

# Assessing the Value of Post-Secondary Education in Michigan: An Equity-Focused Analysis

Monica Brockmeyer, Ph.D.  
Change By Degrees Consulting, LLC  
Wayne State University

Darryl Gardner, Ph.D.  
Solixico Analytics, LLC  
Wayne State University

*The authors would like to thank the Institute for Higher Education Policy (IHEP) for providing the Equitable Value Explorer dataset, for providing feedback and reviewing earlier drafts of this report, and for funding this project. We would especially like to thank Lauren McLeese, Kimberly Dancy, and Sean Tierney for their comments throughout this process. We also extend our gratitude to the Postsecondary Value Commission for developing the Postsecondary Value Framework and Equitable Value measures utilized in this report.*

## **ABSTRACT**

Post-secondary education is often touted for its economic benefits, including higher earnings, improved health outcomes, and increased community engagement. However, these benefits are not evenly distributed and vary based on factors such as race/ethnicity, gender, location, and type of credential. This paper examines the economic outcomes of post-secondary education in Michigan, using data from the IHEP Equitable Value Explorer and the State of Michigan.

The study reveals several key findings. First, individuals with post-secondary degrees and credentials in Michigan tend to have higher median earnings compared to those without. Second, after ten years, the median earnings of both completers and non-completers of post-secondary education in Michigan surpass those with only a high school degree, often enough to fully recover the costs of their education. Third, Michigan ranks close to the national average for median income and performs well in terms of the economic value of college. However, there are disparities in median income and other outcomes based on gender and race/ethnicity. Additionally, earnings outcomes vary depending on the field of study, and there are differing gender and racial/ethnic disparities across various fields.

Further, there are disparities between public and private institutions, with public universities in Michigan outperforming private universities in terms of median income. Moreover, the study also highlights disparities in earnings outcomes by race/ethnicity and gender. While all race/ethnicity groups and both men and women experience a wage benefit associated with post-secondary education, there are gaps in median income and other outcome measures. For example, Asian and White students in Michigan have higher median incomes than Hispanic and Black students, and men generally have higher median incomes than women with the same level of education.

To address these disparities, recommendations are made for strategies such as universal access to high-quality education from early childhood through high school, enhanced support for college and career planning, increased capacity in high-demand majors, and greater investment in short-duration credentials and training programs for non-degree holders.

## INTRODUCTION

Post-secondary credentials are associated with benefits in many areas: higher earnings and job security,<sup>1</sup> improved health,<sup>2</sup> life expectancy,<sup>3</sup> and increased community involvement and contributions to society.<sup>4</sup> For example, bachelor's degree holders earn, on average, one million dollars more over their lifetime compared to people with a high school degree. Those with an associate degree will earn about \$500,000 more.<sup>5</sup>

These benefits are not only individual, but social. At the national, state, and regional levels, higher levels of education contribute to economic growth<sup>6</sup> and innovation.<sup>7</sup>

However, these benefits are not experienced equally – outcomes vary significantly by race and ethnicity, gender, location, credential level, choice of program and major, occupation and industry of employment.<sup>8</sup> Further, while outcomes for bachelor's degree holders have been extensively studied, much less is known about the outcomes of sub-baccalaureate education, including associate degrees, vocational certificates, and attending college without earning a degree.<sup>9</sup>

The “College for All” mantra falls short when these differences are taken into account. These differences – and our lack of specific understanding of how they play out in lives and communities – have no doubt contributed to the increased public skepticism about the value of college. This is unfortunate, because the evidence is overwhelming that attending college brings significant value and opportunity to *most people, most of the time*.

Understanding who is affected by these variations in outcomes and the reasons for them is critical for national, state, and regional policymakers who aim to improve the well-being of individuals and society by boosting college access, student success and degree attainment.<sup>10</sup>

Using data from the Postsecondary Value Commission Equitable Value Explorer, together with wage and educational data from State of Michigan, this paper explores earnings and other economic outcomes for various levels of educational credential and for various fields of study and assesses differences by race/ethnicity and by gender. Key findings include:

**Finding 1.** Median earnings are higher in Michigan for people with post-secondary degrees and credentials. The median earnings for bachelor's degree holders is \$47,200 one year after graduation, compared to \$20,200 for those with a high school diploma and no post-secondary credential.

**Finding 2.** Ten years after starting college, median earnings for Michigan students (completes and non-completers together) exceed that of those with high school degrees, plus enough to recoup the cost of their investment in post-secondary education. For example, students enrolling in a four-year program enjoy a median educational premium of \$11,447 for private institutions and \$22,514 for public institutions. These results hold for students attending all four-year institutions, almost all community colleges, and some post-secondary credentials.

- Finding 3.** Compared to other states, Michigan ranks 23rd in median income for students who started post-secondary education in 2008 or 2009, with a median income of \$50,547. Michigan ranks 10<sup>th</sup> in the amount it exceeds the minimum economic value of college, providing a median educational premium of \$13,702.
- Finding 4.** There are gaps in median income and other outcome measures for graduates by gender and race/ethnicity, with the median earnings for White bachelor's degree holders \$9,000 more than for Black bachelor's degree holders and median earnings for men with bachelor's degrees \$15,200 higher than for women.
- Finding 5.** Earnings outcomes vary by field of study, ranging from \$32,100 after one year in Biology and Life Sciences to \$71,328 after one year in Engineering and Architecture.
- Finding 6.** Gender and racial/ethnic differences in earnings outcomes for degree and credential holders vary by field of study. Generally, the most lucrative programs, including Engineering, Architecture, Computers, Business, Health and Computers, had the widest disparities.

## **BACKGROUND**

The American public has become more and more doubtful about the benefits of a college degree.<sup>11</sup> Some states are not requiring college degrees for more jobs,<sup>12</sup> a practice which encourages access to jobs but falsely suggests that college isn't necessary or beneficial. Some call this "populist virtue signaling."<sup>13</sup> The media have been promoting the idea that a college degree isn't worth what it used to be for 50 years,<sup>14</sup> during which time the economic divides by education have vastly expanded.

In 2020, the State of Michigan founded the Office of Sixty by 30 to advance Governor Gretchen Whitmer's goal of 60% post-secondary credential attainment among Michigan's working-age adults by 2030. Michigan's 60% attainment goal is based on the state's low number of adults with a post-secondary credential: 49.1%, compared to the national average of 51.9%.<sup>15</sup> Attitudes towards education, especially higher education, have been shaped by our history as an automotive and manufacturing center, and in recent years by a divisive political narrative. There are widespread disparities in outcomes for BIPOC students in both secondary and higher education, among the highest in the nation. Moreover, there is significant variation between Michigan's highest and lowest-performing institutions, with little understanding of the reasons.

In response to these challenges, policymakers, educators, and employers are exploring new approaches to enhance the value and relevance of post-secondary education. Initiatives such as competency-based education, apprenticeships, and stackable credentials are gaining traction as alternatives or supplements to traditional degree programs. These efforts aim to align education and training with the evolving needs of the labor market, ensuring that individuals are equipped with the skills and knowledge required to succeed in today's economy. By addressing the disparities in educational

outcomes and improving the alignment between education and employment, stakeholders can help restore public confidence in the value of post-secondary education.

## **METHODOLOGY**

**Datasets.** The analyses presented in this paper draw from two datasets.

**Equitable Value Explorer Data.** This document reports on the value of post-secondary education as reported in the Equitable Value Explorer (EVE)<sup>16</sup> compiled by the Institute for Higher Education Policy (IHEP), and developed in alignment with the Postsecondary Value Commission.<sup>17</sup> The institution-level and threshold data underlying the EVE are compiled from several publicly available sources, including the Integrated Postsecondary Education Data System (IPEDS), the American Community Survey (ACS), and College Scorecard data. In addition to the data in this document, the EVE data can be browsed using a dashboard<sup>18</sup> created by IHEP.

The EVE data provides institution-level data for 151 post-secondary institutions in Michigan (5,615 nationally). These include 15 Michigan Public Universities (MPUs), 31 community colleges, and 29 private universities. Three Michigan community colleges were identified as public universities with primarily less than two-year credentials. In these analyses, these institutions were combined with the public two-year institutions to reflect the State of Michigan categorization of these institutions. Data disaggregated by gender and by family income level is also available. Outcome variables include student median earnings (ten years after matriculation) and the difference between median income and the value thresholds established by the Postsecondary Value Commission.

**Aggregated Michigan Earnings Data reported on MISchoolData Dashboard.** Michigan reports earnings data<sup>19</sup> for all secondary and post-secondary students one and five years after the students left school.

The Center for Education Performance Information<sup>20</sup> (CEPI) Student Transcript and Academic Record Repository<sup>21</sup> (STARR) database is used to locate enrollment at a Michigan public community college or university. Data from the National Student Clearinghouse<sup>22</sup> is used to exclude students who are currently enrolled in a post-secondary institution. The Michigan State Unemployment Insurance Agency<sup>23</sup> reports employer-submitted unemployment insurance wage data through the Michigan Workforce Longitudinal Data System (WLDS)<sup>24</sup>. The published data is disaggregated by the highest credential achieved, field of study, and intermediate school district. The data is disaggregated by race/ethnicity, gender, and age. It is presented at the state level as well as disaggregated by post-secondary institution for Michigan's public universities and community colleges. It does not provide wage information for private universities or certificate programs. Michigan is one of only two states that publish earnings data for all students who have exited a post-secondary institution, regardless of whether the student earned a credential.<sup>25</sup>

**Populations.** The analyses describe economic outcomes for two different populations of students.

The EVE dataset<sup>26</sup> provides median income 10 years after students enter an institution, from the College Scorecard.<sup>27</sup> These earnings data were collected for calendar years 2019 and 2020 for students who first enrolled between 2008-09 and 2009-10.

The Aggregated Michigan Earnings data provides median income, statewide and by institution, for students one and five years after they completed their last credential. This paper reports from the 2023 data set.

**Measures.** The analyses use the following measures:

**Thresholds.** The Postsecondary Value Commission has defined a series of thresholds against which median wages are compared. According to the PVC technical documentation,<sup>28</sup>

*The Equitable Value Explorer measures institution-level earnings ... against four economic value thresholds, ... The thresholds are estimated using data from ACS, based on a combined 5-year file that aggregates data from 2017 to 2021. These threshold earnings estimates are based on individuals with positive earnings between the ages of 22 and 40 and not enrolled in a postsecondary institution in the three months prior to the survey interview. The ACS earnings ... includes income from wages and from any self-owned business or farm. While business and farm earnings can include negative figures, we exclude any zero or negative incomes from our threshold calculations. These earnings values are reported in 2021 dollars in the ACS and adjusted to 2022 dollars using the annual CPI-U.*

This report uses two of the thresholds defined by the Postsecondary Value Commission, the Minimum Economic Value threshold and the Economic Mobility Threshold (which they refer to as T0 and T3, respectively). The Minimum Economic Value threshold is the median earnings of a high school graduate in that state (in Michigan, \$36,845 annually), plus enough to recoup the expected total net price within ten years (an institution specific measure based on the annualized cumulative net price of attendance). The Economic Mobility Threshold is the income level needed to reach the 4<sup>th</sup> income quintile (60<sup>th</sup> percentile) for each state. In Michigan this is \$46,661.

**Aggregation and disaggregation of medians.** Both EVE data and Michigan wage data report median income at the institutional level for groups of students or credential holders. The EVE dataset also contains disaggregated median wages by gender and by family income level. The Michigan wage dataset provides median wages for groups disaggregated by race/ethnicity, gender, and age. Both datasets suppress values when the number of students is small.

For some analyses, median wages are aggregated up to the state level, or by race/ethnicity, gender, institutional sector and institution's primary credential level. Since neither dataset contains student level data, it was not possible to calculate average or median wages for these population groups. Rather, a weighted average of the median income values for each institution-level record was used.

