAL TECHNICIAN
77121010	DIETETIC ASSISTANT
151199000	DIGITAL & SOCIAL MEDIA SPECIALIST
164117010	DIGITAL MARKETER
962132010	DIGITAL VIDEO EDITOR
211093000	DIRECT SUPPORT PROFESSIONAL
379362010	DISPATCHER
739361010	DISPLAY MAKER
7261022	DRAFTER, COMPUTER AIDED DRAFTING
7281010	DRAFTER, MECHANICAL
5281014	DRAFTER, STRUCTURAL
92227018	EARLY CHILDHOOD EDUCATOR
119161000	EMERGENCY MANAGEMENT SPECIALIST
79374010	EMERGENCY MEDICAL TECH./PARAMEDIC
381137010	ENVIRONMENTAL CARE SUPERVISOR
18167034	FIELD ENGINEER
210367010	FINANCIAL BUSINESS PARTNER
142081010	FLORAL DESIGNER
365361014	FOOTWEAR AND LEATHER REPAIRER
250257010	GENERAL INSURANCE ASSOCIATE
153227018	GOLF PROFESSIONAL
141061018	GRAPHIC DESIGNER
32262010	HELP DESK TECHNICIAN
729387022	HOME INSPECTOR
419224010	HORSE TRAINER

40061038	HORTICULTURIST
119081000	HOTEL AND LODGING MANAGER
381687014	HOUSEKEEPER
168367018	HOUSING INSPECTOR
141061022	ILLUSTRATOR
151122100	INFO SYSTEMS SECURITY ENGINEER
151244000	INFORMATION ASSURANCE SPECIALIST
151212000	INFORMATION SECURITY ANALYST
151241000	INTEGRATION DESIGN SPECIALIST
151151100	IT FIELD SUPPORT SPECIALIST LEVEL 1
151151200	IT FIELD SUPPORT SPECIALIST LEVEL 2
151151000	IT PROFESSIONAL LEVEL 1
151151001	IT PROFESSIONAL LEVEL 2
700281010	JEWELRY REPAIRER
30062010	JUNIOR SOFTWARE DEVELOPER
231011000	LAWYER
132099020	LICENSED FINANCIAL REPRESENTATIVE
151299080	LINUX SYSTEMS ADMINISTRATOR
972382014	LITHOGRAPHIC CAMERA OPERATOR
972381010	LITHOGRAPHIC PLATEMAKER
972381022	LITHOGRAPHIC STRIPPER
709281010	LOCKSMITH
661281014	LOFT WORKER
222587030	MAILER
411011000	MANAGER (RETAIL STORE)
187167106	MANAGER RESTAURANT
169167030	MANAGER, DATA PROCESSING
112021000	MARKETING MANAGER
187167030	MORTICIAN
168167062	MOSH INSPECTOR
271024000	MULTIMEDIA GRAPHIC DESIGNER
272012010	MULTIMEDIA PRODUCER
151142010	NETWORK COMMUNICATIONS TECHNICIAN
151142014	NETWORK SUPPORT TECHNICIAN
151244010	NETWORK TECHNICIAN

184167014	NEWS DIRECTOR
169167034	OFFICE MANAGER
184167188	OPERATIONS MANAGER
716280014	OPTICIAN
920587018	PACKAGER, HAND
169167042	PARK RANGER
195107034	PEER RECOVERY SPECIALIST
142062030	PHOTOGRAPHER, STILL
730361010	PIANO TECHNICIAN/TUNER
131151000	PROFESSIONAL SUCCESS COACH
151199090	PROGRAM MANAGER
30162018	PROGRAMMER, ENGINEERING/SCIENTIFIC
144061010	PUBLIC ARTIST AND RELATED WORKER
166267038	RECRUITER
637261026	REFRIGERATION MECHANIC
79361010	RESPIRATORY THERAPY TECHNICIAN
313361014	RESTAURANT LINE COOK
119051000	RESTAURANT MANAGER
274357018	RETAIL HOME CENTER SPECIALIST
251357010	SALES REPRESENTATIVE
144061018	SCULPTOR
151131000	SECURE SOFTWARE PROGRAMMING
187117010	SENIOR LIVING MANAGER
620261014	SERVICE MANAGER, AUTO
151132000	SOFTWARE DEVELOPER (APPLICATIONS)
162117014	SUBCONTRACT ADMINISTRATOR
162157038	SUBCONTRACT ADMINISTRATOR ASSOCIATE
292055500	SURGICAL TECHNOLOGIST
151152010	SYSTEMS ADMINISTRATION TECHNICIAN
151251000	SYSTEMS SPECIALIST
393011000	TABLE GAMES SUPERVISOR
91227010	TEACHER
412031000	TECHNICAL SALES REPRESENTATIVE
151152000	TECHNICAL SUPPORT SPECIALIST
151299090	TECHNOLOGY PROJECT SPECIALIST

720281018	TELEVISION RADIO REPAIRER
116167054	TRAINING AND DEVELOPMENT SPECIALIST
12167054	VALIDATION TECHNICIAN
715281010	WATCH REPAIRER TECHNICIAN
203362022	WORD PROCESSING MACHINE OPERATOR