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H.B. 1388 2024 Analysis

*Examining Career and Technical Education at
Mississippi's Community Colleges*



MISSISSIPPI STATE UNIVERSITY™
NATIONAL STRATEGIC PLANNING
& ANALYSIS RESEARCH CENTER

H.B. 1388 2024 ANALYSIS

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The following report was created to fulfill the requirements described in
H.B. 1388, and was commissioned by AccelerateMS.

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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.

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EXECUTIVE SUMMARY

This report was commissioned by AccelerateMS to fulfill the requirements set forth by House Bill 1388 (HB1388) which seeks to align community college career and technical education (CTE) programs to employer demand and occupations which provide family-sustaining wages.

Enacted on March 23, 2022, HB1388 requires an annual study be conducted that examines the outcomes of students who complete CTE programs through Mississippi community colleges, defined as the completion of (1) an Associate of Applied Science degree or (2) a Career/Technical Certificate.

This report has two primary objectives: (1) to provide information pertaining to postsecondary outcomes of students enrolled in community college CTE programs in Academic Year (AY) 2018 through AY 2022; and (2) to provide information pertaining to employment outcomes of students who graduated from community college CTE programs in AY 2018 through AY 2022.

Data for this report were contributed to Mississippi's State Longitudinal Data System (SLDS) by the Mississippi Community College Board (MCCB), the Institutions of Higher Learning (IHL), and the Mississippi Department of Employment Security (MDES).

SUMMARY OF RESULTS

Enrollment. On average, approximately 20,000 Mississippi community college students enrolled in CTE degree programs annually between AY 2018 and AY 2022, including Associate of Applied Science (AAS) degrees (~14,500 students) and Career/Technical Certificates (~5,500 students). Over the study period, the following enrollment trends were observed:

- CTE student enrollment overall declined from 20,414 to 19,315, accounting for a 5% drop.
- This decline was driven by a 27% drop in Career/Technical Certificate program enrollment. Enrollment in AAS degrees experienced a 5% increase during the study period.

Graduation. On average, approximately 8,000 students graduated from community college CTE programs each year during the study period, including 4,300 with AAS degrees and 3,700 with Career/Technical Certificates. The following graduation trends were observed:

- The overall number of CTE graduates declined from 8,145 in 2018 to 7,283 in 2022, accounting for an 11% drop.
- This decline in number of graduates was driven by an 11% drop in graduates from AAS programs and a 10% drop in graduates from CTE Certificate programs.

Workforce. Approximately 7,400 CTE graduates annually did not enroll in additional postsecondary education in Mississippi public universities. Of these non-university bound graduates:

- Approximately 66% (~4,900 graduates) entered Mississippi's workforce and secured employment within one year of graduation.
- Approximately 35% of employed graduates (~1,700 graduates) were working in Mississippi industries that aligned with their community college CTE degree.
- Employed graduates earned an average of \$32,000 in their first year of employment after graduation.

University. Approximately 500 CTE graduates annually enrolled in a Mississippi public university within a year of completing their community college CTE degree or certificate. Of these public university bound graduates:

- Approximately 60% (~300 graduates) declared majors that aligned with their community college CTE degree.

Public Assistance. In the year after graduation, an average of 1,000 graduates (13%) annually received public assistance or unemployment insurance (UI) benefits. This includes:

- 623 (~8%) received Supplemental Nutritional Aid Program (SNAP) benefits.
- 11 (<1%) received Temporary Aid for Needy Families (TANF) benefits.
- 480 (~6%) received UI benefits.

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The following report was created to fulfill the requirements described in H.B. 1388, and was commissioned by AccelerateMS.

OVERVIEW

Enacted on March 23, 2022, House Bill 1388 (HB1388) charged AccelerateMS with aligning community college career and technical education (CTE) programs with employer demand and occupations that pay a family-sustaining wage. HB1388 requires an annual study be conducted examining workforce outcomes of students who complete CTE programs through Mississippi community colleges, defined as the completion of (1) an Associate of Applied Science degree or (2) a Career/Technical Certificate. AccelerateMS commissioned Mississippi State University's NSPARC to conduct a study of these outcomes from Academic Year (AY) 2018 through AY 2022.

This study addresses the following objectives:

Objective 1: Measure Postsecondary Outcomes of Community College CTE Students –

Provide information on the number of community college CTE students in the state, the number of these students who subsequently enrolled in a Mississippi 4-year public university, and the extent of the alignment of these students' community college and public university majors.

Objective 2: Measure Employment Outcomes of Community College CTE Students –

Provide information on the employment outcomes of community college CTE students who have graduated with an Associate of Applied Science degree or a Career/Technical Certificate. For community college CTE graduates who enter the workforce after completing their CTE program, this study determines the extent to which students' majors are aligned with their industry of employment after graduation. For graduates who are not employed, alternative outcomes are examined, including the number receiving public assistance or unemployment insurance benefits.

DATA SOURCES

Data for this study came from Mississippi’s State Longitudinal Data System (SLDS), which includes administrative records from more than 25 state agencies. Data from the following SLDS data contributors were used:

Mississippi Department of Employment Security – Employer wage records are contributed to the SLDS by the Mississippi Department of Employment Security (MDES). Employer wage records are collected from Mississippi employers that participate in the state’s covered employment system. Data fields include information on quarterly earnings, company of employment, industry of employment, and county location of employer.

Mississippi Community Colleges – Data on community college graduates are contributed to the SLDS by Mississippi’s 15 community colleges and the Mississippi Community College Board (MCCB). These data include information on enrollment, county of residence, academic major, and graduation.

Mississippi Public Universities – Data on 4-year public university graduates are contributed to the SLDS by Mississippi’s eight public universities and the Institutions for Higher Learning (IHL). These data include information on enrollment, county of residence, academic major, and graduation.

METHODOLOGY

To help account for any annual fluctuations in CTE enrollment, each of the measurements presented in this report is calculated with the most recent five years of data available. Using five years of data enables this report to present student outcomes before, during, and after the academic interruptions caused by COVID-19. Results are presented for each year, and as a five-year average.

In accordance with SLDS Rules and Regulations, numeric values less than 10 are suppressed along with the accompanying percentages. These suppressed values are replaced with the “<10” symbol, and the accompanying percent is replaced with the “---” symbol.

The primary analysis for this report is conducted at the state level. Each state-level result is also presented for each of Mississippi’s four Local Workforce Development Areas (LWDAs) and for each of the AccelerateMS Ecosystems. Figure 1 illustrates the geographic coverage of each LWDA, and Figure 2 illustrates the coverage of the eight Ecosystems.



Figure 1: Mississippi's LWDAs



Figure 2: Mississippi's Ecosystems

Statewide results are also broken out by each of the following demographic characteristics, unless otherwise noted:

Demographics – Gender:

1. Male
2. Female

Demographics – Race:

1. Black
2. White
3. Other

Demographics – Race and Gender:

1. Black: Male and Female
2. White: Male and Female
3. Other: Male and Female

The method used to measure CTE Program-to-University alignment was provided by AccelerateMS, in coordination with the Mississippi Community College Board and the Mississippi Institutions for Higher Learning. 2-digit CIP codes were used to assess the community college major alignment with public university majors.

RESEARCH ACTIVITIES FOR OBJECTIVE 1: POSTSECONDARY OUTCOMES OF COMMUNITY COLLEGE CTE STUDENTS

The following SLDS data are used:

Mississippi Community College Data – Students enrolled or graduating in AY 2017-2018, AY 2018-2019, AY 2019-2020, AY 2020-2021, and AY 2021-2022.

Mississippi Public University Data – Students enrolled in AY 2018-2019, AY 2019-2020, AY 2020-2021, AY 2021-2022, and AY 2022-2023.

The following indicators have been constructed:

CTE Student Enrollment – The number of students enrolled in an Associate of Applied Science or Career/Technical Certificate program.

CTE Graduates – The number of students who graduated with an Associate of Applied Science or Career/Technical Certificate program.

Enrollment in a Mississippi Public University – The number of CTE Graduates who enrolled in a Mississippi public university within one year of graduation.

CTE Program-to-University Alignment – The number of CTE Graduates who enrolled in a Mississippi public university, and whose declared major aligns with their Associate of Applied Science degree. This alignment is determined by comparing

the enrolled graduates' declared majors in their 4-year public university program to the majors for their community college degrees. The method used to assess CTE Program-to-University alignment was provided by AccelerateMS, in coordination with the Mississippi Community College Board and the Mississippi Institutes for Higher Learning. two-digit CIP codes were used to assess community college major alignment with public university majors.

In Appendix A, each indicator is presented separately for students in Associate of Applied Science programs and for students in Career/Technical Certificate programs.

RESEARCH ACTIVITIES FOR OBJECTIVE 2: EMPLOYMENT OUTCOMES OF COMMUNITY COLLEGE CTE STUDENTS

The following SLDS data are used:

Mississippi Community College Data – Students graduating in AY 2017-2018, AY 2018-2019, AY 2019-2020, AY 2020-2021, and AY 2021-2022.

MDES data – Employment and wage records from Calendar Year (CY) 2018, CY 2019, CY 2020, CY 2021, CY 2022, and CY 2023.