## RESULTS

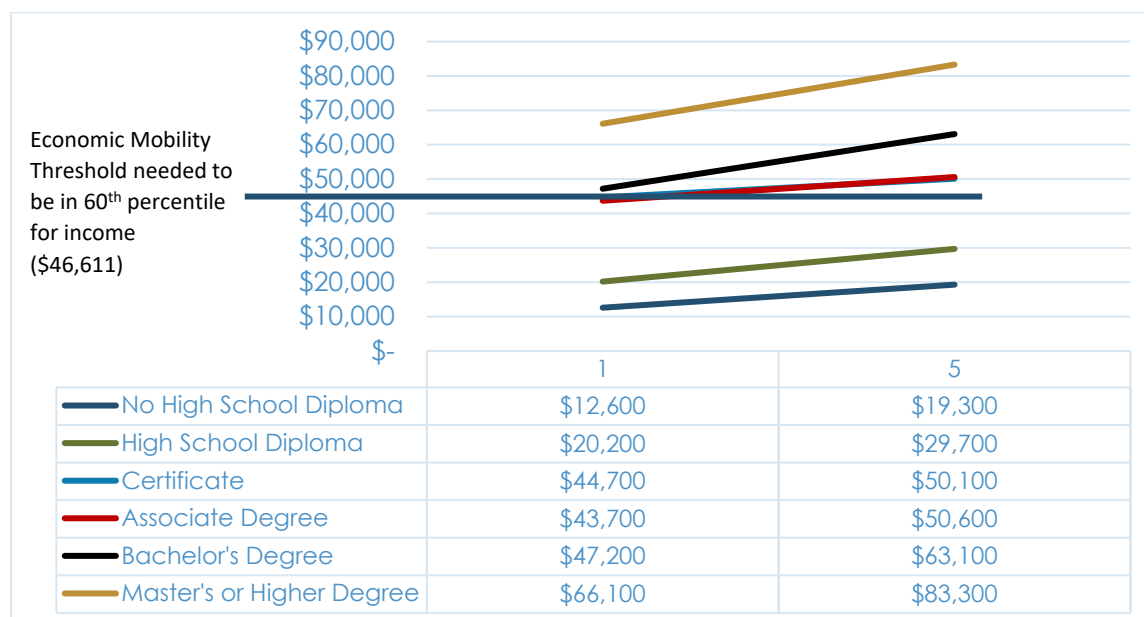
### **Finding 1: Median earnings are higher in Michigan for people with post-secondary degrees and credentials.**

As shown in Figure 1, workers in Michigan with a post-secondary credential also have an education premium over those with a high school diploma. For example, one year after earning a bachelor's degree, the median income was \$47,200 compared to \$20,200 a year after earning a high school diploma. In the first year, the median income for all post-secondary credential holders was at least twice as much as the median for those with a high school degree. Differences between certificate, associate's, and bachelor's degree earnings were relatively narrow, ranging from \$44,700 to \$47,200. These differences widen over time; five years after receiving a degree, bachelor's recipients earned \$63,100 compared to \$50,600 for an associate degree, \$50,100 for a vocational certificate, and \$29,700 for those with a high school degree.

The horizontal line across Figure 1 indicates the Economic Mobility Threshold, that is, the annual income needed to reach the 60<sup>th</sup> percentile, \$46,611 in the state of Michigan. Interestingly, the median income for certificate, associate degree, and bachelor's degree holders one year after graduating are all very close to this level.

The median income for Michigan degree and credential holders five years after degree exceeds the Minimum Economic Value for all credential and degree levels, as shown in Figure 1. In this paper, we call the difference between the median income and the Minimum Economic Value the Educational Premium. Note that the median Educational Premium is relatively similar for certificate, associate degree, and bachelor's degree levels, suggesting that the higher cost of a four-year degree may dampen people's experience of receiving good economic value from college. We were unable to display this value for master's level and above since the EVE database only provides the Minimum Economic Value for four-year credentials and shorter.

**Figure 1: Median Earnings For Michigan Workers, 1 and 5 Years after Graduation, by Credential Level**



Note: The populations referenced in these analyses include workers who had four quarters of wage data reported to Michigan Unemployment Insurance Agency in 2020 and who had completed a degree or other credential at a Michigan high school, community college or public university one or five years prior. Students who returned to an educational program were excluded.

Note: Economic Mobility Threshold is from Postsecondary Value Commission Equitable Value Explorer dataset.

Source: Median Annual Wages by Education Attainment, MI School Data.  
<https://www.mischooldata.org/median-annual-wages-by-education-attainment/>

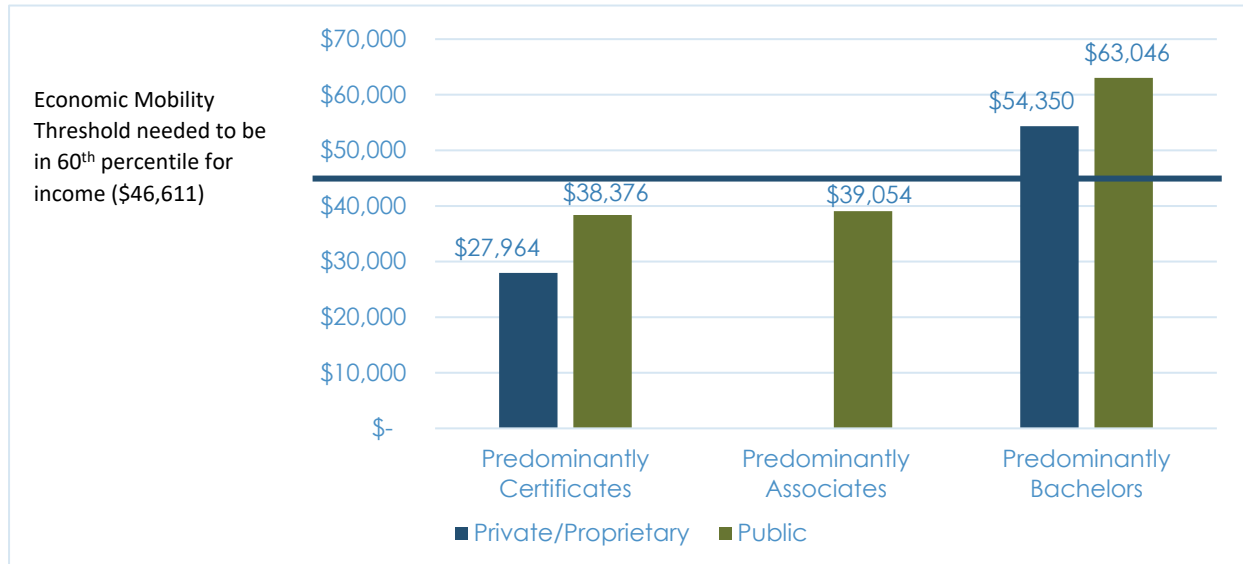
**Finding 2: Ten years after starting college, median earnings for Michigan students (completes and non-completers together) exceed that of those with high school degrees, plus enough to recoup the cost of their investment in post-secondary education. These results for students attending all four-year institutions, almost all community colleges, and some post-secondary credentials.**

Recent studies tend to emphasize the importance of risk when considering the question "is college worth the investment?" and non-completion is arguably the largest determinant of risk.<sup>29</sup> Unlike the Michigan Wage dataset (which contains wage data only for completers), the EVE dataset provides median outcomes for cohorts of students whether or not they have completed a credential within 10 years. While this data does not allow for examination of outcomes for non-completers specifically, it does illuminate some of the risks and benefits of enrolling in a credential program or attending college.

Figure 2 shows that once non-completers are included, there is greater variation in median wage among the educational sectors and only students who enroll at predominately bachelor's institutions have median incomes above the 60<sup>th</sup> percentile threshold after ten years.



**Figure 2: Median Income for Michigan Students, 10 years after starting a degree or credential program, by credential level of Institution.**

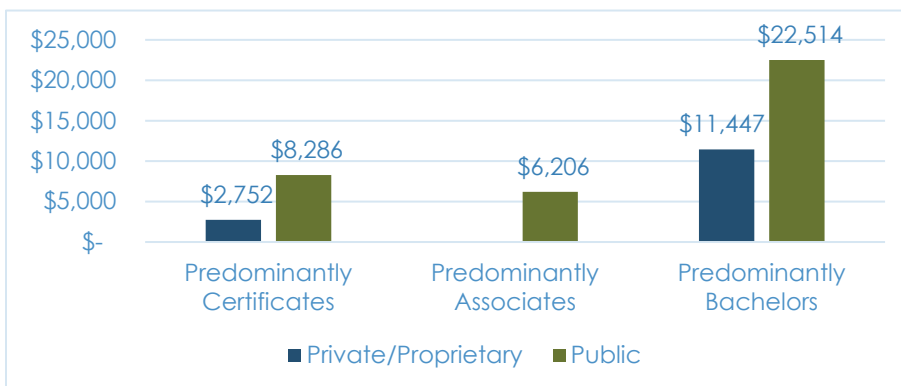


Note: The populations referenced in these analyses include students who enrolled in post-secondary education in 2008 and 2009.

Note: Economic Mobility Threshold is from Postsecondary Value Commission Equitable Value Explorer dataset. Source: Postsecondary Value Commission Equitable Value Explorer dataset. [www.postsecondaryvalue.org](http://www.postsecondaryvalue.org).

Figure 3 shows that enrolling in a certificate or associate degree program provides median wages only somewhat higher than those earned by those with high school diplomas (once the cost of the program is accounted for), while those enrolling in a four-year program enjoy a median educational premium of \$11,447 for private institutions and \$22,514 for public institutions. The difference in outcomes between private and public institutions is noteworthy. This difference is due to both greater tuition costs at private institutions and higher earnings from those attending public institutions.

**Figure 3: Educational Premium for Michigan Students, 10 years after starting a degree or credential program, by credential level of Institution.**



Note: The populations referenced in these analyses include students who enrolled in post-secondary education in 2008 and 2009.

Note: Minimum Economic Value is authors' calculations of weighted T0 from Postsecondary Value Commission Equitable Value Explorer data. Educational Premium is the difference between Median Wages and Minimum Economic Value. Source: Postsecondary Value Commission Equitable Value Explorer dataset. [www.postsecondaryvalue.org](http://www.postsecondaryvalue.org).

**Finding 3: Compared to other states, Michigan ranks near the US average for median income, and ranks highly for exceeding the minimum economic value of college.**

Figure 5 illustrates the weighted average Minimum Economic Value threshold, median income for those attending certificate, associate degree and bachelor's degree granting institutions and the Economic Mobility threshold for each state, as well as for the District of Columbia and for the nation overall. In nearly every state, attending certificate and associate degree institutions, on average, leads to a median wage that exceeds the Minimum Economic Value threshold. In every state, attending a bachelor's degree granting institution leads to an average median wage that exceeds the Minimum Economic Value threshold as well as median wages from certificate and associate degree granting institutions. Median wages for bachelor's degree granting institutions exceed the Economic Mobility threshold in very nearly every state. (See the Appendix for the full list of 50 states and the District of Columbia.)

Table 1 and Table 2 compare Michigan to the US Average and to the other Great Lakes states.

As discussed earlier, individuals who enroll in post-secondary programs earnings significantly outpace those who enter the workforce with a high school diploma or equivalent credential – on average. Michigan ranks close to the US average and in the middle of the pack for Great Lakes states for median income for those attending certificate and associate degree institutions. Table 1 shows that enrolling in a certificate or associate degree programs in Michigan provides median wages near, but just slightly below, certificate and associates enrollees nationally. Additionally, Michigan enrollees at four-year public institutions earn more than \$3k more than the national average but nearly \$7K less than the national average for those enrolled in four-year private/proprietary institutions.

There is a noticeable difference in outcomes between Michigan's public and private four-year institutions, with median incomes at Michigan Public Universities (MPUs) well above the national average and toward the top of the Great Lakes states. Private Universities in Michigan, on the other hand, have median income below the US average, lowest in the Great Lakes and in the bottom quartile of all states.

