



October 2023

Workforce Outcomes for Diesel Mechanic Technology Graduates

Employment and Earnings, 2018 - 2022



MISSISSIPPI STATE UNIVERSITY™
NATIONAL STRATEGIC PLANNING
& ANALYSIS RESEARCH CENTER

Workforce Outcomes for Diesel Mechanic Technology Graduates

Employment and Earnings, 2018 - 2022

October 2023

ABOUT MISSISSIPPI'S SLDS

Mississippi's State Longitudinal Data System (SLDS) is one of the most comprehensive systems in the country and includes administrative records from more than 25 education, workforce, and human service agencies in the state. The SLDS allows for the alignment of multiple sources of de-identified administrative data over time to evaluate educational or workforce strategies in terms of real outcomes, such as entrance into employment, wages, and skill gains.

ABOUT NSPARC

NSPARC is a university research center at Mississippi State University and is a trusted and reliable source for high-quality research and analysis. We specialize in use-inspired research, data analytics, and software architecture and development. Our research emphasizes workforce and economic development, but the diversity of expertise on our team means we cover a broad range of topics in education, economics, health, human services, and corrections.

Unique experience with administrative records and longitudinal data systems, matched with our ability to apply the latest methodological and machine learning approaches allows us to draw meaningful insights from data to address challenges faced by policymakers, employers, economic developers, and state agencies.

For more information, contact NSPARC at nsparc@nsparc.msstate.edu or 662-325-9242.

Copyright 2023 by Mississippi State University. All rights reserved. Produced by NSPARC.

Mississippi State University is an equal opportunity institution. Discrimination in university employment, programs, or activities based on race, color, ethnicity, sex, pregnancy, religion, national origin, disability, age, sexual orientation, gender identity, genetic information, status as a U.S. veteran, or any other status protected by applicable law is prohibited.

Workforce Outcomes for Diesel Mechanic Technology Graduates

Employment and Earnings, 2018 - 2022

October 2023

OVERVIEW

This research brief, requested by AccelerateMS, provides summary information on the workforce outcomes of Mississippi public community college students who graduated from a *Diesel Mechanic Technology* program with an Associate of Applied Science degree, a Career Certificate, or a Technical Certificate.

This analysis was conducted for students graduating in Academic Years (AY) 2018 through 2022. During this time period, seven of Mississippi's 15 public community colleges reported graduating students from a *Diesel Mechanic Technology* program. These schools include Copiah-Lincoln Community College, East Central Community College, East Mississippi Community College, Hinds Community College, Itawamba Community College, Northeast Mississippi Community College, and Southwest Mississippi Community College.

Results of the analysis show:

- An average of 98 students graduate from *Diesel Mechanic Technology* programs across the state each year.
- Of these graduates, an average of 12 continue to pursue additional postsecondary education each year.
- Of the remaining 86, approximately 85% are employed in Mississippi within one year of graduation.

Earnings data for the most recent (AY 2022) cohort of graduates show that the employed graduates earn approximately \$45,000 in their first year of employment. This is an increase of about \$15,000 compared to first-year earnings of the AY 2018 cohort.

DATA, INDICATORS, AND METHODOLOGY

DATA SOURCES

The data in this report were made available by the continued funding of Mississippi's State Longitudinal Data System (SLDS) through the state legislature. The following data were used to measure workforce outcomes:

Mississippi Community College Data – Data on college graduates and enrollment come from the administrative records of Mississippi's 15 community colleges and the Mississippi

Community College Board (MCCB). These data include information on the enrollment, county of residence, academic major, and graduation of approximately 73,000 students each year. These data are updated annually with student records from the previous academic year.

Mississippi Employment and Wage Records – Data on employment status, county of employment, earnings, and sector of employment are contributed to the SLDS by the Mississippi Department of Employment Security (MDES). These data were collected from Mississippi employers that participate in the state’s Covered Employment system. Data fields include information on quarterly earnings, company of employment, employer location, and the employer’s industry classification code.

INDICATORS AND METHODOLOGY

Using these data, the following indicators were measured:

Total Graduates – The annual number of students graduating from Mississippi public community college *Diesel Mechanic Technology* program with an Associate of Applied Science degree, a Career Certificate, or a Technical Certificate in academic years 2018 through 2022. To avoid double-counting, students who have earned multiple awards in the same year are counted once and categorized by their highest award earned. The *Diesel Mechanic Technology* program is defined using the standardized Classification of Instructional Program (CIP) Code 47.0605; the exact title of this program may vary between different colleges.