The indicators in this section are calculated for CTE students who meet the following two conditions: (1) graduated from their community college CTE program and (2) did not enroll in a Mississippi community college or public university within one year of graduation.

The following indicators have been constructed:

Employment of CTE Graduates – The number of graduates employed within one year of graduation. Results are presented in total, and by industry of employment.

Average Annualized Earnings – The average (median) annualized earnings of graduates who were employed within one year of graduation. Quarterly earnings from MDES wage records are multiplied by 4 to create an annualized earnings measurement, and the median value is reported. Results are presented in total, and by industry of employment.

CTE Program-to-Workforce Alignment – The number of graduates employed in an industry that aligns with their CTE area of study.

Receipt of Public Assistance or Unemployment Insurance– The number of graduates who received Supplemental Nutritional Aid Program (SNAP), Temporary Aid for Needy Families (TANF), or Unemployment Insurance (UI) benefits. Results are presented in total, as well as for each public assistance program.

In Appendix A, each indicator is presented separately for graduates of Associate of Applied Science programs and for graduates of Career/Technical Certificate programs.

RESULTS:

TABLE 1: COMMUNITY COLLEGE CTE STUDENT ENROLLMENT; NUMBER OF STUDENTS ENROLLED IN AN ASSOCIATE OF APPLIED SCIENCE OR CAREER/TECHNICAL CERTIFICATE PROGRAM

	AY2018	AY2019	AY2020	AY2021	AY2022	Average
Total	20,414	20,447	20,855	19,852	19,315	20,177
Gender*						
Female	10,306	10,460	10,649	10,508	10,265	10,438
Male	10,073	9,931	10,092	9,262	9,030	9,678
Race*						
Black	8,991	8,843	8,750	8,037	8,249	8,574
White	10,221	10,186	10,359	10,214	9,562	10,108
Other	924	1,023	1,136	1,142	1,129	1,071
Race & Gender*						
Black, Female	4,951	4,922	4,976	4,639	4,779	4,853
Black, Male	4,027	3,909	3,749	3,373	3,465	3,705
White, Female	4,817	4,926	4,961	5,149	4,769	4,924
White, Male	5,387	5,230	5,341	5,029	4,784	5,154
Other, Female	455	504	563	586	576	537
Other, Male	468	516	564	552	553	531
Ecosystem of College						
Ecosystem 1	648	562	540	511	588	570
Ecosystem 2	2,465	2,411	2,387	2,534	2,894	2,538
Ecosystem 3	497	570	557	482	466	514
Ecosystem 4	3,389	3,460	3,506	3,162	3,224	3,348
Ecosystem 5	4,740	4,603	4,553	3,860	3,904	4,332
Ecosystem 6	3,119	2,991	3,002	3,148	2,716	2,995
Ecosystem 7	1,354	1,373	1,454	1,274	1,154	1,322
Ecosystem 8	4,202	4,477	4,856	4,881	4,369	4,557
WIOA Region of College						
Delta	1,145	1,132	1,097	993	1,054	1,084
MS Partnership	5,854	5,871	5,893	5,696	6,118	5,886
South Central	6,094	5,976	6,007	5,134	5,058	5,654
Twin Districts	7,321	7,468	7,858	8,029	7,085	7,552

Note: This analysis uses five years so as to present a comprehensive picture of students and student outcomes before, during, and after the academic interruptions caused by COVID-19.

** Values reported for race and gender categories do not equal the reported total due to gender and/or race not being reported in all cases.*

TABLE 2: COMMUNITY COLLEGE CTE GRADUATES; NUMBER OF STUDENTS GRADUATING WITH AN ASSOCIATE OF APPLIED SCIENCE DEGREE OR A CAREER/TECHNICAL CERTIFICATE

	AY2018	AY2019	AY2020	AY2021	AY2022	Average
Total	8,145	8,002	8,077	7,996	7,283	7,901
Gender*						
Female	4,316	4,228	4,170	4,235	3,868	4,163
Male	3,789	3,689	3,654	3,553	3,178	3,573
Race*						
Black	3,204	3,127	2,886	2,880	2,642	2,948
White	4,458	4,357	4,204	4,285	3,914	4,244
Other	329	333	395	402	367	365
Race & Gender*						
Black, Female	1,773	1,739	1,677	1,685	1,517	1,678
Black, Male	1,430	1,386	1,207	1,192	1,120	1,267
White, Female	2,335	2,287	2,222	2,284	2,096	2,245
White, Male	2,117	2,058	1,963	1,989	1,816	1,989
Other, Female	169	176	203	211	208	193
Other, Male	159	156	190	190	159	171
Ecosystem of College						
Ecosystem 1	377	396	314	354	280	344
Ecosystem 2	949	948	913	999	837	929
Ecosystem 3	341	333	369	341	273	331
Ecosystem 4	840	848	858	877	1,011	887
Ecosystem 5	2,224	2,087	2,371	2,117	1,893	2,138
Ecosystem 6	1,316	1,181	1,133	1,074	948	1,130
Ecosystem 7	488	514	493	491	458	489
Ecosystem 8	1,610	1,695	1,626	1,743	1,583	1,651
WIOA Region of College						
Delta	718	729	683	695	553	676
MS Partnership	1,789	1,796	1,771	1,876	1,848	1,816
South Central	2,712	2,601	2,864	2,608	2,351	2,627
Twin Districts	2,926	2,876	2,759	2,817	2,531	2,782

Note: This analysis uses five years so as to present a comprehensive picture of students and student outcomes before, during, and after the academic interruptions caused by COVID-19.

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TABLE 3: ENROLLMENT IN A MISSISSIPPI PUBLIC UNIVERSITY; NUMBER OF COMMUNITY COLLEGE CTE GRADUATES WHO ENROLLED IN A MISSISSIPPI PUBLIC UNIVERSITY WITHIN ONE YEAR OF GRADUATION

	AY2018	AY2019	AY2020	AY2021	AY2022	Average
Total	481	450	450	467	436	457
Gender*						
Female	307	292	291	291	279	292
Male	172	154	157	175	155	163
Race*						
Black	235	214	212	207	185	211
White	215	204	207	225	227	216
Other	25	27	26	28	19	25
Race & Gender*						
Black, Female	182	154	157	153	135	156
Black, Male	53	60	55	54	49	54
White, Female	104	120	120	119	129	118
White, Male	110	83	87	105	98	97
Other, Female	18	17	14	17	13	16
Other, Male	<10	10	12	11	<10	<10
Ecosystem of College						
Ecosystem 1	24	19	15	21	10	18
Ecosystem 2	43	58	67	57	62	57
Ecosystem 3	16	29	27	26	23	24
Ecosystem 4	58	48	60	55	74	59
Ecosystem 5	141	102	108	105	97	111
Ecosystem 6	83	85	74	72	54	74
Ecosystem 7	33	22	23	18	23	24
Ecosystem 8	83	87	76	113	93	90
WIOA Region of College						
Delta	40	48	42	47	33	42
MS Partnership	101	106	127	112	136	116
South Central	174	124	131	123	120	134
Twin Districts	166	172	150	185	147	164

Note: This analysis uses five years so as to present a comprehensive picture of students and student outcomes before, during, and after the academic interruptions caused by COVID-19.

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**TABLE 4: COMMUNITY COLLEGE CTE PROGRAM-TO-UNIVERSITY ALIGNMENT;
NUMBER OF ENROLLED COMMUNITY COLLEGE CTE GRADUATES WITH ALIGNED MAJOR**

	AY2018	AY2019	AY2020	AY2021	AY2022	Average
Total	265	254	269	273	240	260
Gender*						
Female	174	182	197	197	177	185
Male	90	70	71	76	62	74
Race*						
Black	111	104	115	121	102	111
White	140	130	136	134	124	133
Other	11	18	16	14	14	15
Race & Gender*						
Black, Female	86	83	94	91	82	87
Black, Male	25	21	21	30	19	23
White, Female	79	87	92	93	84	87
White, Male	60	42	44	41	40	45
Other, Female	<10	12	11	12	11	11
Other, Male	<10	<10	<10	<10	<10	<10
Ecosystem of College						
Ecosystem 1	<10	<10	<10	<10	<10	<10
Ecosystem 2	30	36	50	34	40	38
Ecosystem 3	13	19	19	19	18	18
Ecosystem 4	27	25	39	32	42	33
Ecosystem 5	68	49	50	59	37	53
Ecosystem 6	56	55	51	37	34	47
Ecosystem 7	23	11	14	14	13	15
Ecosystem 8	41	50	42	69	52	51
WIOA Region of College						
Delta	20	28	23	28	22	24
MS Partnership	57	61	89	66	82	71
South Central	91	60	64	73	50	68
Twin Districts	97	105	93	106	86	97

Note: This analysis uses five years so as to present a comprehensive picture of students and student outcomes before, during, and after the academic interruptions caused by COVID-19.