Table 2 compares median wages in Michigan and other Great Lakes states with the Minimum Economic Value threshold. For minimum economic value, Table 2 shows that Michigan ranks in the top 10 for public and private certificate program enrollees and public four-year institutions – ranking 9th overall – with enrollees at four-year institutions earning a premium of \$22,514. Michigan is the only Great Lakes state ranked in the top 10 for minimum economic value.

It's important to note that this state-wise comparison looks at *weighted median* incomes within each state and sector. Even when the weighted median income falls above a threshold, many individuals will have income falling below those thresholds, as we will see in Findings 4 and 5.

**Table 1: Median Earnings compared to other Great Lakes States**

State	Public		Private / Proprietary		Public		Private / Proprietary		Public		Private / Proprietary		Overall	
	Rank	Earnings	Rank	Earnings	Rank	Earnings	Rank	Earnings	Rank	Earnings	Rank	Earnings	Rank	Earnings
MN	4	\$47,424	8	\$33,913	4	\$48,243	17	\$42,965	15	\$62,824	22	\$59,820	14	\$55,383
WI	5	\$44,815	27	\$24,540	14	\$43,702	32	\$35,291	20	\$61,185	17	\$61,360	15	\$53,905
IL	12	\$41,687	3	\$38,849	37	\$39,642	22	\$40,352	8	\$66,395	10	\$69,348	20	\$51,323
US		<b>\$39,352</b>		<b>\$27,488</b>		<b>\$42,637</b>		<b>\$41,074</b>		<b>\$59,827</b>		<b>\$60,955</b>		<b>\$50,675</b>
MI	<b>21</b>	<b>\$38,376</b>	<b>14</b>	<b>\$27,964</b>	<b>38</b>	<b>\$39,054</b>		--	<b>14</b>	<b>\$63,046</b>	<b>38</b>	<b>\$54,350</b>	<b>23</b>	<b>\$50,547</b>
PA	6	\$44,507	35	\$23,516	12	\$43,766	15	\$43,585	51	\$37,990	4	\$73,721	26	\$49,822
IN	22	\$37,933	24	\$25,719	11	\$43,830	19	\$42,097	37	\$53,280	13	\$64,131	28	\$49,022
OH	18	\$40,143	7	\$33,954	28	\$41,920	13	\$44,453	35	\$54,351	21	\$59,956	36	\$47,814

Note: The populations referenced in these analyses include students who enrolled in post-secondary education in 2008 and 2009.

Source: Author's calculation of weighted median wages from Postsecondary Value Commission Equitable Value Explorer dataset. [www.postsecondaryvalue.org](http://www.postsecondaryvalue.org).

**Table 2: Educational Premium Compared to Other Great Lakes States**

State	Public		Private / Proprietary		Public		Private / Proprietary		Public		Private / Proprietary		Overall	
	Rank	Earnings	Rank	Earnings	Rank	Earnings	Rank	Earnings	Rank	Earnings	Rank	Earnings	Rank	Earnings
MI	<b>10</b>	<b>\$8,286</b>	<b>4</b>	<b>\$2,752</b>	<b>23</b>	<b>\$6,206</b>		\$-	<b>8</b>	<b>\$22,514</b>	<b>27</b>	<b>\$11,447</b>	<b>9</b>	<b>\$13,702</b>
IL	7	\$8,890	1	\$7,727	25	\$5,999	19	\$1,731	6	\$24,160	5	\$20,204	13	\$13,075
ID	32	\$2,306	20	\$-	13	\$7,928		\$-	42	\$11,719	8	\$18,606	15	\$12,439
WI	8	\$8,776	18	\$47	27	\$5,744	32	\$(5,037)	22	\$16,462	25	\$12,257	17	\$12,379
PA	37	\$-	7	\$2,331	17	\$6,765	13	\$4,566	47	\$9,174	3	\$23,183	18	\$12,310
MN	4	\$10,853	2	\$5,105	7	\$8,579	23	\$1,152	20	\$16,889	23	\$12,543	19	\$12,304
US		<b>\$6,687</b>		<b>\$1,137</b>		<b>\$6,396</b>		<b>\$2,254</b>		<b>\$17,825</b>		<b>\$12,902</b>		<b>\$11,081</b>
IN	27	\$4,250	11	\$1,086	15	\$7,376	18	\$1,809	35	\$12,926	15	\$16,516	31	\$10,184
OH	14	\$7,487	3	\$3,616	12	\$7,982	11	\$6,692	40	\$12,192	18	\$14,297	34	\$9,903

Note: The populations referenced in these analyses include students who enrolled in post-secondary education in 2008 and 2009.

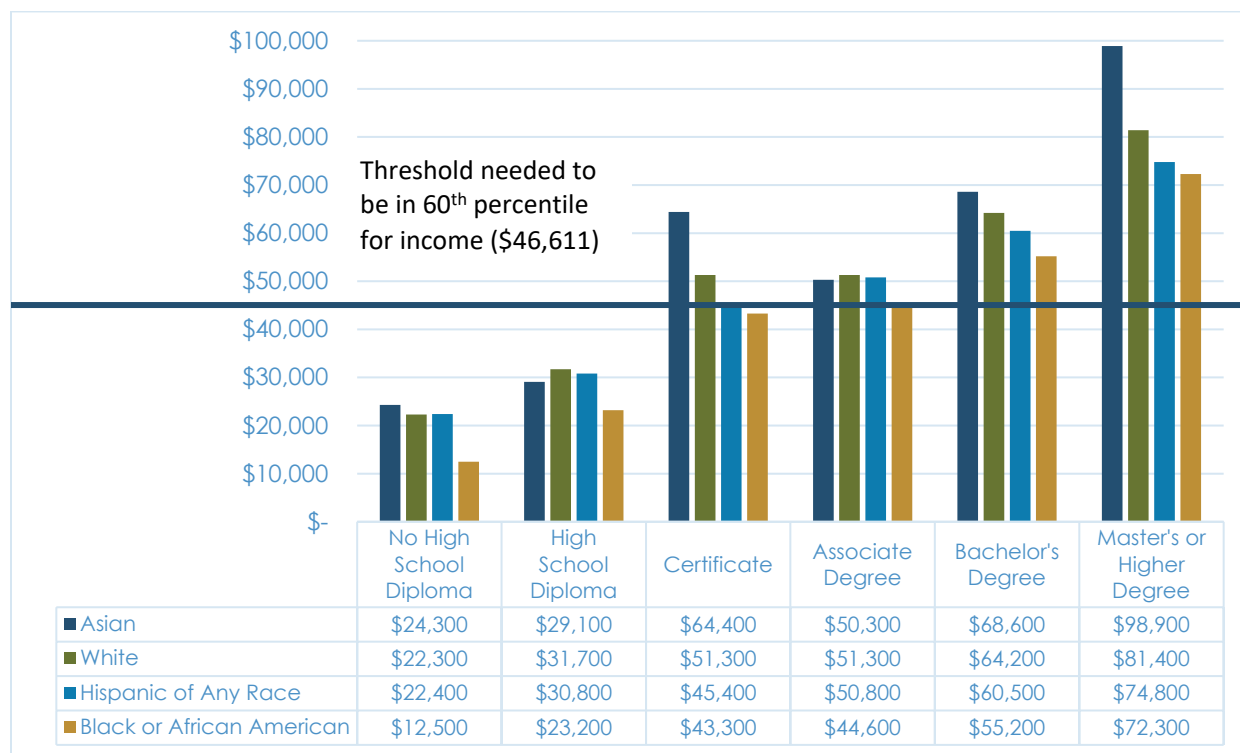
Source: Author's calculation of weighted median wages from Postsecondary Value Commission Equitable Value Explorer dataset. [www.postsecondaryvalue.org](http://www.postsecondaryvalue.org).

**Finding 4: There are gaps in median income and other outcome measures for graduates by gender and race/ethnicity.**

In every race/ethnicity group in the US, people with a post-secondary education earn, on average, more than those with a high school diploma. These findings are mirrored for workers in Michigan, as shown in Figure 4. For example, Hispanic/Latino/a workers have a median income of \$60,500 five years after a bachelor's degree, compared to \$30,800 five years after a high school diploma. Similar results occur for White, Asian and Black workers.

Although the overall population has benefited from higher levels of educational attainment, these gains have largely failed to reduce disparities between white Americans and historically underrepresented racial/ethnic groups<sup>30</sup> This is largely because improvements in degree attainment among these marginalized groups has not exceeded that of the white population. In addition, between 2010 and 2020, income disparities between white adults and adults in certain racial/ethnic groups increased, including Native American/Alaska Native, Native Hawaiian/Pacific Islander communities, and Black/African American communities.<sup>31</sup>

**Figure 4: Median Earnings for Michigan Workers with Varying Credentials, by Race, 5 Years after Graduating**



Note: The populations referenced in these analyses include workers who had four quarters of wage data reported to Michigan Unemployment Insurance Agency in 2020 and who had completed a degree or other credential at a Michigan high school, community college or public university one or five years prior. Students who returned to an educational program were excluded.

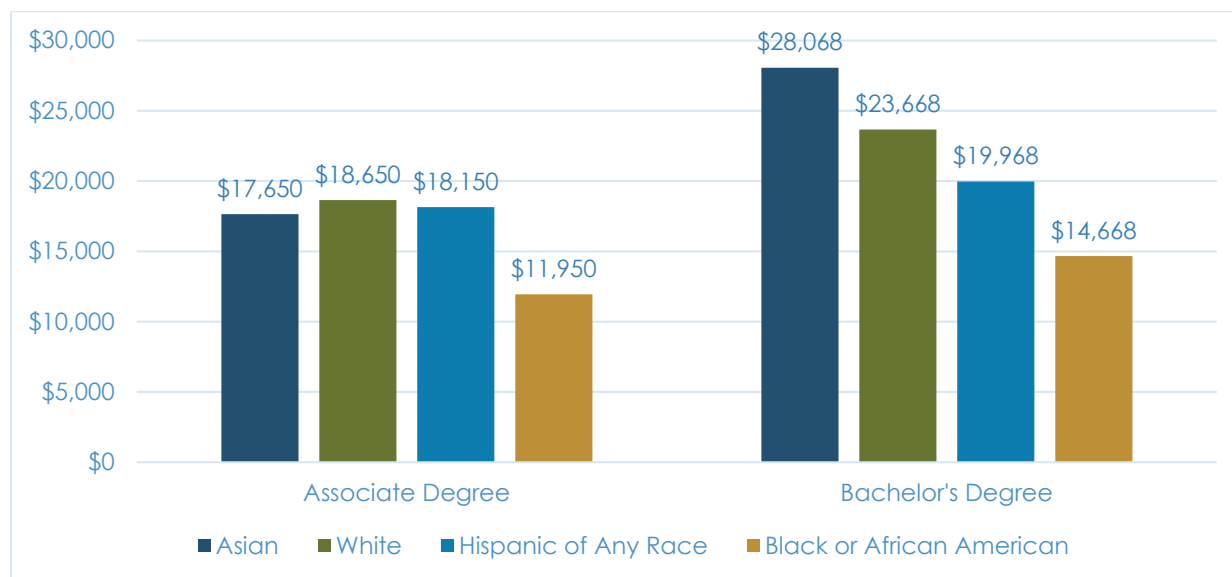
Note: Economic Mobility Threshold is from Postsecondary Value Commission Equitable Value Explorer dataset.

Source: Median Annual Wages by Education Attainment, MI School Data.  
<https://www.mischooldata.org/median-annual-wages-by-education-attainment/>

In Michigan, Asian and White students with a less than two-year certificate have a median income above the 60<sup>th</sup> percentile, while Hispanic students need an associate degree, and Black students need a bachelor's degree in order to have a median wage above the 60<sup>th</sup> percentile.