Graduates not Re-Enrolled – The annual number of graduates who do not continue pursuing additional postsecondary education at one of Mississippi’s public community colleges or universities after graduation from their *Diesel Mechanic Technology* program. These graduates are utilized as the foundation for this report’s workforce measurements, because including re-enrolled full-time or part-time students would skew the measurement of a cohort’s overall employment and earnings.

Employed Graduates – The annual number of graduates who not re-enrolled and who are employed within 1 year of graduation by a Mississippi employer that participates in the state’s Covered Employment system.

Average Earnings (Median) – The median wages paid to employed graduates. This metric is calculated in accordance with the U.S. Department of Labor’s (DOL) WIOA Performance Guidance, which recommends measuring the median wages paid in the second quarter after exit from an instructional program and multiplying by 4 to create an annualized earnings measurement.

RESULTS

Table 1 reports the total number of graduates of the *Diesel Mechanic Technology* programs, statewide, in AY 2018 through 2022.

Table 2 reports the number of graduates who are available for full-time work because they are not re-enrolled in other postsecondary education programs, alongside the number and percent of these graduates who are employed within one year of graduation.

Table 3 reports the median and mean annualized earnings for graduates who are employed within one year of graduation.

TABLE 1: GRADUATES OF DIESEL MECHANIC TECHNOLOGY PROGRAMS, AY 2018 - 2022

	2018	2019	2020	2021	2022	5-Year Average
Total Graduates	97	106	79	106	104	98
Associate Degree	38	40	26	51	29	37
Career Certificate	20	32	28	22	33	27
Technical Certificate	39	34	25	33	42	35

Notes: Measured for graduates of Mississippi public community college Diesel Mechanic Technology programs (CIP 47.0605).

Source: Mississippi State Longitudinal Data System (SLDS), 2023.

TABLE 2: EMPLOYMENT OF DIESEL MECHANIC TECHNOLOGY PROGRAM GRADUATES, MEASURED FOR STUDENTS GRADUATING IN AY 2018 - 2022

	2018	2019	2020	2021	2022	5-Year Average
Graduates not Re-Enrolled	81	90	72	97	90	86
Associate Degree	35	37	25	49	29	35
Career Certificate	13	21	26	19	29	22
Technical Certificate	33	32	21	29	32	29
Employed Graduates	69	70	64	86	78	73
Associate Degree	29	30	23	45	25	30
Career Certificate	10	13	21	17	22	17
Technical Certificate	30	27	20	24	31	26
Percent Employed	85.2%	77.8%	88.9%	88.7%	86.7%	85.3%
Associate Degree	82.9%	81.1%	92.0%	91.8%	86.2%	86.9%
Career Certificate	76.9%	61.9%	80.8%	89.5%	75.9%	76.9%
Technical Certificate	90.9%	84.4%	95.2%	82.8%	96.9%	89.8%

Notes: Measured for graduates of Mississippi public community college Diesel Mechanic Technology programs (CIP 47.0605).

Source: Mississippi State Longitudinal Data System (SLDS), 2023.

**TABLE 3: MEDIAN EARNINGS OF EMPLOYED GRADUATES,
MEASURED FOR STUDENTS GRADUATING IN AY 2018 - 2022**

	2018	2019	2020	2021	2022	5-Year Average
Median Earnings	\$30,144	\$33,371	\$34,064	\$36,861	\$46,042	\$36,268
<i>Associate Degree</i>	<i>\$31,200</i>	<i>\$33,033</i>	<i>\$41,432</i>	<i>\$40,751</i>	<i>\$46,282</i>	<i>\$38,592</i>
<i>Career Certificate</i>	<i>\$23,076</i>	<i>\$34,301</i>	<i>\$19,985</i>	<i>\$33,663</i>	<i>\$46,582</i>	<i>\$35,144</i>
<i>Technical Certificate</i>	<i>\$32,495</i>	<i>\$33,335</i>	<i>\$34,250</i>	<i>\$27,807</i>	<i>\$45,869</i>	<i>\$35,253</i>

Notes: Measured for graduates of Mississippi public community college Diesel Mechanic Technology programs (CIP 47.0605) who are employed within one year of graduation.

Source: Mississippi State Longitudinal Data System (SLDS), 2023.