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TABLE 5: EMPLOYMENT OF COMMUNITY COLLEGE CTE GRADUATES; NUMBER OF COMMUNITY COLLEGE CTE GRADUATES EMPLOYED WITHIN ONE YEAR OF GRADUATION

	AY2018	AY2019	AY2020	AY2021	AY2022	Average
Total	4,880	4,890	4,975	4,942	4,612	4,860
Gender*						
Female	2,590	2,652	2,565	2,595	2,462	2,573
Male	2,267	2,191	2,293	2,228	2,021	2,200
Race*						
Black	1,796	1,822	1,695	1,690	1,640	1,729
White	2,813	2,778	2,723	2,762	2,564	2,728
Other	181	178	215	220	211	201
Race & Gender*						
Black, Female	964	1,008	951	948	921	958
Black, Male	831	813	743	740	716	769
White, Female	1,516	1,528	1,455	1,495	1,401	1,479
White, Male	1,296	1,243	1,255	1,261	1,162	1,243
Other, Female	89	102	119	118	116	109
Other, Male	92	76	96	102	95	92
Ecosystem of College						
Ecosystem 1	208	233	165	187	161	191
Ecosystem 2	631	595	576	630	539	594
Ecosystem 3	207	195	217	194	162	195
Ecosystem 4	479	498	491	525	597	518
Ecosystem 5	1,249	1,271	1,494	1,332	1,242	1,318
Ecosystem 6	839	730	718	727	630	729
Ecosystem 7	309	345	333	324	305	323
Ecosystem 8	958	1,023	981	1,023	976	992
WIOA Region of College						
Delta	415	428	382	381	323	386
MS Partnership	1,110	1,093	1,067	1,155	1,136	1,112
South Central	1,558	1,616	1,827	1,656	1,547	1,641
Twin Districts	1,797	1,753	1,699	1,750	1,606	1,721

Note: This analysis uses five years so as to present a comprehensive picture of students and student outcomes before, during, and after the academic interruptions caused by COVID-19.

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TABLE 5 (CONT.): EMPLOYMENT OF COMMUNITY COLLEGE CTE GRADUATES; NUMBER OF COMMUNITY COLLEGE CTE GRADUATES EMPLOYED WITHIN ONE YEAR OF GRADUATION

	AY2018	AY2019	AY2020	AY2021	AY2022	Average
Total	4,880	4,890	4,975	4,942	4,612	4,860
Industry						
Accommodation/Leisure	359	333	383	329	292	339
Administrative and Waste Services	355	308	309	300	294	313
Construction	291	277	257	293	277	279
Educational Services	115	99	87	109	81	98
Financial Activities	61	63	55	70	84	67
Health Care and Social Assistance	1,904	1,973	1,831	1,863	1,766	1,867
Information	21	18	24	13	13	18
Management of Companies and Enterprises	21	16	15	13	22	17
Manufacturing	474	512	466	496	483	486
Natural Resources	44	43	33	33	28	36
Other Services (except Public Administration)	99	118	106	100	106	106
Professional, Scientific, and Technical Services	115	109	120	119	103	113
Public Administration	62	79	85	68	77	74
Transportation and Warehousing	282	289	476	384	377	362
Utilities	32	22	17	24	37	26
Wholesale/Retail Trade	637	622	701	719	568	649
Industry not reported	<10	<10	10	<10	<10	<10

Note: This analysis uses five years so as to present a comprehensive picture of students and student outcomes before, during, and after the academic interruptions caused by COVID-19.

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TABLE 6: AVERAGE ANNUALIZED EARNINGS; EARNINGS OF COMMUNITY COLLEGE CTE GRADUATES EMPLOYED WITHIN ONE YEAR OF GRADUATION

	AY2018	AY2019	AY2020	AY2021	AY2022	Average
Total	\$30,095	\$31,207	\$31,181	\$33,291	\$36,988	\$32,422
Gender*						
Female	\$29,375	\$31,772	\$31,028	\$31,780	\$34,920	\$31,802
Male	\$30,682	\$30,685	\$31,117	\$34,711	\$38,552	\$33,127
Race*						
Black	\$24,625	\$26,347	\$26,865	\$29,916	\$32,791	\$27,863
White	\$33,354	\$34,000	\$33,917	\$35,141	\$39,406	\$35,000
Other	\$30,966	\$30,502	\$30,640	\$31,124	\$34,815	\$31,553
Race & Gender*						
Black, Female	\$24,227	\$26,650	\$26,878	\$29,126	\$31,270	\$27,621
Black, Male	\$24,979	\$26,097	\$26,478	\$31,550	\$34,481	\$28,092
White, Female	\$32,170	\$33,656	\$34,273	\$33,777	\$36,827	\$34,101
White, Male	\$34,597	\$34,282	\$33,845	\$36,826	\$41,261	\$36,005
Other, Female	\$30,859	\$33,272	\$31,142	\$29,851	\$36,401	\$31,748
Other, Male	\$31,073	\$27,095	\$28,893	\$33,053	\$33,515	\$31,073
Ecosystem of College						
Ecosystem 1	\$24,734	\$23,379	\$31,509	\$30,147	\$34,266	\$28,069
Ecosystem 2	\$32,155	\$32,123	\$33,498	\$34,619	\$37,720	\$34,001
Ecosystem 3	\$33,874	\$31,602	\$34,321	\$35,575	\$40,005	\$34,784
Ecosystem 4	\$33,329	\$32,819	\$32,468	\$34,352	\$37,244	\$34,298
Ecosystem 5	\$29,021	\$30,658	\$30,951	\$33,322	\$37,654	\$32,183
Ecosystem 6	\$28,636	\$32,198	\$30,479	\$33,287	\$35,754	\$32,000
Ecosystem 7	\$26,641	\$28,539	\$30,268	\$31,609	\$36,400	\$30,722
Ecosystem 8	\$30,604	\$32,290	\$29,248	\$32,094	\$36,315	\$31,982
WIOA Region of College						
Delta	\$28,268	\$27,384	\$32,499	\$33,349	\$36,106	\$31,456
MS Partnership	\$32,680	\$32,390	\$32,805	\$34,445	\$37,500	\$34,110
South Central	\$28,703	\$30,156	\$30,879	\$33,122	\$37,501	\$31,961
Twin Districts	\$29,971	\$32,249	\$29,743	\$32,547	\$36,000	\$31,983

Note: This analysis uses five years so as to present a comprehensive picture of students and student outcomes before, during, and after the academic interruptions caused by COVID-19.

** Values reported for race and gender categories do not equal the reported total due to gender and/or race not being reported in all cases.*

**TABLE 6 (CONT.): AVERAGE ANNUALIZED EARNINGS; EARNINGS OF COMMUNITY COLLEGE
CTE GRADUATES EMPLOYED WITHIN ONE YEAR OF GRADUATION**

	AY2018	AY2019	AY2020	AY2021	AY2022	Average
Total	\$30,095	\$31,207	\$31,181	\$33,291	\$36,988	\$32,422
Industry						
Accommodation/Leisure	\$13,867	\$15,027	\$13,854	\$16,245	\$18,284	\$14,981
Administrative and Waste Services	\$23,270	\$22,847	\$20,670	\$28,507	\$27,560	\$24,534
Construction	\$29,266	\$30,109	\$29,699	\$32,675	\$37,996	\$31,912
Educational Services	\$24,003	\$19,067	\$26,790	\$27,040	\$28,826	\$25,555
Financial Activities	\$24,281	\$28,829	\$27,843	\$34,836	\$31,359	\$30,036
Health Care and Social Assistance	\$37,429	\$38,738	\$40,250	\$39,720	\$42,600	\$39,643
Information	\$26,404	\$33,024	\$29,838	\$32,255	\$44,441	\$30,211
Management of Companies and Enterprises	\$36,142	\$33,599	\$32,671	\$39,048	\$36,856	\$35,944
Manufacturing	\$36,045	\$35,400	\$35,175	\$41,807	\$42,692	\$37,961
Natural Resources	\$32,631	\$37,786	\$34,443	\$29,680	\$48,084	\$35,078
Other Services (except Public Administration)	\$25,092	\$22,945	\$22,174	\$23,731	\$29,692	\$24,934
Professional, Scientific, and Technical Services	\$27,335	\$31,161	\$28,308	\$32,567	\$35,090	\$30,855
Public Administration	\$33,246	\$26,572	\$35,474	\$29,934	\$35,979	\$31,783
Transportation and Warehousing	\$26,257	\$29,057	\$31,279	\$32,678	\$42,934	\$32,291
Utilities	\$45,997	\$41,924	\$41,447	\$45,714	\$47,730	\$45,714
Wholesale/Retail Trade	\$20,670	\$20,504	\$21,206	\$25,885	\$24,400	\$22,527
Industry not reported	---	---	\$22,221	---	---	---

Note: This analysis uses five years so as to present a comprehensive picture of students and student outcomes before, during, and after the academic interruptions caused by COVID-19.