Figure 5 shows that Michigan students in every race/ethnicity category have median earnings above the Minimum Economic Value threshold for both associate and bachelor's degree holders. For associate degree holders, there is little variability in the size of the premium for Asian, White, and Hispanic workers, but a significant disparity between these groups and Black workers. For bachelor's degree holders, Asian workers enjoy the greatest benefit, followed by White workers, Hispanic workers, and Black workers.

**Figure 5: Educational Premium, for Michigan credential holders, 5 years after degree/credential, by race/ethnicity**



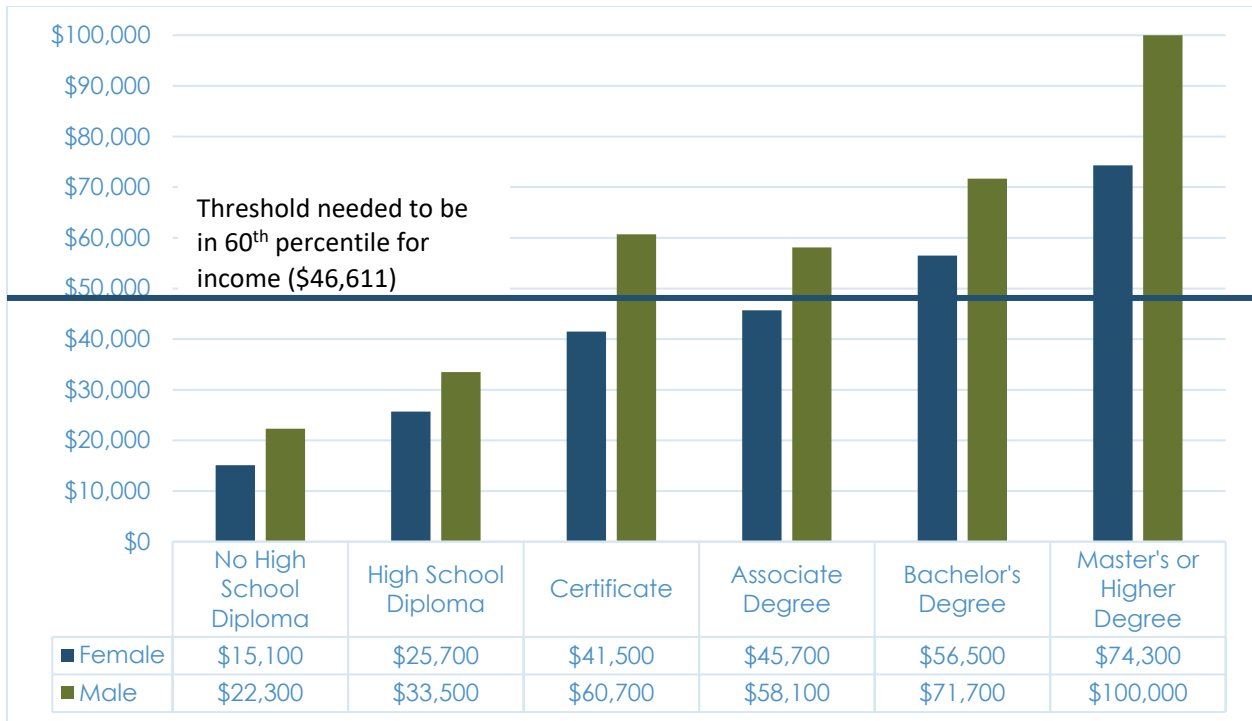
Note: The populations referenced in these analyses include workers who had four quarters of wage data reported to Michigan Unemployment Insurance Agency in 2020 and who had completed a degree or other credential at a Michigan high school, community college or public university one or five years prior. Students who returned to an educational program were excluded.

Note: Minimum Economic Value is authors' calculations of weighted T0 from Postsecondary Value Commission Equitable Value Explorer data. Educational Premium is the difference between Median Wages and Minimum Economic Value.

Source: Median Annual Wages by Education Attainment, MI School Data. <https://www.mischooldata.org/median-annual-wages-by-education-attainment/>

Even though degree attainment for women is growing faster than for men,<sup>32</sup> income for women, and the educational premium for education lags that for men. Figure 6 shows that the median wage for men with any post-secondary credential (whether certificate, associate degree, bachelor's degree, master's degree, or higher) is above the Economic Mobility threshold. Women fare worse, with median incomes above the Economic Mobility threshold only for bachelor's and graduate degree holders. These disparities are echoed in Figure 8 with men enjoying almost twice the Educational Premium than women.

**Figure 6: Median Earnings For Michigan Workers with Varying Credentials, by Gender, 5 Years after Graduating**

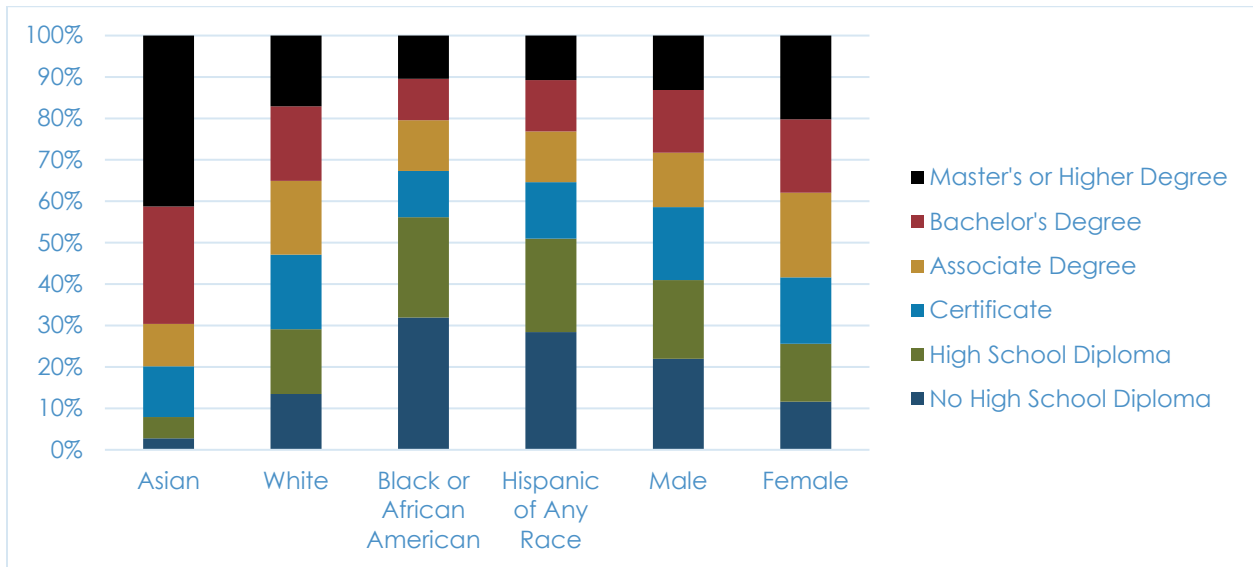


Note: The populations referenced in these analyses include workers who had four quarters of wage data reported to Michigan Unemployment Insurance Agency in 2020 and who had completed a degree or other credential at a Michigan high school, community college or public university one or five years prior. Students who returned to an educational program were excluded.

Note: Economic Mobility Threshold is from Postsecondary Value Commission Equitable Value Explorer dataset.

Source: Median Annual Wages by Education Attainment, MI School Data.  
<https://www.mischooldata.org/median-annual-wages-by-education-attainment/>

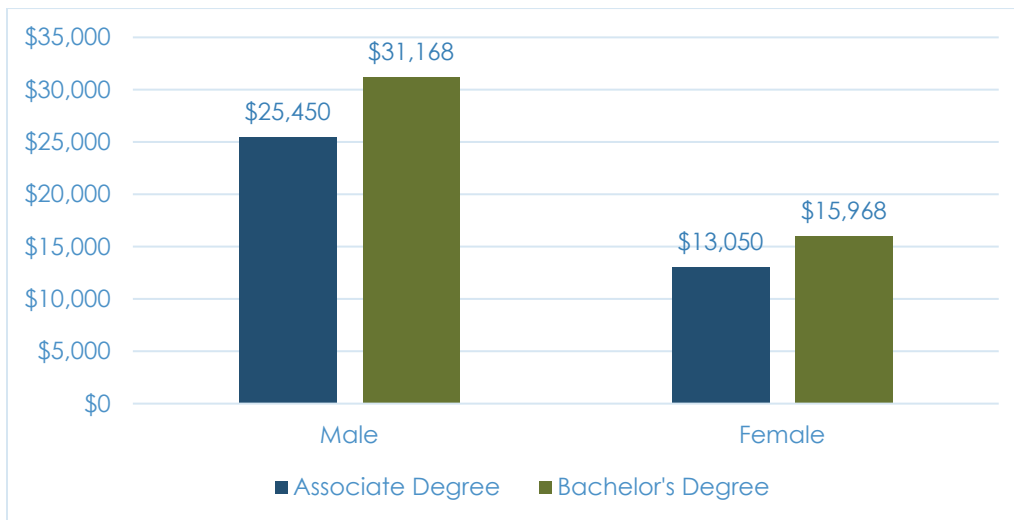
**Figure 7: Share of Workers with Various Credential & Degree Levels, by Race/Ethnicity and Gender**



Note: The populations referenced in these analyses include workers who had four quarters of wage data reported to Michigan Unemployment Insurance Agency in 2020 and who had completed a degree or other credential at a Michigan high school, community college or public university one or five years prior. Students who returned to an educational program were excluded.

Source: Median Annual Wages by Education Attainment, MI School Data.  
<https://www.mischooldata.org/median-annual-wages-by-education-attainment/>

**Figure 8: Educational Premium, for Michigan credential holders, 5 years after degree/credential, by gender**



Note: The populations referenced in these analyses include workers who had four quarters of wage data reported to Michigan Unemployment Insurance Agency in 2020 and who had completed a degree or other credential at a Michigan high school, community college or public university one or five years prior. Students who returned to an educational program were excluded.

Note: Minimum Economic Value is authors' calculations of weighted T0 from Postsecondary Value Commission Equitable Value Explorer data. Educational Premium is the difference between Median Wages and Minimum Economic Value.

Source: Median Annual Wages by Education Attainment, MI School Data.  
<https://www.mischooldata.org/median-annual-wages-by-education-attainment/>

### **Finding 5: Earnings outcomes vary by field of study.**

The field of study of graduates is a crucial determinant of their earnings, and we use it to analyze variations in income across different educational routes. While a graduate's major doesn't always correspond exactly to their occupation,<sup>33</sup> prior studies have shown that the choice of major significantly influences earnings.<sup>34</sup> Therefore, due to the constraints in data availability, we utilize the field of study as an approximate measure for understanding earnings disparities in associated professions. To investigate differences in earnings by field of study, this report groups field of study into 15 categories.\*

Median income varies substantially by field of study, ranging from \$32,100 after one year in Biology and Life Sciences to \$71,328 after one year in Engineering and Architecture.

Four groups of majors have median earnings above the 60<sup>th</sup> percentile for bachelor's degree recipients in Michigan after one year: Business, Health, Engineering and Architecture, and Computers, Statistics and Mathematics. Five years out, all groups except Arts have median income above the 60<sup>th</sup> percentile (\$46K annually). All groups show median earnings gains of at least \$9,000 between year one and year five, with an increase of more than \$21,000 for Biology and Life Sciences (which had the lowest wages after only one year.)

The variation in wage level across various fields of study is partially accounted for by differences in wage at different levels of educational attainment, as depicted in Table 4. The Engineering and Architecture category has the highest median wage at all credential levels. Students who majored in a program in Industrial Arts, Consumer Services, or Recreation with a certificate had higher median wages than those with higher credential levels. Those who majored in Law, Social Work and public policy or Education and Library Science at the certificate level had higher median salary than those at the associate or bachelor's level but not those with a graduate degree. Some fields of study including Business, Psychology, Biology and Life Sciences, and Agriculture and Natural Resources have substantial jumps in median income between the bachelor's and graduate degree level. Median income is low at every level for students majoring in the Arts.

