

# Professional Technician Development Committee Information Report: 2018-1

## *Determining Technician Entry-Level Skills*

Developed by the Technology & Maintenance Council's (TMC)  
Determining Necessary Entry Level Technician Skills Task Force

### **ABSTRACT**

This information report presents the results of the Professional Technical Development Committee's (PTDC) Task Force on Determining Necessary Entry Level Technician Skills. The charge of this Task Force was to examine means of determining these essential skill sets to become a qualified applicant for technician positions in the industry. This report discusses the activities of the Task Force and resulting changes made to requirements for accredited technical training through the National Institute for Automotive Service Excellence (ASE) and its National Automotive Technician Education Foundation (NATEF).

### **INTRODUCTION**

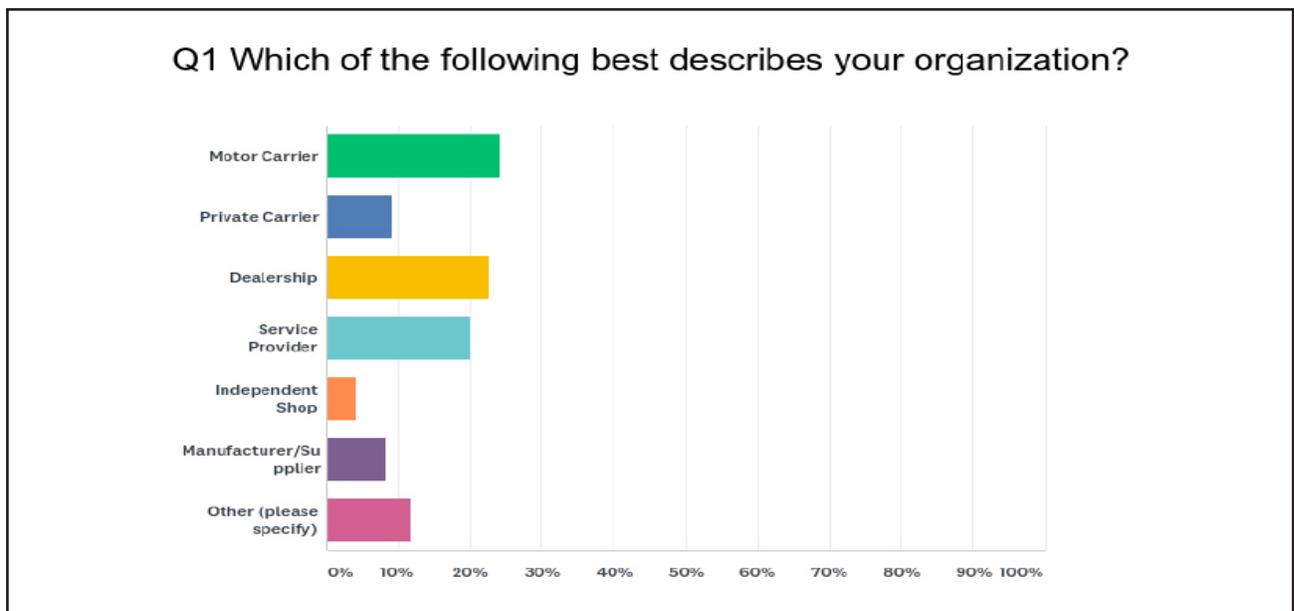
As vehicle technology continues to evolve, so must the skill level of entry-level technicians. The situation is exacerbated by a technician shortage, and in particular by a shortage of qualified technicians in the labor market.

TMC's PTDC began to study this challenge in 2016 by setting up a Task Force to evaluate this issue and to develop recommendations as to the appropriate steps to mitigate a perceived deficit in the area of necessary skills for entry-level technicians. This report describes the activities of the Task Force and the resulting modifications to requirements for accredited technician training programs.

Shortly after beginning its work, the Task Force learned that the National Institute for Automotive Service Excellence (ASE), the lead organization for technician certification, was evaluating the same issue. In early 2017, TMC advised ASE that its members desired to assist with this effort by ASE and its National Automotive Technician Education Foundation (NATEF), which examines the structure, resources and quality of training programs and evaluates them against standards established by the industry. As a result of this cooperation, TMC surveyed its members regarding the then existing task list stipulated by NATEF for training programs to develop in their students in order to become ASE Certified Technicians.