** Values reported for race and gender categories do not equal the reported total due to gender and/or race not being reported in all cases.*

TABLE 7: COMMUNITY COLLEGE CTE PROGRAM-TO-WORKFORCE ALIGNMENT; NUMBER OF COMMUNITY COLLEGE CTE GRADUATES EMPLOYED IN AN ALIGNED INDUSTRY

	AY2018	AY2019	AY2020	AY2021	AY2022	Average
Total	1,762	1,668	1,684	1,727	1,620	1,692
Gender*						
Female	1,084	1,077	1,099	1,141	1,091	1,098
Male	670	586	581	579	524	588
Race*						
Black	581	621	600	596	552	590
White	1,078	976	990	1,015	976	1,007
Other	77	59	83	87	74	76
Race & Gender*						
Black, Female	374	430	435	425	395	412
Black, Male	206	190	165	171	156	178
White, Female	659	610	599	650	641	632
White, Male	419	366	389	363	335	374
Other, Female	40	34	60	53	45	46
Other, Male	37	25	23	34	29	30
Ecosystem of College						
Ecosystem 1	90	98	77	84	68	83
Ecosystem 2	296	265	279	280	249	274
Ecosystem 3	82	74	88	64	58	73
Ecosystem 4	213	212	232	223	251	226
Ecosystem 5	343	357	348	320	324	338
Ecosystem 6	309	257	242	273	228	262
Ecosystem 7	111	118	118	106	106	112
Ecosystem 8	318	287	300	377	336	324
WIOA Region of College						
Delta	172	172	165	148	126	157
MS Partnership	509	477	511	503	500	500
South Central	454	475	466	426	430	450
Twin Districts	627	544	542	650	564	585

Note: This analysis uses five years so as to present a comprehensive picture of students and student outcomes before, during, and after the academic interruptions caused by COVID-19.

** Values reported for race and gender categories do not equal the reported total due to gender and/or race not being reported in all cases.*

TABLE 8: RECEIPT OF PUBLIC ASSISTANCE; NUMBER OF COMMUNITY COLLEGE CTE GRADUATES WHO RECEIVE SNAP, TANF, OR UI BENEFITS WITHIN ONE YEAR OF GRADUATION

	AY2018	AY2019	AY2020	AY2021	AY2022	Average
Total	831	1,156	1,583	806	554	986
Gender*						
Female	588	696	993	559	404	648
Male	242	452	568	232	137	326
Race*						
Black	532	674	882	540	380	602
White	264	428	547	204	137	316
Other	25	36	71	19	21	34
Race & Gender*						
Black, Female	375	403	569	388	285	404
Black, Male	157	271	313	151	93	197
White, Female	190	268	367	153	100	216
White, Male	74	158	179	49	37	99
Other, Female	18	21	38	10	17	21
Other, Male	<10	15	33	<10	<10	14
Ecosystem of College						
Ecosystem 1	67	92	69	44	28	60
Ecosystem 2	68	132	144	75	39	92
Ecosystem 3	39	53	71	22	15	40
Ecosystem 4	62	99	151	78	60	90
Ecosystem 5	237	297	525	276	182	303
Ecosystem 6	144	179	242	106	90	152
Ecosystem 7	68	77	79	59	45	66
Ecosystem 8	146	227	302	146	95	183
WIOA Region of College						
Delta	106	145	140	66	43	100
MS Partnership	130	231	295	153	99	182
South Central	305	374	604	335	227	369
Twin Districts	290	406	544	252	185	335
Public Assistance						
SNAP	768	649	656	559	481	623
TANF	21	14	11	<10	<10	11
UI	94	646	1,186	376	98	480

Note: This analysis uses five years so as to present a comprehensive picture of students and student outcomes before, during, and after the academic interruptions caused by COVID-19.

** Values reported for race and gender categories do not equal the reported total due to gender and/or race not being reported in all cases.*

APPENDIX A: DETAILED BREAKDOWN OF RESULTS

**TABLE A1: COMMUNITY COLLEGE CTE STUDENT ENROLLMENT,
NUMBER OF STUDENTS ENROLLED ASSOCIATE OF APPLIED SCIENCE PROGRAMS**

	AY2018	AY2019	AY2020	AY2021	AY2022	Average
Total	13,648	14,618	15,513	14,992	14,377	14,630
Gender*						
Female	6,757	7,328	7,665	7,682	7,323	7,351
Male	6,870	7,249	7,776	7,264	7,040	7,240
Race*						
Black	5,200	5,856	6,157	5,693	5,616	5,704
White	7,614	7,805	8,217	8,104	7,601	7,868
Other	686	782	889	903	889	830
Race & Gender*						
Black, Female	2,933	3,312	3,507	3,261	3,189	3,240
Black, Male	2,261	2,535	2,633	2,420	2,423	2,454
White, Female	3,416	3,551	3,642	3,862	3,583	3,611
White, Male	4,186	4,232	4,539	4,224	4,014	4,239
Other, Female	351	393	427	457	444	414
Other, Male	335	386	455	444	445	413
Ecosystem of College						
Ecosystem 1	487	481	465	435	523	478
Ecosystem 2	1,822	1,712	1,731	1,806	2,181	1,850
Ecosystem 3	279	298	322	269	229	279
Ecosystem 4	2,589	2,678	2,746	2,538	2,545	2,619
Ecosystem 5	1,878	2,739	3,267	3,000	2,980	2,773
Ecosystem 6	2,170	2,104	2,039	2,231	1,804	2,070
Ecosystem 7	991	986	1,067	904	759	941
Ecosystem 8	3,432	3,620	3,876	3,809	3,356	3,619
WIOA Region of College						
Delta	766	779	787	704	752	758
MS Partnership	4,411	4,390	4,477	4,344	4,726	4,470
South Central	2,869	3,725	4,334	3,904	3,739	3,714
Twin Districts	5,602	5,724	5,915	6,040	5,160	5,688

Note: This analysis uses five years so as to present a comprehensive picture of students and student outcomes before, during, and after the academic interruptions caused by COVID-19.

** Values reported for race and gender categories do not equal the reported total due to gender and/or race not being reported in all cases.*

**TABLE A2: COMMUNITY COLLEGE CTE STUDENT ENROLLMENT,
NUMBER OF STUDENTS ENROLLED IN CAREER/TECHNICAL CERTIFICATE PROGRAMS**

	AY2018	AY2019	AY2020	AY2021	AY2022	Average
Total	6,766	5,829	5,342	4,860	4,938	5,547
Gender*						
Female	3,549	3,132	2,984	2,826	2,942	3,087
Male	3,203	2,682	2,316	1,998	1,990	2,438
Race*						
Black	3,791	2,987	2,593	2,344	2,633	2,870
White	2,607	2,381	2,142	2,110	1,961	2,240
Other	238	241	247	239	240	241
Race & Gender*						
Black, Female	2,018	1,610	1,469	1,378	1,590	1,613
Black, Male	1,766	1,374	1,116	953	1,042	1,250
White, Female	1,401	1,375	1,319	1,287	1,186	1,314
White, Male	1,201	998	802	805	770	915
Other, Female	104	111	136	129	132	122
Other, Male	133	130	109	108	108	118
Ecosystem of College						
Ecosystem 1	161	81	75	76	65	92
Ecosystem 2	643	699	656	728	713	688
Ecosystem 3	218	272	235	213	237	235
Ecosystem 4	800	782	760	624	679	729
Ecosystem 5	2,862	1,864	1,286	860	924	1,559
Ecosystem 6	949	887	963	917	912	926
Ecosystem 7	363	387	387	370	395	380
Ecosystem 8	770	857	980	1,072	1,013	938
WIOA Region of College						
Delta	379	353	310	289	302	327
MS Partnership	1,443	1,481	1,416	1,352	1,392	1,417
South Central	3,225	2,251	1,673	1,230	1,319	1,940
Twin Districts	1,719	1,744	1,943	1,989	1,925	1,864

Note: This analysis uses five years so as to present a comprehensive picture of students and student outcomes before, during, and after the academic interruptions caused by COVID-19.

** Values reported for race and gender categories do not equal the reported total due to gender and/or race not being reported in all cases.*

**TABLE A3: COMMUNITY COLLEGE CTE GRADUATES;
NUMBER OF STUDENTS GRADUATING WITH AN ASSOCIATE OF APPLIED SCIENCE DEGREE**

	AY2018	AY2019	AY2020	AY2021	AY2022	Average
Total	4,372	4,261	4,380	4,263	3,890	4,233
Gender*						
Female	2,654	2,619	2,623	2,599	2,374	2,574
Male	1,701	1,619	1,734	1,650	1,502	1,641
Race*						
Black	1,273	1,310	1,277	1,233	1,111	1,241
White	2,851	2,706	2,807	2,728	2,476	2,714
Other	196	204	241	239	229	222
Race & Gender*						
Black, Female	899	930	886	887	782	877
Black, Male	373	379	389	345	328	363
White, Female	1,621	1,554	1,581	1,551	1,426	1,547
White, Male	1,227	1,145	1,215	1,169	1,050	1,161
Other, Female	111	124	131	133	139	128
Other, Male	84	80	109	106	90	94
Ecosystem of College						
Ecosystem 1	155	154	133	124	128	139
Ecosystem 2	615	594	588	615	516	586
Ecosystem 3	157	165	181	177	147	165
Ecosystem 4	423	435	443	484	540	465
Ecosystem 5	844	864	842	817	734	820
Ecosystem 6	664	590	574	554	411	559
Ecosystem 7	316	338	324	338	286	320
Ecosystem 8	1,198	1,121	1,295	1,154	1,128	1,179
WIOA Region of College						
Delta	312	319	314	301	275	304
MS Partnership	1,038	1,029	1,031	1,099	1,056	1,051
South Central	1,160	1,202	1,166	1,155	1,020	1,141
Twin Districts	1,862	1,711	1,869	1,708	1,539	1,738

Note: This analysis uses five years so as to present a comprehensive picture of students and student outcomes before, during, and after the academic interruptions caused by COVID-19.