Michigan does not publish wage data by field of study at more than five years post-degree, so it is not possible to discern whether these differences narrow over time.

---

\* These 15 categories are: Agriculture and Natural Resources (CIP: 01, 03); Architecture and Engineering (CIP: 04, 14, and 15); Arts (CIP: 50); Biology and Life Sciences (CIP: 26); Business (CIP: 52); Communications and Journalism (CIP: 09 and 10); Computers, Statistics, and Mathematics (CIP: 11 and 27); Education and Interdisciplinary Studies (CIP: 13 and 25); Health (CIP: 51); Humanities and Liberal Arts (CIP: 05, 16, 23, 24, 30, 38, 39, and 54); Industrial Arts, Consumer Services, and Recreation (CIP: 12, 19, 31, 46, 47, and 49); Law and Public Policy and Social Work (CIP: 22, 43, and 44); Physical Sciences (CIP: 40 and 41); Psychology (CIP: 42); and Social Sciences (CIP: 45).



**Table 3: Median Earnings For Michigan Workers with Bachelor's Degrees, 1 and 5 Years after Graduating, By Field of Study**

Weighted Median Wages	Wages After Year	
	1	5
Business	\$51,400	\$71,000
Health	\$67,000	\$69,400
Humanities and Liberal Arts	\$37,064	\$50,162
Engineering and Architecture	\$71,036	\$90,418
Education and Library Science	\$46,700	\$52,600
Law and Public Policy and Social Work	\$41,328	\$56,067
Industrial Arts, Consumer Services, and Recreation	\$34,935	\$54,409
Computers, Statistics, and Mathematics	\$65,915	\$87,958
Communications and Journalism	\$39,508	\$55,225
Social Sciences	\$40,500	\$57,200
Arts	\$32,200	\$45,100
Psychology	\$34,600	\$48,900
Biology and Life Sciences	\$32,100	\$55,000
Agriculture and Natural Resources	\$38,295	\$51,918
Physical Sciences	\$42,200	\$62,800

Note: The populations referenced in these analyses include workers who had four quarters of wage data reported to Michigan Unemployment Insurance Agency in 2020 and who had completed a degree or other credential at a Michigan high school, community college or public university one or five years prior. Students who returned to an educational program were excluded.

Source: Median Annual Wages by Education Attainment, MI School Data.  
<https://www.mischooldata.org/median-annual-wages-by-education-attainment/>

**Table 4: Median Income, 5 years after credential, by credential level and field of study**

Field of Study	Certificate	Associate Degree	Bachelor's Degree	Master's or Higher
Business	\$49,900	\$49,100	\$71,000	\$110,500
Health	\$39,700	\$64,100	\$69,400	\$94,700
Humanities and Liberal Arts	\$44,151	\$44,820	\$50,162	\$61,685
Engineering and Architecture	\$67,821	\$65,242	\$90,418	\$106,303
Education and Library Science	\$56,100	\$29,000	\$52,600	\$70,478
Law, Public Policy, & Social Work	\$66,548	\$58,141	\$56,067	\$68,258
Industrial Arts, Consumer Services, and Recreation	\$61,252	\$50,825	\$54,409	\$59,449
Computers, Statistics, and Mathematics	\$53,800	\$57,200	\$87,958	\$97,394
Communications and Journalism	\$42,300	\$34,850	\$55,225	\$60,500
Social Sciences	\$57,200	\$35,500	\$57,200	\$67,200
Arts	\$35,700	\$36,500	\$45,100	\$44,700
Psychology	--	\$47,000	\$48,900	\$70,700
Biology and Life Sciences	--	\$37,800	\$55,000	\$70,400
Agriculture and Natural Resources	\$47,500	\$42,825	\$51,918	\$93,845
Physical Sciences	--	\$49,143	\$62,800	\$85,700

Note: The populations referenced in these analyses include workers who had four quarters of wage data reported to Michigan Unemployment Insurance Agency in 2020 and who had completed a degree or other credential at a Michigan high school, community college or public university one or five years prior. Students who returned to an educational program were excluded.

Note: Economic Mobility Threshold is from Postsecondary Value Commission Equitable Value Explorer dataset.

Source: Median Annual Wages by Education Attainment, MI School Data.  
<https://www.mischooldata.org/median-annual-wages-by-education-attainment/>

**Finding 6: Gender and racial/ethnic differences in earnings outcomes for degree and credential holders vary by field of study.**

Race/ethnicity differences in earnings vary by field of study nationally as well as in Michigan as depicted in Figure 9 and Figure 10. Generally, Asian graduates earn more than White graduates followed by Hispanic graduates who earn more than Black graduates, although in some fields, Hispanic students earn more than White students. Graduates in Humanities and Liberal Arts see similar earnings regardless of racial background. Two of the most common and lucrative fields, Business and Health see especially large gaps for those with a master's degree or higher. Disparities between Black students and White students are largest in Computers, Statistics and Mathematics at the bachelor's level, more than \$21,000.

Earnings differences between White and Asian graduates when compared to Black and Hispanic graduates may be exacerbated by differences in enrollment in more lucrative programs and majors. For example, White students are 2.5 times more likely to major in Engineering and Architecture than Black students, while Asian students are 10 times more likely to major in Computers, Statistics and Mathematics than Black students, both fields are among the highest paying majors. On the other hand, black students are 1.7 times more likely to major in the Humanities and Liberal Arts than White students and nearly 4 times more likely than Asian students, two of the lowest paying majors. (See Table 5.)

**Table 5: Share of Graduates Majoring in Different Fields of Study by Race/Ethnicity.**

<b>CIP Group</b>	<b>Asian</b>	<b>White</b>	<b>Hispanic of Any Race</b>	<b>Black or African American</b>
Business	27%	24%	23%	20%
Health	15%	11%	10%	9%
Humanities and Liberal Arts	3%	7%	9%	11%
Engineering and Architecture	14%	10%	8%	4%
Education and Library Science	3%	6%	4%	2%
Law and Public Policy and Social Work	0%	6%	7%	13%
Industrial Arts, Consumer Services, and Recreation	0%	.4%	2%	6%
Computers, Statistics, and Mathematics	10%	5%	6%	1%
Communications and Journalism	6%	7%	8%	13%
Social Sciences	7%	5%	7%	8%
Psychology	6%	4%	5%	7%
Arts	3%	4%	6%	4%
Biology and Life Sciences	7%	4%	5%	1%
Agriculture and Natural Resources	0%	2%	0%	0%
Physical Sciences	0%	1%	0%	0%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

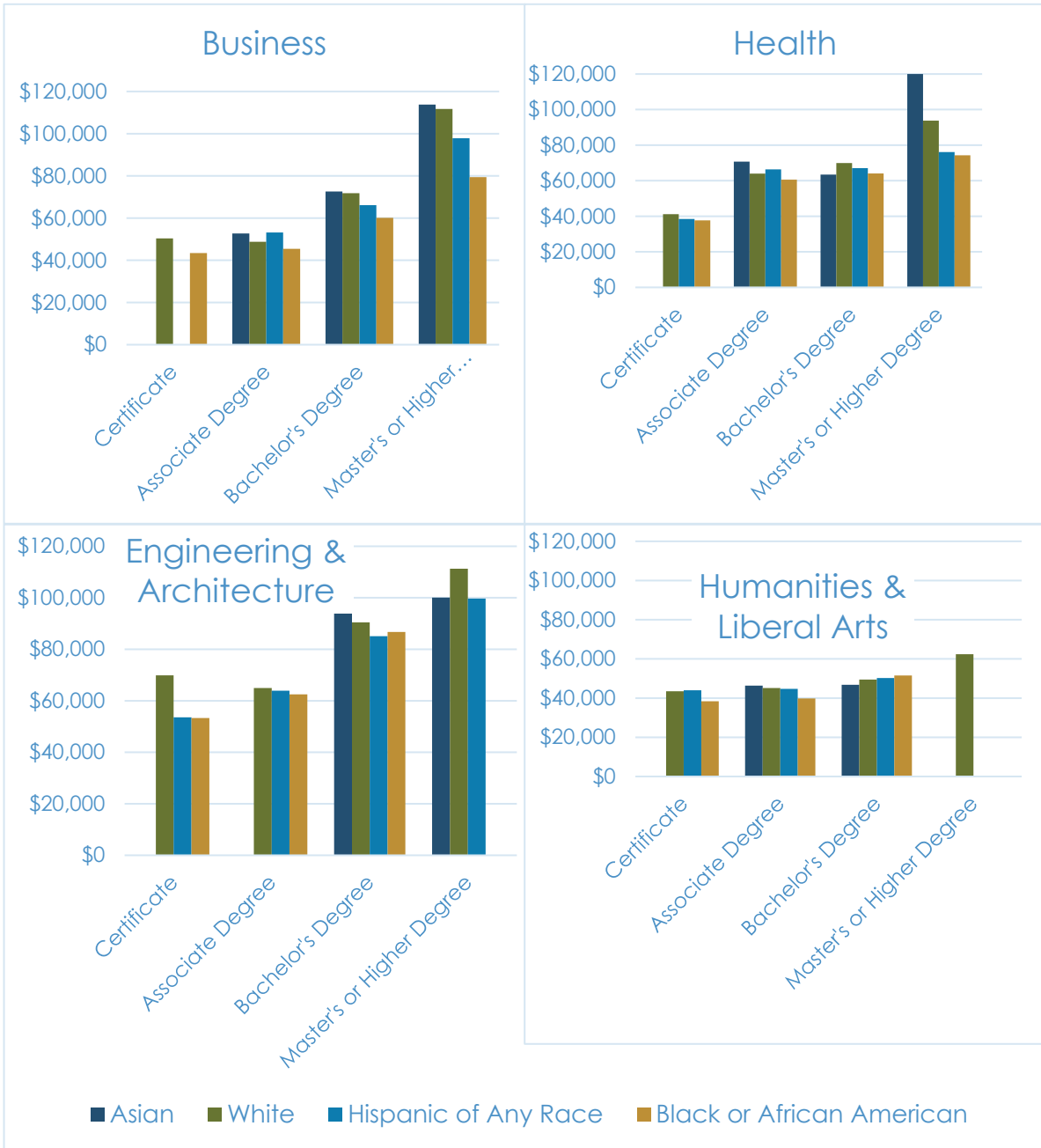
*Note: The populations referenced in these analyses include workers who had four quarters of wage data reported to Michigan Unemployment Insurance Agency in 2020 and who had completed a degree or other credential at a Michigan high school, community college or public university one or five years prior. Students who returned to an educational program were excluded.*

Source: Median Annual Wages by Education Attainment, MI School Data.  
<https://www.mischooldata.org/median-annual-wages-by-education-attainment/>

Gender differences are also quite stark among the various fields of study and they also vary across those fields. Men's median wages are higher than women's in all categories. Two fields of study, Psychology, and the Arts, have gender differences that are less than \$1500 five years after graduation. Gender gaps are highest, more than \$15,000, in Industrial Arts, Consumer Services, and Recreation; and in Health. Computers, Statistics and Mathematics, and Engineering and Architecture, which have very high race/ethnicity disparities also have high disparities between men and women.

As for race/ethnicity, overall wage differences between men and women appear to be partially explained by differences in the frequency with which women and men pursue and complete various fields of study. Men are more than five times more likely than women to earn bachelor's degrees with majors in Engineering, Architecture, Computers, Mathematics, and Statistics, generally high wage programs of study. On the other hand, women are about four times more likely to earn bachelor's degrees in health fields of study, but men still earn more than women in these fields. (See Table 6.)