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**Figure 1: Distribution of TMC Survey Respondents**

## SURVEY RESULTS

The goal of the survey was to identify TMC member expectations in terms of entry-level technician skills. One hundred and twenty members responded to the TMC survey. A demographic breakdown of survey respondents is shown in **Figure 1**.

Of those companies responding, 24 percent were Motor Carriers, 22 percent were Dealerships, 20 percent were Service Providers, nine percent were Private Carriers, eight percent were Independent Shops, four percent were Manufacturers/Suppliers and the remaining 11 percent were “others.”

The survey results indicated that 80.8 percent of those TMC members responding had a shortage of qualified candidates, while only 19.2 percent experienced a shortage of applicants for these positions. More than 80 percent of the respondents indicated that of the 541 items on the NATEF task list, 184 were entry-level. Electrical and Preventive Maintenance Inspection (PMI) tasks were identified as highly important for entry-level technicians. The 57.1 percent of respondents promote ASE certifications of their technicians. 66.7 percent stated that the employer reimburses students

for the cost of ASE tests if they pass. Nearly 38 percent increase the technicians’ pay if they pass. More than 74 percent of respondents recognized ASE student certifications.

Considering these results, and that 71 percent of those companies responding to the survey are involved with local auto or truck school programs, The Task Force recommended TMC’s working with ASE to align the NATEF standards with the entry-level skills needed for the industry would be a huge step in the right direction to address the shortage of qualified technicians.

ASE also conducted a separate survey of agricultural industry technician instructors. The results of responses to that survey indicated that 67.7 percent of agricultural students find employment as diesel technicians.

## TMC FOCUS GROUP

As a result of these recommendations, the PTDC facilitated a focus group during the TMC Annual Meeting in February 2017, which reviewed the survey results and conducted a task-by-task review of the then current NATEF standards. As a result of this focus group, PTDC recommended changes to certain ter-

Accreditation Level	Instructor Qualifications	Tasks	Hours
Medium/ Heavy Truck Inspection and Minor Repair	T4, T6, T8 and any other ASE Medium/ Heavy Truck Certification	P-1 = 128 (95% = 122) P-2 = 19 (70% = 13) P-3 = 9 (25% = 2 ) Required Supplemental Tasks = 43	540 hours combined classroom and lab/ shop instructional activities
Medium/Heavy Truck Service Technology	T4, T6, T8 plus any certification in the area in which the Instructor teaches	P-1 = 191 (95% = 181) P-2 = 72 (70% = 50) P-3 = 23 (25% = 6 ) Required Supplemental Tasks = 43	740 hours combined classroom and lab/ shop instructional
Master Medium/Heavy Truck Service Technology	T4, T6, T8 plus any certification in the area in which the Instructor teaches. The Program must also have ASE Certified Instructors in T2-T8.	P-1 = 194 (95% = 184) P-2 = 92 (70% = 64) P-3 = 69 (25% = 17) Required Supplemental Tasks = 43	1040 hours combined classroom and lab/ shop instructional

**Table 1. Proposed Revised ASE Medium/Heavy Truck Accreditation Model**

minology, as well as for additions and deletions in the task list.

### ASE WORKSHOP

In March 2017, ASE organized a workshop with a group of subject matter experts. This group included original equipment (OE) and aftermarket suppliers, shop owners and technical instructors. This group was charged with determining changes needed in NATEF's accreditation model. The workshop included a review of the task list and tool list.

Based upon these recommendations, ASE edited and updated the model. The updated NATEF model has three levels, (see **Table 1**):

- Inspection, Maintenance and Minor Repair
- Truck Service Technology
- Master truck Service Technology

At the time this Information Report was issued, Tasks and Hours for Levels 2 or 3 had yet to be finalized. However, it is projected that the new NATEF model will become effective sometime in 2018. Resources for the new accreditation model will be accessible at <https://www.asealliance.org/resources>.

### CONCLUSION

The result of this endeavor by the Task Force is a great move in the right direction to address the shortage of qualified technicians. However, the Task Force concluded that additional work must be done. All technicians hired in the industry are not recruited exclusively from technical schools, and all technical schools do not utilize the NATEF standards. TMC member companies must continue to build training programs specific to their operations to help fill all skill gaps of new hire technicians.