** Values reported for race and gender categories do not equal the reported total due to gender and/or race not being reported in all cases.*

**TABLE A4: COMMUNITY COLLEGE CTE GRADUATES;
NUMBER OF STUDENTS GRADUATING WITH A CAREER/TECHNICAL CERTIFICATE**

	AY2018	AY2019	AY2020	AY2021	AY2022	Average
Total	3,773	3,741	3,697	3,733	3,393	3,667
Gender*						
Female	1,662	1,609	1,547	1,636	1,494	1,590
Male	2,088	2,070	1,920	1,903	1,676	1,931
Race*						
Black	1,931	1,817	1,609	1,647	1,531	1,707
White	1,607	1,651	1,397	1,557	1,438	1,530
Other	133	129	154	163	138	143
Race & Gender*						
Black, Female	874	809	791	798	735	801
Black, Male	1,057	1,007	818	847	792	904
White, Female	714	733	641	733	670	698
White, Male	890	913	748	820	766	827
Other, Female	58	52	72	78	69	66
Other, Male	75	76	81	84	69	77
Ecosystem of College						
Ecosystem 1	222	242	181	230	152	205
Ecosystem 2	334	354	325	384	321	344
Ecosystem 3	184	168	188	164	126	166
Ecosystem 4	417	413	415	393	471	422
Ecosystem 5	1,380	1,223	1,529	1,300	1,159	1,318
Ecosystem 6	652	591	559	520	537	572
Ecosystem 7	172	176	169	153	172	168
Ecosystem 8	412	574	331	589	455	472
WIOA Region of College						
Delta	406	410	369	394	278	371
MS Partnership	751	767	740	777	792	765
South Central	1,552	1,399	1,698	1,453	1,331	1,487
Twin Districts	1,064	1,165	890	1,109	992	1,044

Note: This analysis uses five years so as to present a comprehensive picture of students and student outcomes before, during, and after the academic interruptions caused by COVID-19.

** Values reported for race and gender categories do not equal the reported total due to gender and/or race not being reported in all cases.*

**TABLE A5: ENROLLMENT IN A MISSISSIPPI PUBLIC UNIVERSITY;
NUMBER OF COMMUNITY COLLEGE CTE GRADUATES FROM ASSOCIATE OF APPLIED SCIENCE
PROGRAMS WHO ENROLLED IN A MISSISSIPPI PUBLIC UNIVERSITY
ONE YEAR OF GRADUATION**

	AY2018	AY2019	AY2020	AY2021	AY2022	Average
Total	415	388	401	412	388	401
Gender*						
Female	269	257	264	270	248	262
Male	145	128	135	141	140	138
Race*						
Black	193	176	183	174	157	177
White	196	183	191	205	211	197
Other	21	25	23	27	17	23
Race & Gender*						
Black, Female	155	129	140	135	116	135
Black, Male	38	47	43	39	41	42
White, Female	97	112	112	116	119	111
White, Male	98	70	79	88	92	85
Other, Female	14	15	12	17	11	14
Other, Male	<10	10	11	10	<10	<10
Ecosystem of College						
Ecosystem 1	22	16	12	14	<10	14
Ecosystem 2	42	54	60	55	59	54
Ecosystem 3	14	24	26	21	20	21
Ecosystem 4	48	38	52	47	67	50
Ecosystem 5	113	83	88	88	79	90
Ecosystem 6	72	76	70	65	46	66
Ecosystem 7	30	21	22	17	21	22
Ecosystem 8	74	76	71	105	88	83
WIOA Region of College						
Delta	36	40	38	35	28	35
MS Partnership	90	92	112	102	126	104
South Central	143	104	110	105	100	112
Twin Districts	146	152	141	170	134	149

Note: This analysis uses five years so as to present a comprehensive picture of students and student outcomes before, during, and after the academic interruptions caused by COVID-19.

** Values reported for race and gender categories do not equal the reported total due to gender and/or race not being reported in all cases.*

**TABLE A6: ENROLLMENT IN A MISSISSIPPI PUBLIC UNIVERSITY;
NUMBER OF COMMUNITY COLLEGE CTE GRADUATES FROM CAREER/TECHNICAL
CERTIFICATE PROGRAMS WHO ENROLLED IN A MISSISSIPPI PUBLIC UNIVERSITY WITHIN ONE
YEAR OF GRADUATION**

	AY2018	AY2019	AY2020	AY2021	AY2022	Average
Total	66	62	49	55	48	56
Gender*						
Female	38	35	27	21	31	30
Male	27	26	22	34	15	25
Race*						
Black	42	38	29	33	28	34
White	19	21	16	20	16	18
Other	<10	<10	<10	<10	<10	<10
Race & Gender*						
Black, Female	27	25	17	18	19	21
Black, Male	15	13	12	15	<10	13
White, Female	<10	<10	<10	<10	10	<10
White, Male	12	13	<10	17	<10	11
Other, Female	<10	<10	<10	<10	<10	<10
Other, Male	<10	<10	<10	<10	<10	<10
Ecosystem of College						
Ecosystem 1	<10	<10	<10	<10	<10	<10
Ecosystem 2	<10	<10	<10	<10	<10	<10
Ecosystem 3	<10	<10	<10	<10	<10	<10
Ecosystem 4	10	10	<10	<10	<10	<10
Ecosystem 5	28	19	20	17	18	20
Ecosystem 6	11	<10	<10	<10	<10	<10
Ecosystem 7	<10	<10	<10	<10	<10	<10
Ecosystem 8	<10	11	<10	<10	<10	<10
WIOA Region of College						
Delta	<10	<10	<10	12	<10	<10
MS Partnership	11	14	15	10	10	12
South Central	31	20	21	18	20	22
Twin Districts	20	20	<10	15	13	15

Note: This analysis uses five years so as to present a comprehensive picture of students and student outcomes before, during, and after the academic interruptions caused by COVID-19.

** Values reported for race and gender categories do not equal the reported total due to gender and/or race not being reported in all cases.*

**TABLE A7: COMMUNITY COLLEGE CTE PROGRAM-TO-UNIVERSITY ALIGNMENT,
NUMBER OF ENROLLED COMMUNITY COLLEGE CTE GRADUATES FROM ASSOCIATE OF
APPLIED SCIENCE PROGRAMS WITH ALIGNED MAJOR**

	AY2018	AY2019	AY2020	AY2021	AY2022	Average
Total	240	237	253	252	218	240
Gender*						
Female	162	170	187	188	161	174
Male	77	65	65	64	57	66
Race*						
Black	98	94	107	107	90	99
White	130	124	130	127	116	125
Other	<10	17	14	14	12	13
Race & Gender*						
Black, Female	79	75	89	82	74	80
Black, Male	19	19	18	25	16	19
White, Female	76	84	88	93	78	84
White, Male	53	39	42	34	38	41
Other, Female	<10	11	10	12	<10	10
Other, Male	<10	<10	<10	<10	<10	<10
Ecosystem of College						
Ecosystem 1	<10	<10	<10	<10	<10	<10
Ecosystem 2	30	34	47	33	38	36
Ecosystem 3	11	18	19	16	17	16
Ecosystem 4	24	23	34	29	38	30
Ecosystem 5	58	43	47	50	30	46
Ecosystem 6	51	52	48	35	31	43
Ecosystem 7	22	11	13	14	12	14
Ecosystem 8	37	47	41	66	48	48
WIOA Region of College						
Delta	18	27	23	25	21	23
MS Partnership	54	57	81	62	76	66
South Central	80	54	60	64	42	60
Twin Districts	88	99	89	101	79	91

Note: This analysis uses five years so as to present a comprehensive picture of students and student outcomes before, during, and after the academic interruptions caused by COVID-19.