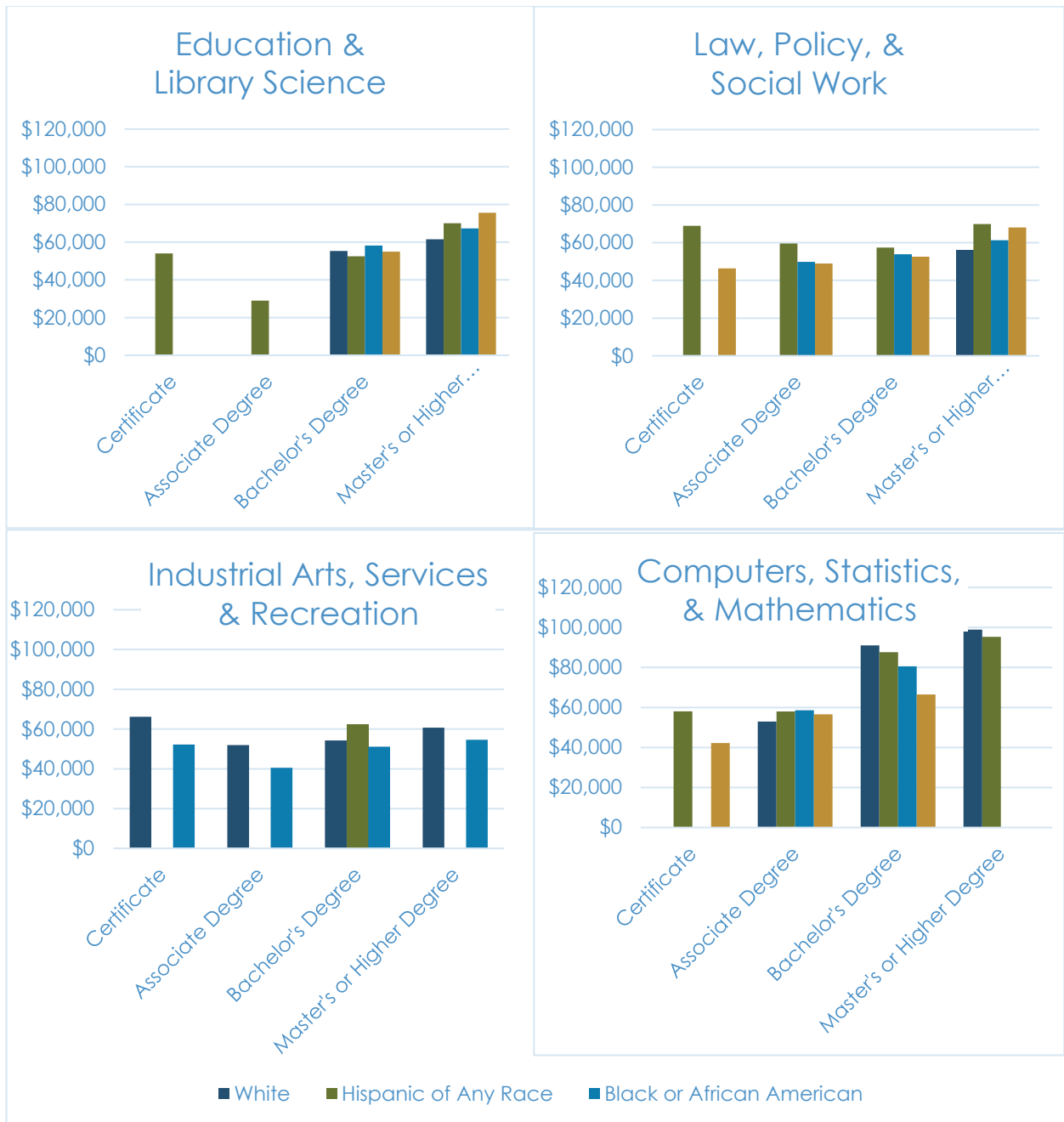
**Figure 9: Median Wages for Michigan Workers, by Race/Ethnicity**



Note: The populations referenced in these analyses include workers who had four quarters of wage data reported to Michigan Unemployment Insurance Agency in 2020 and who had completed a degree or other credential at a Michigan high school, community college or public university one or five years prior. Students who returned to an educational program were excluded.

Source: Median Annual Wages by Education Attainment, MI School Data.  
<https://www.mischooldata.org/median-annual-wages-by-education-attainment/>

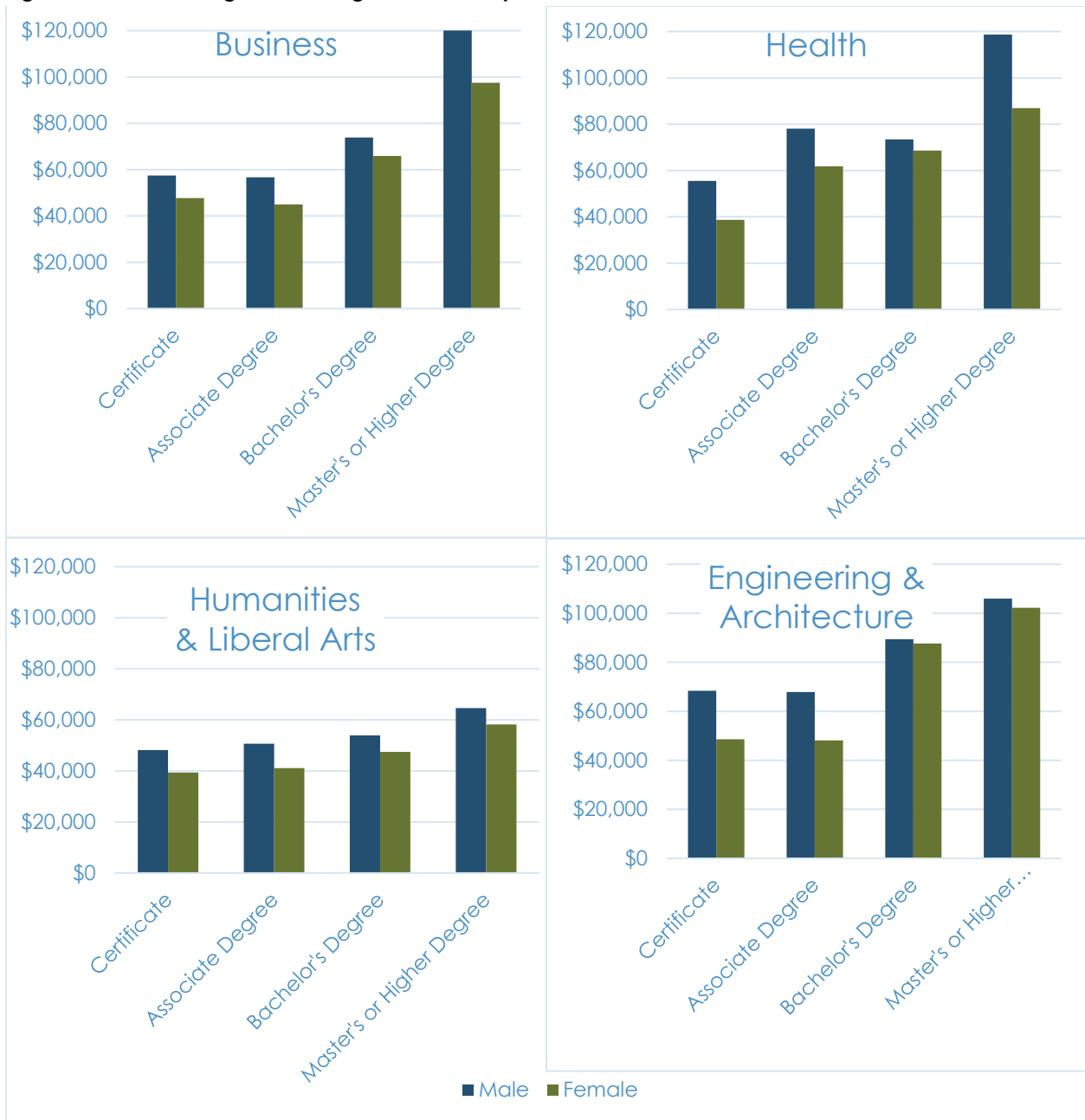
**Figure 10: Median Wages For Michigan Workers, by Race/Ethnicity, cont.**



Note: The populations referenced in these analyses include workers who had four quarters of wage data reported to Michigan Unemployment Insurance Agency in 2020 and who had completed a degree or other credential at a Michigan high school, community college or public university one or five years prior. Students who returned to an educational program were excluded.

Source: Median Annual Wages by Education Attainment, MI School Data.  
<https://www.mischooldata.org/median-annual-wages-by-education-attainment/>

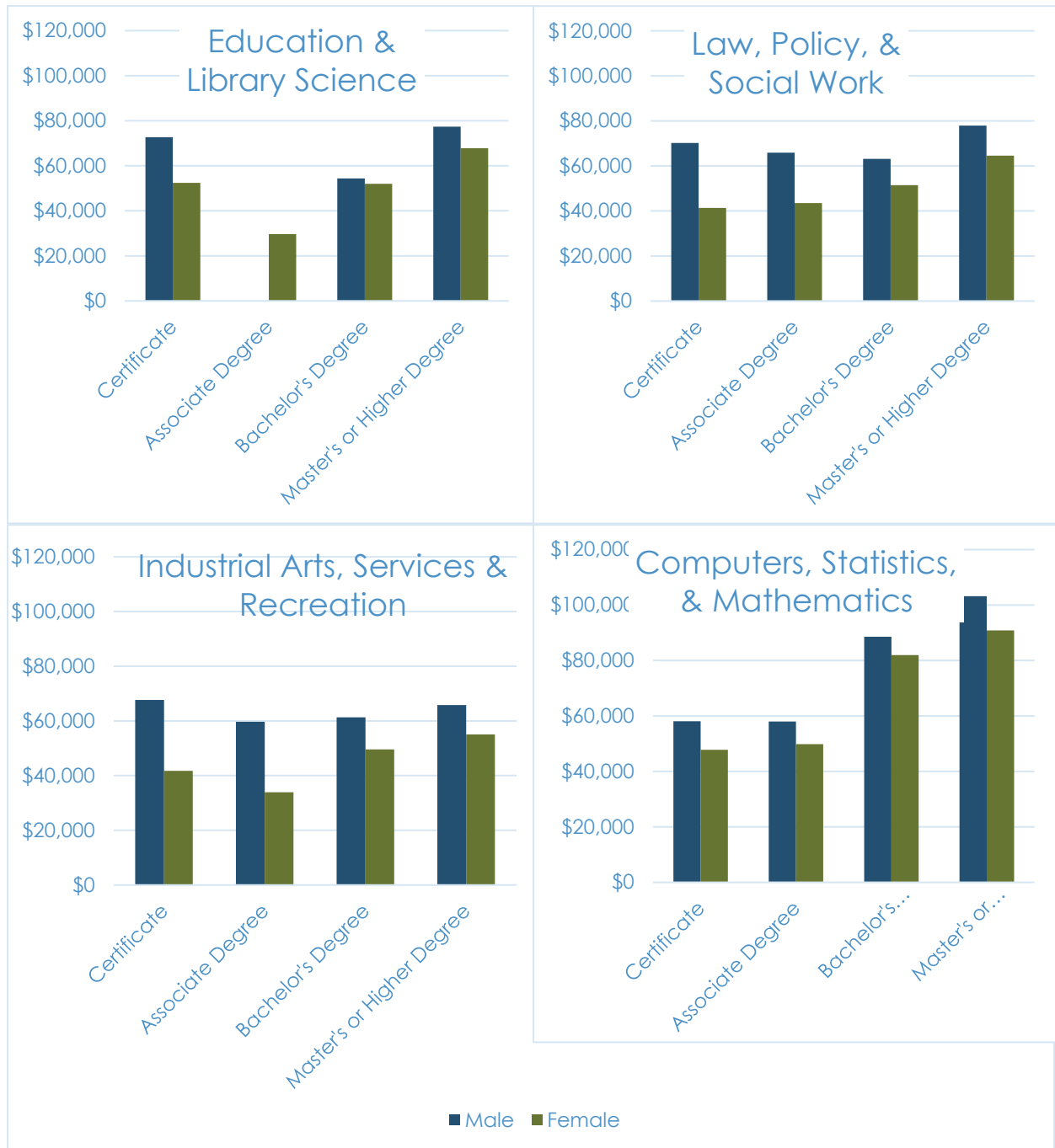
**Figure 11: Median Wages for Michigan Workers, by Gender**



Note: The populations referenced in these analyses include workers who had four quarters of wage data reported to Michigan Unemployment Insurance Agency in 2020 and who had completed a degree or other credential at a Michigan high school, community college or public university one or five years prior. Students who returned to an educational program were excluded.