** Values reported for race and gender categories do not equal the reported total due to gender and/or race not being reported in all cases.*

**TABLE A8: COMMUNITY COLLEGE CTE PROGRAM-TO-UNIVERSITY ALIGNMENT,
NUMBER OF ENROLLED COMMUNITY COLLEGE CTE GRADUATES FROM CAREER/TECHNICAL
CERTIFICATE PROGRAMS WITH ALIGNED MAJOR**

	AY2018	AY2019	AY2020	AY2021	AY2022	Average
Total	25	17	16	21	22	20
Gender*						
Female	12	12	10	<10	16	12
Male	13	<10	<10	12	<10	<10
Race*						
Black	13	10	<10	14	12	11
White	10	<10	<10	<10	<10	<10
Other	<10	<10	<10	<10	<10	<10
Race & Gender*						
Black, Female	<10	<10	<10	<10	<10	<10
Black, Male	<10	<10	<10	<10	<10	<10
White, Female	<10	<10	<10	<10	<10	<10
White, Male	<10	<10	<10	<10	<10	<10
Other, Female	<10	<10	<10	<10	<10	<10
Other, Male	<10	<10	<10	<10	<10	<10
Ecosystem of College						
Ecosystem 1	<10	<10	<10	<10	<10	<10
Ecosystem 2	<10	<10	<10	<10	<10	<10
Ecosystem 3	<10	<10	<10	<10	<10	<10
Ecosystem 4	<10	<10	<10	<10	<10	<10
Ecosystem 5	10	<10	<10	<10	<10	<10
Ecosystem 6	<10	<10	<10	<10	<10	<10
Ecosystem 7	<10	<10	<10	<10	<10	<10
Ecosystem 8	<10	<10	<10	<10	<10	<10
WIOA Region of College						
Delta	<10	<10	<10	<10	<10	<10
MS Partnership	<10	<10	<10	<10	<10	<10
South Central	11	<10	<10	<10	<10	<10
Twin Districts	<10	<10	<10	<10	<10	<10

Note: This analysis uses five years so as to present a comprehensive picture of students and student outcomes before, during, and after the academic interruptions caused by COVID-19.

** Values reported for race and gender categories do not equal the reported total due to gender and/or race not being reported in all cases.*

**TABLE A9: EMPLOYMENT OF COMMUNITY COLLEGE CTE GRADUATES,
NUMBER OF COMMUNITY COLLEGE CTE GRADUATES FROM ASSOCIATE OF APPLIED SCIENCE
PROGRAMS EMPLOYED WITHIN ONE YEAR OF GRADUATION**

	AY2018	AY2019	AY2020	AY2021	AY2022	Average
Total	2,880	2,799	2,835	2,784	2,552	2,770
Gender*						
Female	1,718	1,736	1,684	1,671	1,552	1,672
Male	1,152	1,055	1,140	1,106	994	1,089
Race*						
Black	770	782	738	744	664	740
White	1,955	1,869	1,925	1,858	1,711	1,864
Other	120	125	144	145	140	135
Race & Gender*						
Black, Female	532	558	510	511	465	515
Black, Male	237	224	227	233	198	224
White, Female	1,110	1,093	1,079	1,064	993	1,068
White, Male	845	773	838	791	718	793
Other, Female	63	78	81	80	81	77
Other, Male	57	47	63	65	59	58
Ecosystem of College						
Ecosystem 1	96	99	83	76	78	86
Ecosystem 2	454	407	402	416	354	407
Ecosystem 3	118	108	118	109	86	108
Ecosystem 4	279	281	281	333	356	306
Ecosystem 5	531	559	551	551	508	540
Ecosystem 6	465	390	399	388	276	384
Ecosystem 7	192	220	220	211	176	204
Ecosystem 8	745	735	781	700	718	736
WIOA Region of College						
Delta	214	207	201	185	164	194
MS Partnership	733	688	683	749	710	713
South Central	723	779	771	762	684	744
Twin Districts	1,210	1,125	1,180	1,088	994	1,119

Note: This analysis uses five years so as to present a comprehensive picture of students and student outcomes before, during, and after the academic interruptions caused by COVID-19.

** Values reported for race and gender categories do not equal the reported total due to gender and/or race not being reported in all cases.*

**TABLE A9 (CONT.): EMPLOYMENT OF COMMUNITY COLLEGE CTE GRADUATES,
NUMBER OF COMMUNITY COLLEGE CTE GRADUATES FROM ASSOCIATE OF APPLIED SCIENCE
PROGRAMS EMPLOYED WITHIN ONE YEAR OF GRADUATION**

	AY2018	AY2019	AY2020	AY2021	AY2022	Average
Total	2,880	2,799	2,835	2,784	2,552	2,770
Industry						
Accommodation/Leisure	217	189	242	197	184	206
Administrative and Waste Services	174	152	143	163	166	160
Construction	139	121	150	118	111	128
Educational Services	86	75	67	83	67	76
Financial Activities	45	44	35	42	51	43
Health Care and Social Assistance	1,334	1,362	1,265	1,237	1,146	1,269
Information	19	14	18	12	11	15
Management of Companies and Enterprises	13	11	13	<10	17	12
Manufacturing	267	254	246	290	267	265
Natural Resources	14	19	14	12	10	14
Other Services (except Public Administration)	51	53	52	44	38	48
Professional, Scientific, and Technical Services	106	92	104	102	86	98
Public Administration	36	50	58	42	56	48
Transportation and Warehousing	35	38	44	56	49	44
Utilities	12	10	12	10	11	11
Wholesale/Retail Trade	329	312	368	364	280	331
Industry not reported	<10	<10	<10	<10	<10	<10

Note: This analysis uses five years so as to present a comprehensive picture of students and student outcomes before, during, and after the academic interruptions caused by COVID-19.

** Values reported for race and gender categories do not equal the reported total due to gender and/or race not being reported in all cases.*

**TABLE A10: EMPLOYMENT OF COMMUNITY COLLEGE CTE GRADUATES,
NUMBER OF COMMUNITY COLLEGE CTE GRADUATES FROM CAREER/TECHNICAL
CERTIFICATE PROGRAMS EMPLOYED WITHIN ONE YEAR OF GRADUATION**

	AY2018	AY2019	AY2020	AY2021	AY2022	Average
Total	2,000	2,091	2,140	2,158	2,060	2,090
Gender*						
Female	872	916	881	924	910	901
Male	1,115	1,136	1,153	1,122	1,027	1,111
Race*						
Black	1,026	1,040	957	946	976	989
White	858	909	798	904	853	864
Other	61	53	71	75	71	66
Race & Gender*						
Black, Female	432	450	441	437	456	443
Black, Male	594	589	516	507	518	545
White, Female	406	435	376	431	408	411
White, Male	451	470	417	470	444	450
Other, Female	26	24	38	38	35	32
Other, Male	35	29	33	37	36	34
Ecosystem of College						
Ecosystem 1	112	134	82	111	83	104
Ecosystem 2	177	188	174	214	185	188
Ecosystem 3	89	87	99	85	76	87
Ecosystem 4	200	217	210	192	241	212
Ecosystem 5	718	712	943	781	734	778
Ecosystem 6	374	340	319	339	354	345
Ecosystem 7	117	125	113	113	129	119
Ecosystem 8	213	288	200	323	258	256
WIOA Region of College						
Delta	201	221	181	196	159	192
MS Partnership	377	405	384	406	426	400
South Central	835	837	1,056	894	863	897
Twin Districts	587	628	519	662	612	602

Note: This analysis uses five years so as to present a comprehensive picture of students and student outcomes before, during, and after the academic interruptions caused by COVID-19.

** Values reported for race and gender categories do not equal the reported total due to gender and/or race not being reported in all cases.*

**TABLE A10 (CONT.): EMPLOYMENT OF COMMUNITY COLLEGE CTE GRADUATES,
NUMBER OF COMMUNITY COLLEGE CTE GRADUATES FROM ASSOCIATE OF APPLIED SCIENCE
PROGRAMS EMPLOYED WITHIN ONE YEAR OF GRADUATION**

	AY2018	AY2019	AY2020	AY2021	AY2022	Average
Total	2,000	2,091	2,140	2,158	2,060	2,090
Industry						
Accommodation/Leisure	142	144	141	132	108	133
Administrative and Waste Services	181	156	166	137	128	154
Construction	152	156	107	175	166	151
Educational Services	29	24	20	26	14	23
Financial Activities	16	19	20	28	33	23
Health Care and Social Assistance	570	611	566	626	620	599
Information	<10	<10	<10	<10	<10	<10
Management of Companies and Enterprises	<10	<10	<10	<10	<10	<10
Manufacturing	207	258	220	206	216	221
Natural Resources	30	24	19	21	18	22
Other Services (except Public Administration)	48	65	54	56	68	58
Professional, Scientific, and Technical Services	<10	17	16	17	17	15
Public Administration	26	29	27	26	21	26
Transportation and Warehousing	247	251	432	328	328	317
Utilities	20	12	<10	14	26	15
Wholesale/Retail Trade	308	310	333	355	288	319
Industry not reported	<10	<10	<10	<10	<10	<10

Note: This analysis uses five years so as to present a comprehensive picture of students and student outcomes before, during, and after the academic interruptions caused by COVID-19.