Source: Median Annual Wages by Education Attainment, MI School Data.  
<https://www.mischooldata.org/median-annual-wages-by-education-attainment/>

**Figure 12: Median Wages for Michigan Workers, by Gender, cont.**



Note: The populations referenced in these analyses include workers who had four quarters of wage data reported to Michigan Unemployment Insurance Agency in 2020 and who had completed a degree or other credential at a Michigan high school, community college or public university one or five years prior. Students who returned to an educational program were excluded.

Source: Median Annual Wages by Education Attainment, MI School Data.  
<https://www.mischooldata.org/median-annual-wages-by-education-attainment/>

**Table 6: Share of Graduates Majoring in Different Fields of Study by Gender.**

CIP Group	Male	Female
Business	28%	19%
Health	4%	18%
Humanities and Liberal Arts	7%	9%
Engineering and Architecture	17%	3%
Education and Library Science	3%	8%
Law and Public Policy and Social Work	5%	7%
Industrial Arts, Consumer Services, and Recreation	3%	5%
Computers, Statistics, and Mathematics	9%	2%
Communications and Journalism	6%	8%
Social Sciences	6%	5%
Psychology	2%	6%
Arts	3%	5%
Biology and Life Sciences	3%	4%
Agriculture and Natural Resources	2%	2%
Physical Sciences	2%	1%
Total	100%	100%

*Note: The populations referenced in these analyses include workers who had four quarters of wage data reported to Michigan Unemployment Insurance Agency in 2020 and who had completed a degree or other credential at a Michigan high school, community college or public university one or five years prior. Students who returned to an educational program were excluded.*

Source: Median Annual Wages by Education Attainment, MI School Data.

<https://www.mischooldata.org/median-annual-wages-by-education-attainment/>

## CONCLUSIONS

Using data from the Equitable Value Explorer and the State of Michigan, the study finds that individuals with post-secondary degrees and credentials in Michigan tend to have higher median earnings compared to those without. After ten years, both completers and non-completers of post-secondary education in Michigan often surpass those with only a high school degree in median earnings, enough to recover the costs of their education. However, there are disparities in median income and other outcomes based on gender and race/ethnicity, with Asian and White students generally having higher median incomes than Hispanic and Black students, and men having higher median incomes than women with the same level of education. Michigan ranks near the national average for median income and exceeds the minimum economic value of college, but public universities in Michigan outperform private universities in terms of median income.

Policy recommendations are as follows:

1. **Targeted Communications and Data Driven Storytelling.** A collaborative effort involving key stakeholders such as the state of Michigan, regional initiatives, college access organizations, and colleges and universities, should promote a comprehensive, data-driven communications strategy around the value of post-



secondary education. This strategy should target historically marginalized groups in Michigan. All involved entities must highlight overall economic advantages, long-term returns, and Michigan-specific success stories. Transparency about existing disparities is essential, as is the emphasis that college remains a pathway to opportunity for all populations. Messages tailored for specific audiences – including prospective students, parents, K-12 educators, community leaders, and policymakers – will maximize impact. Partnerships will ensure broad dissemination in diverse communities. Compelling data visualizations from this study (e.g., charts demonstrating long-term returns compared to high school graduates, infographics on disparities) should be utilized alongside testimonials and case studies to resonate with different audiences. This decentralized multi-stakeholder approach requires coordination to ensure consistent narratives while leveraging the expertise and reach of organizations across the state. Continuous evaluation will enable adjustment and refinement of this strategy to maximize impact and promote a more positive, data-supported public narrative about the value of higher education.

2. **Universal and Equitable Access to Higher Education:** Our analyses confirm that post-secondary education generally provides economic benefits at every level, across racial groups and for both men and women. While smaller racial disparities exist at the associate degree level than at the bachelor's and master's degree levels, more people of color are concentrated at certificate and associate degree levels, contributing to income disparities.

The pathway to college should be open to all individuals who are prepared to commit to their education, necessitating not only the opportunity to enroll but also comprehensive support to achieve success. This involves early intervention to address disparities, enhanced guidance for college and career planning, streamlined processes for making informed college and financial aid decisions, and targeted efforts to make higher education more affordable for students who have been historically excluded.

Michigan compares favorably to other states in exceeding the Minimum Economic Value threshold, especially Michigan Public Universities for their combination of relatively lower cost and higher earnings. Efforts should continue to maintain lower tuition rates and/or to provide more financial support to those who need it.

3. **Fair Representation in High-Earning Fields:** Disparities in income often result from the specific fields that students pursue, with certain degrees leading to higher earnings. In Michigan, Engineering, Architecture, Computers, Statistics, and Mathematics and Health fields of study had the highest median wages and had proportionately more Asian and White graduates. The trend of occupational segregation exacerbates racial, ethnic, and gender disparities in income, often linked to the choice of major. However, neither student choice nor academic preparation explain the stratification of historically excluded students by major<sup>35</sup>. Addressing this requires more than guiding student choices; it involves increasing

capacity in high-demand, high-paying majors and revising curricula, particularly in STEM, to broaden access and encourage diverse participation. (It's important to note however, that median earnings and educational premiums are higher for students with a bachelor's degree in lower-paying programs or majors than for those in associate degrees or other post-secondary programs.)

4. **Addressing Wage Inequality in the Workforce:** Wage disparities, even among individuals with similar educational backgrounds, often result from occupational segregation and various forms of discrimination. We found that these inequalities were not uniform across field of study and often widened over time. Ensuring that all workers are compensated equally for the same work, irrespective of race, ethnicity, or gender, is imperative for achieving labor market equity.

There are many avenues for future research. Neither the EVE database and the MISchoolData database contain individual-level data, although EVE contains 25<sup>th</sup> and 75<sup>th</sup> income percentile data. Comparing median wages with the Minimum Economic Value and Economic Mobility thresholds does not permit us to identify how many Michigan workers fall above and below those thresholds. While the MISchool data further disaggregates by race/ethnicity and gender, comparison of these medians does not allow a sufficiently precise understanding of who benefits and does not benefit from college to enable focused interventions.

Worker-level data from Michigan's Workforce Longitudinal Data System was not available at the time of this writing, pending an update to Michigan's reporting infrastructure. When that data becomes available, it will permit a more granular understanding of the economic value of college. Individual-level wage data will also permit an assessment of the economic contribution of post-secondary education to the economy of Michigan as a whole.

Space did not permit analyses of the benefits of college at the institutional level nor an understanding of how institutions fared at providing equitable access and outcomes. MISchoolData also provides economic outcomes for different age groups. Given the anticipated demographic "cliff" in traditionally aged undergraduates<sup>36</sup>, these analyses could inform efforts to recruit adult students.

## APPENDIX

Table 7: Median Income by State

State	Public		Private / Proprietary		Public		Private / Proprietary		Public		Private / Proprietary		Rank	Earnings
	Rank	Earnings	Rank	Earnings	Rank	Earnings	Rank	Earnings	Rank	Earnings	Rank	Earnings		
DC		--	23	\$25,828		--		--	49	\$46,776	2	\$76,773	1	\$73,315
MA	42	--	19	\$26,246	15	\$43,633	1	\$59,201	10	\$65,373	1	\$83,174	2	\$67,252
RI		--	4	\$35,778	32	\$41,470	10	\$48,877	7	\$67,391	3	\$76,013	3	\$63,221
VT		--	51	\$-	5	\$47,774	34	\$32,143	13	\$63,518	9	\$69,354	4	\$60,873
NY	2	\$48,908	38	\$22,777	10	\$45,192	20	\$41,961	17	\$62,291	6	\$71,562	5	\$58,136
NH	42	--	46	\$13,660	3	\$48,603	38	--	12	\$63,775	25	\$59,006	6	\$58,012
CT	20	\$39,356	2	\$39,109	29	\$41,865	25	\$39,126	4	\$69,121	12	\$65,124	7	\$57,576
MD		--	26	\$24,700	8	\$46,301		--	9	\$65,671	5	\$72,788	8	\$57,205
ND		--	11	\$28,918	2	\$49,285	33	\$34,512	19	\$61,506	18	\$60,965	9	\$56,631
UT	40	\$30,429	44	\$14,979	1	\$55,314	5	\$53,017	25	\$58,842	19	\$60,809	10	\$56,594
DE	42	--	32	\$23,988	26	\$42,226	27	\$38,794	1	\$72,410	33	\$55,179	11	\$56,337
WA	3	\$47,572	6	\$34,205	6	\$47,639	38	--	3	\$71,364	8	\$69,966	12	\$56,150
NJ	38	\$32,720	5	\$34,688	20	\$42,961	4	\$53,663	6	\$67,884	11	\$66,948	13	\$55,473
MN	4	\$47,424	8	\$33,913	4	\$48,243	17	\$42,965	15	\$62,824	22	\$59,820	14	\$55,383
WI	5	\$44,815	27	\$24,540	14	\$43,702	32	\$35,291	20	\$61,185	17	\$61,360	15	\$53,905
VA	29	\$36,080	41	\$20,350	9	\$45,542	21	\$41,885	5	\$68,896	41	\$51,830	16	\$53,635
WV	39	\$32,146	49	\$10,712	42	\$38,590	35	\$26,506	41	\$51,484	16	\$61,740	17	\$53,211
NE	17	\$40,577	16	\$27,053	19	\$43,031	23	\$39,906	28	\$56,706	15	\$63,595	18	\$52,598
IA	13	\$41,329	34	\$23,552	16	\$43,393	2	\$57,568	11	\$65,079	27	\$57,069	19	\$51,710
IL	12	\$41,687	3	\$38,849	37	\$39,642	22	\$40,352	8	\$66,395	10	\$69,348	20	\$51,323
OR	25	\$36,956	37	\$22,795	27	\$42,158	38	\$-	18	\$62,014	14	\$63,968	21	\$51,162
MO	14	\$41,165	17	\$26,591	39	\$38,773	7	\$51,440	31	\$56,153	23	\$59,387	22	\$50,702
<b>US</b>		<b>\$39,352</b>		<b>\$27,488</b>		<b>\$42,637</b>		<b>\$41,074</b>		<b>\$59,827</b>		<b>\$60,955</b>		<b>\$50,675</b>
<b>MI</b>	<b>21</b>	<b>\$38,376</b>	<b>14</b>	<b>\$27,964</b>	<b>38</b>	<b>\$39,054</b>		<b>--</b>	<b>14</b>	<b>\$63,046</b>	<b>38</b>	<b>\$54,350</b>	<b>23</b>	<b>\$50,547</b>

Note: The populations referenced in these analyses include students who enrolled in post-secondary education in 2008 and 2009.

Source: Author's calculation of weighted median wages from Postsecondary Value Commission Equitable Value Explorer dataset. [www.postsecondaryvalue.org](http://www.postsecondaryvalue.org).