** Values reported for race and gender categories do not equal the reported total due to gender and/or race not being reported in all cases.*

**TABLE A11: AVERAGE ANNUALIZED EARNINGS,
EARNINGS OF COMMUNITY COLLEGE CTE GRADUATES FROM ASSOCIATE OF APPLIED
SCIENCE PROGRAMS EMPLOYED WITHIN ONE YEAR OF GRADUATION**

	AY2018	AY2019	AY2020	AY2021	AY2022	Average
Total	\$34,371	\$35,013	\$34,465	\$37,675	\$40,226	\$36,130
Gender*						
Female	\$33,653	\$35,193	\$34,505	\$36,510	\$38,630	\$35,408
Male	\$35,074	\$34,580	\$34,465	\$38,898	\$42,373	\$36,909
Race*						
Black	\$26,099	\$27,803	\$28,424	\$34,497	\$35,224	\$30,373
White	\$35,857	\$37,290	\$36,900	\$39,128	\$41,757	\$37,974
Other	\$37,982	\$33,286	\$32,895	\$32,024	\$38,576	\$34,473
Race & Gender*						
Black, Female	\$25,728	\$28,147	\$27,613	\$33,186	\$33,745	\$29,688
Black, Male	\$27,446	\$26,898	\$29,181	\$37,954	\$37,439	\$32,238
White, Female	\$35,134	\$38,486	\$37,858	\$39,185	\$40,529	\$37,921
White, Male	\$36,663	\$36,381	\$35,457	\$39,126	\$43,912	\$38,044
Other, Female	\$38,503	\$36,129	\$31,490	\$30,226	\$39,568	\$34,608
Other, Male	\$37,982	\$26,757	\$34,364	\$35,718	\$37,151	\$34,465
Ecosystem of College						
Ecosystem 1	\$31,631	\$29,621	\$31,914	\$42,073	\$36,134	\$32,640
Ecosystem 2	\$35,366	\$34,384	\$36,322	\$38,924	\$40,147	\$36,774
Ecosystem 3	\$42,606	\$37,439	\$40,281	\$42,173	\$50,856	\$41,836
Ecosystem 4	\$36,603	\$35,013	\$35,843	\$35,557	\$42,483	\$36,857
Ecosystem 5	\$35,232	\$33,211	\$36,554	\$38,394	\$41,473	\$37,072
Ecosystem 6	\$34,579	\$38,429	\$33,717	\$39,108	\$41,297	\$37,105
Ecosystem 7	\$29,414	\$31,099	\$33,633	\$37,888	\$41,845	\$34,544
Ecosystem 8	\$31,449	\$36,159	\$32,231	\$34,306	\$37,281	\$33,982
WIOA Region of College						
Delta	\$38,769	\$32,640	\$36,400	\$42,136	\$43,385	\$38,416
MS Partnership	\$35,821	\$34,570	\$35,992	\$37,850	\$41,144	\$36,796
South Central	\$34,040	\$32,880	\$35,550	\$38,358	\$41,683	\$36,503
Twin Districts	\$32,779	\$37,281	\$32,636	\$35,557	\$38,760	\$34,996

Note: This analysis uses five years so as to present a comprehensive picture of students and student outcomes before, during, and after the academic interruptions caused by COVID-19.

** Values reported for race and gender categories do not equal the reported total due to gender and/or race not being reported in all cases.*

**TABLE A11 (CONT.): AVERAGE ANNUALIZED EARNINGS,
EARNINGS OF COMMUNITY COLLEGE CTE GRADUATES FROM ASSOCIATE OF APPLIED
SCIENCE PROGRAMS EMPLOYED WITHIN ONE YEAR OF GRADUATION**

	AY2018	AY2019	AY2020	AY2021	AY2022	Average
Total	\$34,371	\$35,013	\$34,465	\$37,675	\$40,226	\$36,130
Industry						
Accommodation/Leisure	\$16,360	\$16,660	\$14,528	\$18,022	\$20,131	\$16,566
Administrative and Waste Services	\$24,691	\$24,560	\$26,815	\$31,806	\$30,528	\$28,112
Construction	\$32,136	\$30,806	\$30,568	\$34,851	\$38,136	\$33,280
Educational Services	\$18,480	\$18,618	\$26,790	\$26,195	\$28,826	\$24,507
Financial Activities	\$24,853	\$30,542	\$31,302	\$34,167	\$32,063	\$30,189
Health Care and Social Assistance	\$42,867	\$42,695	\$46,527	\$48,092	\$48,648	\$44,818
Information	\$26,404	\$12,745	\$30,211	\$34,686	\$43,425	\$29,824
Management of Companies and Enterprises	\$38,970	\$30,405	\$32,671	---	\$35,939	\$34,068
Manufacturing	\$40,013	\$40,901	\$38,666	\$44,710	\$49,218	\$42,682
Natural Resources	\$38,921	\$32,462	\$34,353	\$28,291	\$60,765	\$34,353
Other Services (except Public Administration)	\$33,479	\$29,056	\$26,905	\$32,110	\$31,200	\$30,028
Professional, Scientific, and Technical Services	\$28,000	\$31,161	\$29,736	\$32,383	\$35,090	\$31,028
Public Administration	\$34,446	\$27,636	\$36,500	\$28,512	\$37,296	\$34,032
Transportation and Warehousing	\$31,921	\$20,233	\$30,024	\$34,703	\$41,162	\$32,921
Utilities	\$54,173	\$38,284	\$31,206	\$42,413	\$54,021	\$43,630
Wholesale/Retail Trade	\$21,331	\$20,964	\$20,878	\$26,966	\$23,235	\$22,748
Industry not reported	---	---	---	---	---	---

Note: This analysis uses five years so as to present a comprehensive picture of students and student outcomes before, during, and after the academic interruptions caused by COVID-19.

** Values reported for race and gender categories do not equal the reported total due to gender and/or race not being reported in all cases.*

**TABLE A12: AVERAGE ANNUALIZED EARNINGS,
EARNINGS OF COMMUNITY COLLEGE CTE GRADUATES FROM CAREER/TECHNICAL
CERTIFICATE PROGRAMS EMPLOYED WITHIN ONE YEAR OF GRADUATION**

	AY2018	AY2019	AY2020	AY2021	AY2022	Average
Total	\$25,784	\$27,475	\$27,529	\$28,493	\$33,819	\$28,368
Gender*						
Female	\$24,415	\$26,563	\$26,405	\$26,199	\$31,611	\$26,922
Male	\$26,730	\$27,850	\$27,878	\$31,168	\$35,949	\$29,421
Race*						
Black	\$22,885	\$25,018	\$25,295	\$26,024	\$31,459	\$26,106
White	\$28,257	\$29,341	\$27,914	\$30,018	\$35,603	\$30,209
Other	\$23,952	\$23,973	\$28,080	\$29,568	\$30,625	\$27,275
Race & Gender*						
Black, Female	\$21,547	\$24,749	\$25,156	\$24,593	\$29,528	\$25,198
Black, Male	\$23,649	\$25,670	\$25,634	\$27,961	\$33,117	\$26,834
White, Female	\$26,816	\$27,972	\$26,579	\$27,284	\$32,367	\$27,987
White, Male	\$30,646	\$30,962	\$29,699	\$33,981	\$38,524	\$32,675
Other, Female	\$23,040	\$21,061	\$30,862	\$29,342	\$30,164	\$28,701
Other, Male	\$25,002	\$28,519	\$23,671	\$29,815	\$31,089	\$27,000
Ecosystem of College						
Ecosystem 1	\$19,214	\$21,540	\$31,509	\$26,770	\$31,224	\$24,700
Ecosystem 2	\$25,192	\$26,018	\$27,864	\$29,025	\$33,293	\$28,391
Ecosystem 3	\$25,101	\$20,563	\$25,851	\$29,031	\$31,056	\$26,911
Ecosystem 4	\$28,125	\$31,127	\$27,927	\$31,453	\$34,298	\$30,558
Ecosystem 5	\$25,985	\$28,414	\$29,045	\$29,905	\$35,979	\$29,426
Ecosystem 6	\$23,937	\$28,224	\$26,680	\$27,338	\$32,279	\$27,475
Ecosystem 7	\$23,671	\$24,337	\$25,723	\$22,451	\$32,074	\$25,420
Ecosystem 8	\$28,101	\$26,328	\$22,971	\$28,658	\$33,396	\$28,135
WIOA Region of College						
Delta	\$21,696	\$21,131	\$26,112	\$28,210	\$31,224	\$25,983
MS Partnership	\$27,349	\$28,896	\$27,896	\$29,670	\$33,926	\$29,609
South Central	\$25,756	\$27,918	\$28,860	\$28,519	\$35,333	\$28,974
Twin Districts	\$25,477	\$27,630	\$25,267	\$27,956	\$32,715	\$27,765

Note: This analysis uses five years so as to present a comprehensive picture of students and student outcomes before, during, and after the academic interruptions caused by COVID-19.

** Values reported for race and gender categories do not equal the reported total due to gender and/or race not being reported in all cases.*

**TABLE A12 (CONT.): AVERAGE ANNUALIZED EARNINGS,
EARNINGS OF COMMUNITY COLLEGE CTE GRADUATES FROM CAREER/TECHNICAL
CERTIFICATE PROGRAMS EMPLOYED WITHIN ONE YEAR OF GRADUATION**

	AY2018	AY2019	AY2020	AY2021	AY2022	Average
Total	\$25,784	\$27,475	\$27,529	\$28,493	\$33,819	\$28,368
Industry						
Accommodation/Leisure	\$11,087	\$13,316	\$11,564	\$14,585	\$14,585	\$12,671
Administrative and Waste Services	\$20,896	\$20,727	\$17,087	\$23,332	\$24,685	\$21,138
Construction	\$27,128	\$28,795	\$28,204	\$29,710	\$37,996	\$30,314
Educational Services	\$30,015	\$32,750	\$25,086	\$31,785	\$29,331	\$29,775
Financial Activities	\$18,515	\$23,679	\$25,267	\$34,879	\$28,760	\$28,841
Health Care and Social Assistance	\$29,994	\$32,697	\$33,134	\$30,594	\$35,354	\$32,244
Information	---	---	---	---	---	---
Management of Companies and Enterprises	---	---	---	---	---	---
Manufacturing	\$29,768	\$29,762	\$30,987	\$36,627	\$35,949	\$33,268
Natural Resources	\$31,122	\$40,478	\$36,262	\$30,757	\$46,008	\$35,783
Other Services (except Public Administration)	\$20,439	\$19,116	\$18,833	\$21,883	\$28,423	\$21,844
Professional, Scientific, and Technical Services	---	\$30,572	\$24,576	\$33,900	\$34,410	\$27,386
Public Administration	\$26,466	\$20,231	\$31,821	\$31,646	\$35,019	\$28,482
Transportation and Warehousing	\$25,934	\$29,863	\$31,294	\$32,267	\$43,095	\$32,267
Utilities	\$44,338	\$43,544	---	\$48,327	\$46,727	\$45,763
Wholesale/Retail Trade	\$19,629	\$20,229	\$21,644	\$24,683	\$24,538	\$22,099
Industry not reported	---	---	---	---	---	---

Note: This analysis uses five years so as to present a comprehensive picture of students and student outcomes before, during, and after the academic interruptions caused by COVID-19.

** Values reported for race and gender categories do not equal the reported total due to gender and/or race not being reported in all cases.*

TABLE A13: COMMUNITY COLLEGE CTE PROGRAM-TO-WORKFORCE ALIGNMENT; NUMBER OF COMMUNITY COLLEGE CTE GRADUATES FROM ASSOCIATE OF APPLIED SCIENCE PROGRAMS EMPLOYED IN AN ALIGNED INDUSTRY

	AY2018	AY2019	AY2020	AY2021	AY2022	Average
Total	997	865	939	928	888	923
Gender*						
Female	584	536	569	579	578	569
Male	410	329	368	344	306	351
Race*						
Black	254	257	266	263	238	256
White	684	564	621	597	595	612
Other	45	40	47	52	45	46
Race & Gender*						
Black, Female	172	183	187	180	172	179
Black, Male	81	74	79	83	65	76
White, Female	384	328	346	360	372	358
White, Male	300	236	274	236	223	254
Other, Female	22	24	34	32	28	28
Other, Male	23	16	13	20	17	18
Ecosystem of College						
Ecosystem 1	44	42	36	34	29	37
Ecosystem 2	193	154	170	159	163	168
Ecosystem 3	31	29	32	32	20	29
Ecosystem 4	118	124	125	134	148	130
Ecosystem 5	171	188	196	166	177	180
Ecosystem 6	148	101	101	118	81	110
Ecosystem 7	62	67	70	65	53	63
Ecosystem 8	230	160	209	220	217	207
WIOA Region of College						
Delta	75	71	68	66	49	66
MS Partnership	311	278	295	293	311	298
South Central	233	255	266	231	230	243
Twin Districts	378	261	310	338	298	317

Note: This analysis uses five years so as to present a comprehensive picture of students and student outcomes before, during, and after the academic interruptions caused by COVID-19.

** Values reported for race and gender categories do not equal the reported total due to gender and/or race not being reported in all cases.*

TABLE A14: COMMUNITY COLLEGE CTE PROGRAM-TO-WORKFORCE ALIGNMENT; NUMBER OF COMMUNITY COLLEGE CTE GRADUATES FROM CAREER/TECHNICAL CERTIFICATE PROGRAMS EMPLOYED IN AN ALIGNED INDUSTRY

	AY2018	AY2019	AY2020	AY2021	AY2022	Average
Total	765	803	745	799	732	769
Gender*						
Female	500	541	530	562	513	529
Male	260	257	213	235	218	237
Race*						
Black	327	364	334	333	314	334
White	394	412	369	418	381	395
Other	32	19	36	35	29	30
Race & Gender*						
Black, Female	202	247	248	245	223	233
Black, Male	125	116	86	88	91	101
White, Female	275	282	253	290	269	274
White, Male	119	130	115	127	112	121
Other, Female	18	10	26	21	17	18
Other, Male	14	<10	10	14	12	12
Ecosystem of College						
Ecosystem 1	46	56	41	50	39	46
Ecosystem 2	103	111	109	121	86	106
Ecosystem 3	51	45	56	32	38	44
Ecosystem 4	95	88	107	89	103	96
Ecosystem 5	172	169	152	154	147	159
Ecosystem 6	161	156	141	155	147	152
Ecosystem 7	49	51	48	41	53	48
Ecosystem 8	88	127	91	157	119	116
WIOA Region of College						
Delta	97	101	97	82	77	91
MS Partnership	198	199	216	210	189	202
South Central	221	220	200	195	200	207
Twin Districts	249	283	232	312	266	268

Note: This analysis uses five years so as to present a comprehensive picture of students and student outcomes before, during, and after the academic interruptions caused by COVID-19.

** Values reported for race and gender categories do not equal the reported total due to gender and/or race not being reported in all cases.*

**TABLE A15: RECEIPT OF PUBLIC ASSISTANCE,
NUMBER OF COMMUNITY COLLEGE CTE GRADUATES FROM ASSOCIATE OF APPLIED SCIENCE
PROGRAMS WHO RECEIVE PAYMENTS FROM PUBLIC ASSISTANCE WITHIN ONE YEAR OF
GRADUATION**

	AY2018	AY2019	AY2020	AY2021	AY2022	Average
Total	372	607	776	342	247	469
Gender*						
Female	305	426	547	277	205	352
Male	67	180	227	63	42	116
Race*						
Black	192	293	380	209	146	244
White	165	289	343	114	88	200
Other	12	24	44	13	13	21
Race & Gender*						
Black, Female	166	222	295	180	128	198
Black, Male	26	71	85	29	18	46
White, Female	127	187	226	86	67	139
White, Male	38	101	116	27	21	61
Other, Female	<10	16	22	<10	10	13
Other, Male	<10	<10	22	<10	<10	<10
Ecosystem of College						
Ecosystem 1	12	43	38	12	15	24
Ecosystem 2	39	92	85	31	18	53
Ecosystem 3	15	26	25	11	<10	17
Ecosystem 4	27	46	65	40	31	42
Ecosystem 5	78	113	190	101	63	109
Ecosystem 6	62	73	106	36	27	61
Ecosystem 7	29	48	39	24	21	32
Ecosystem 8	110	166	228	87	63	131
WIOA Region of College						
Delta	27	69	63	23	24	41
MS Partnership	66	138	150	71	49	95
South Central	107	161	229	125	84	141
Twin Districts	172	239	334	123	90	192
Public Assistance						
SNAP	340	305	300	251	215	282
TANF	10	<10	<10	<10	<10	<10
UI	48	376	587	144	45	240

Note: This analysis uses five years so as to present a comprehensive picture of students and student outcomes before, during, and after the academic interruptions caused by COVID-19.

** Values reported for race and gender categories do not equal the reported total due to gender and/or race not being reported in all cases.*

**TABLE A16: RECEIPT OF PUBLIC ASSISTANCE,
NUMBER OF COMMUNITY COLLEGE CTE GRADUATES FROM CAREER/TECHNICAL
CERTIFICATE PROGRAMS WHO RECEIVE PAYMENTS FROM PUBLIC ASSISTANCE WITHIN ONE
YEAR OF GRADUATION**

	AY2018	AY2019	AY2020	AY2021	AY2022	Average
Total	459	549	807	464	307	517
Gender*						
Female	283	270	446	282	199	296
Male	175	272	341	169	95	210
Race*						
Black	340	381	502	331	234	358
White	99	139	204	90	49	116
Other	13	12	27	<10	<10	13
Race & Gender*						
Black, Female	209	181	274	208	157	206
Black, Male	131	200	228	122	75	151
White, Female	63	81	141	67	33	77
White, Male	36	57	63	22	16	39
Other, Female	<10	<10	16	<10	<10	<10
Other, Male	<10	<10	11	<10	<10	<10
Ecosystem of College						
Ecosystem 1	55	49	31	32	13	36
Ecosystem 2	29	40	59	44	21	39
Ecosystem 3	24	27	46	11	<10	23
Ecosystem 4	35	53	86	38	29	48
Ecosystem 5	159	184	335	175	119	194
Ecosystem 6	82	106	136	70	63	91
Ecosystem 7	39	29	40	35	24	33
Ecosystem 8	36	61	74	59	32	52
WIOA Region of College						
Delta	79	76	77	43	19	59
MS Partnership	64	93	145	82	50	87
South Central	198	213	375	210	143	228
Twin Districts	118	167	210	129	95	144
Public Assistance						
SNAP	428	344	356	308	266	340
TANF	11	<10	<10	<10	<10	<10
UI	46	270	599	232	53	240

Note: This analysis uses five years so as to present a comprehensive picture of students and student outcomes before, during, and after the academic interruptions caused by COVID-19.

** Values reported for race and gender categories do not equal the reported total due to gender and/or race not being reported in all cases.*