**Table 8: Median Income by State, continued.**

State	Public		Private / Proprietary		Public		Private / Proprietary		Public		Private / Proprietary		Rank	Earnings
	Rank	Earnings	Rank	Earnings	Rank	Earnings	Rank	Earnings	Rank	Earnings	Rank	Earnings		
SD		--	30	\$24,217	21	\$42,775		--	38	\$52,935	42	\$50,328	24	\$50,396
AK	16	\$40,943	9	\$33,487		--	38	--	39	\$52,465	46	\$45,834	25	\$50,363
PA	6	\$44,507	35	\$23,516	12	\$43,766	15	\$43,585	51	\$37,990	4	\$73,721	26	\$49,822
CA	10	\$42,541	10	\$30,462	25	\$42,565	14	\$43,634	2	\$71,443	31	\$55,819	27	\$49,787
IN	22	\$37,933	24	\$25,719	11	\$43,830	19	\$42,097	37	\$53,280	13	\$64,131	28	\$49,022
TX	15	\$41,050	13	\$28,156	22	\$42,730	12	\$46,370	22	\$59,736	20	\$60,684	29	\$48,894
HI	11	\$42,525	50	\$1,645	17	\$43,245		--	26	\$58,230	36	\$54,856	30	\$48,768
KS	7	\$43,628	29	\$24,357	13	\$43,723	28	\$38,402	32	\$55,680	37	\$54,742	31	\$48,672
AL	26	\$36,396	20	\$26,224	45	\$36,092		--	36	\$54,293	24	\$59,028	32	\$48,480
GA	35	\$33,970	12	\$28,504	23	\$42,654	9	\$49,342	29	\$56,703	40	\$52,000	33	\$48,267
NV	19	\$39,826	31	\$24,090	24	\$42,621	29	\$37,703	24	\$59,516	7	\$70,232	34	\$48,187
ME	34	\$34,323	47	\$13,257	36	\$40,050	16	\$43,183	46	\$49,588	29	\$56,527	35	\$48,180
OH	18	\$40,143	7	\$33,954	28	\$41,920	13	\$44,453	35	\$54,351	21	\$59,956	36	\$47,814
CO	8	\$43,600	45	\$14,023	7	\$46,544	18	\$42,134	33	\$55,445	44	\$48,064	37	\$47,813
FL	23	\$37,584	28	\$24,458	30	\$41,832	30	\$36,710	21	\$60,774	28	\$56,770	38	\$47,487
SC	27	\$36,300	40	\$21,226	43	\$37,916	24	\$39,900	23	\$59,684	45	\$46,365	39	\$47,317
MT	1	\$56,064	48	\$11,135	46	\$35,226	37	\$19,314	42	\$51,305	34	\$55,057	40	\$47,137
AZ	9	\$43,548	21	\$25,982	18	\$43,130	36	\$25,614	16	\$62,501	48	\$40,150	41	\$46,355
WY		--	1	\$52,774	31	\$41,617		--	27	\$57,569		--	42	\$46,349
OK	36	\$33,069	18	\$26,572	35	\$40,906	3	\$56,680	34	\$54,441	39	\$52,173	43	\$46,095
NC	30	\$36,008	36	\$23,489	47	\$35,183	8	\$49,389	30	\$56,273	26	\$57,958	44	\$45,512
TN	31	\$35,740	33	\$23,835	41	\$38,637	31	\$35,479	43	\$51,038	32	\$55,427	45	\$45,329
LA	32	\$35,248	22	\$25,831	44	\$36,637	6	\$51,687	40	\$51,556	35	\$54,924	46	\$44,725
ID	41	\$9,462	39	\$21,712	34	\$40,928		--	44	\$50,815	30	\$55,883	47	\$44,723
KY	28	\$36,084	43	\$16,383		--	26	\$39,011	45	\$50,628	43	\$48,380	48	\$43,943
AR	33	\$34,876	42	\$16,735	40	\$38,659	11	\$46,809	47	\$49,081	50	\$32,686	49	\$41,483
NM	24	\$37,162	25	\$24,992	33	\$41,121		--	50	\$43,827	49	\$36,956	50	\$40,109
MS	37	\$32,834	15	\$27,515	48	\$33,857		--	48	\$48,336	47	\$44,798	51	\$39,789

Note: The populations referenced in these analyses include students who enrolled in post-secondary education in 2008 and 2009.

Source: Author's calculation of weighted median wages from Postsecondary Value Commission Equitable Value Explorer dataset. [www.postsecondaryvalue.org](http://www.postsecondaryvalue.org).

**Table 9: Educational Premium, By State**

State	Public		Private / Proprietary		Public		Private / Proprietary		Public		Private / Proprietary		Rank	Earnings
	Rank	Earnings	Rank	Earnings	Rank	Earnings	Rank	Earnings	Rank	Earnings	Rank	Earnings		
DC		\$-	20	\$-		\$-		\$-	51	\$795	2	\$23,474	1	\$21,276
WV	35	\$278	20	\$-	20	\$6,416	34	\$(5,977)	29	\$14,617	1	\$25,047	2	\$17,998
UT	37	\$-	31	\$(526)	1	\$16,167	6	\$13,317	24	\$16,042	7	\$19,275	3	\$16,429
DE	37	\$-	20	\$-	33	\$5,174	30	\$(2,866)	1	\$29,285	26	\$12,060	4	\$16,225
VT		\$-	20	\$-	5	\$8,886	36	\$(22,096)	11	\$20,122	16	\$15,611	5	\$15,121
MA	37	\$-	8	\$1,850	42	\$3,523	10	\$9,065	16	\$18,316	10	\$17,785	6	\$13,984
NY	36	\$173	22	\$(35)	11	\$8,214	17	\$2,153	15	\$18,364	11	\$17,734	7	\$13,896
WA	3	\$10,922	20	\$-	14	\$7,863	25	\$-	3	\$25,057	12	\$17,262	8	\$13,816
MI	<b>10</b>	<b>\$8,286</b>	<b>4</b>	<b>\$2,752</b>	<b>23</b>	<b>\$6,206</b>		<b>\$-</b>	<b>8</b>	<b>\$22,514</b>	<b>27</b>	<b>\$11,447</b>	<b>9</b>	<b>\$13,702</b>
RI		\$-	20	\$-	48	\$1,335	21	\$1,264	10	\$20,237	13	\$17,251	10	\$13,458
MD		\$-	24	\$(129)	21	\$6,265		\$-	14	\$18,466	4	\$21,091	11	\$13,174
CT	9	\$8,299	5	\$2,689	41	\$3,530	31	\$(3,636)	5	\$24,440	17	\$14,684	12	\$13,155
IL	7	\$8,890	1	\$7,727	25	\$5,999	19	\$1,731	6	\$24,160	5	\$20,204	13	\$13,075
NE	11	\$8,145	27	\$(225)	6	\$8,598	29	\$(2,406)	30	\$14,563	14	\$17,135	14	\$12,691
ID	32	\$2,306	20	\$-	13	\$7,928		\$-	42	\$11,719	8	\$18,606	15	\$12,439
VA	31	\$3,298	32	\$(637)	8	\$8,460	16	\$2,287	4	\$24,617	44	\$4,320	16	\$12,436
WI	8	\$8,776	18	\$47	27	\$5,744	32	\$(5,037)	22	\$16,462	25	\$12,257	17	\$12,379
PA	37	\$-	7	\$2,331	17	\$6,765	13	\$4,566	47	\$9,174	3	\$23,183	18	\$12,310
MN	4	\$10,853	2	\$5,105	7	\$8,579	23	\$1,152	20	\$16,889	23	\$12,543	19	\$12,304
ND		\$-	33	\$(2,874)	2	\$9,466	33	\$(5,935)	28	\$14,753	19	\$14,030	20	\$12,285
KS	2	\$12,136	20	\$-	3	\$9,394	12	\$5,315	23	\$16,134	30	\$9,930	21	\$12,198
NJ	37	\$-	6	\$2,528	31	\$5,278	27	\$(494)	13	\$18,617	6	\$19,968	22	\$12,115
AL	15	\$6,730	12	\$1,079	45	\$3,145		\$-	27	\$14,862	9	\$18,493	23	\$11,802
<b>US</b>		<b>\$6,687</b>		<b>\$1,137</b>		<b>\$6,396</b>		<b>\$2,254</b>		<b>\$17,825</b>		<b>\$12,902</b>		<b>\$11,081</b>

Note: The populations referenced in these analyses include students who enrolled in post-secondary education in 2008 and 2009.

Source: Author's calculation of weighted median wages from Postsecondary Value Commission Equitable Value Explorer dataset. [www.postsecondaryvalue.org](http://www.postsecondaryvalue.org).

**Table 10: Educational Premium, By State, continued.**

State	Public		Private / Proprietary		Public		Private / Proprietary		Public		Private / Proprietary		Rank	Earnings
	Rank	Earnings	Rank	Earnings	Rank	Earnings	Rank	Earnings	Rank	Earnings	Rank	Earnings		
TX	6	\$9,122	17	\$81	10	\$8,237	28	\$(808)	12	\$18,879	21	\$12,815	24	\$11,659
OR	29	\$3,815	20	\$-	24	\$6,112	25	\$-	18	\$18,204	20	\$12,942	25	\$11,268
FL	23	\$5,003	29	\$(261)	16	\$7,132	22	\$1,183	7	\$23,885	29	\$10,857	26	\$11,202
GA	30	\$3,324	10	\$1,373	9	\$8,341	8	\$12,164	21	\$16,746	39	\$5,999	27	\$10,616
MO	37	\$-	9	\$1,564	32	\$5,238	2	\$16,269	33	\$14,272	24	\$12,541	28	\$10,585
IA	18	\$5,808	30	\$(265)	29	\$5,311	5	\$15,129	9	\$21,924	32	\$9,388	29	\$10,543
MT	1	\$24,731	20	\$-	36	\$4,260	35	\$(10,465)	37	\$12,408	22	\$12,569	30	\$10,371
IN	27	\$4,250	11	\$1,086	15	\$7,376	18	\$1,809	35	\$12,926	15	\$16,516	31	\$10,184
SC	22	\$5,093	28	\$(238)	34	\$4,939	14	\$4,560	19	\$18,167	43	\$4,444	32	\$10,090
CA	12	\$7,894	15	\$592	35	\$4,570	24	\$1,114	2	\$25,814	31	\$9,660	33	\$9,917
OH	14	\$7,487	3	\$3,616	12	\$7,982	11	\$6,692	40	\$12,192	18	\$14,297	34	\$9,903
NC	20	\$5,467	19	\$26	47	\$1,995	9	\$12,151	17	\$18,271	34	\$8,384	35	\$9,321
OK	37	\$-	13	\$901	18	\$6,733	1	\$16,291	32	\$14,315	33	\$8,926	36	\$9,071
LA	25	\$4,728	21	\$(20)	43	\$3,459	3	\$16,029	38	\$12,407	36	\$7,404	37	\$8,580
KY	17	\$6,074	23	\$(60)		\$-	20	\$1,278	36	\$12,448	40	\$5,696	38	\$8,484
SD		\$-	20	\$-	22	\$6,219		\$-	45	\$9,573	42	\$4,750	39	\$8,146
NM	13	\$7,704	20	\$-	4	\$9,363		\$-	49	\$7,572	48	\$2,216	40	\$7,846
TN	33	\$1,634	25	\$(173)	28	\$5,360	26	\$(365)	43	\$11,346	28	\$10,905	41	\$7,846
NV	24	\$4,977	16	\$316	39	\$3,892	25	\$-	34	\$13,571	41	\$5,003	42	\$7,475
AR	28	\$3,948	20	\$-	19	\$6,607	4	\$15,888	44	\$9,764	38	\$6,631	43	\$7,349
WY		\$-	20	\$-	38	\$3,975		\$-	25	\$15,975		\$-	44	\$7,267
MS	26	\$4,681	20	\$-	37	\$4,001		\$-	39	\$12,258	37	\$7,006	45	\$7,240
CO	16	\$6,644	26	\$(179)	30	\$5,308	15	\$2,567	41	\$11,940	49	\$(27)	46	\$7,062
AZ	5	\$9,982	20	\$-	26	\$5,951	25	\$-	31	\$14,460	50	\$(809)	47	\$6,406
ME	34	\$737	14	\$890	44	\$3,236	7	\$12,351	48	\$8,256	46	\$3,902	48	\$5,532
NH	37	\$-	20	\$-	40	\$3,844	25	\$-	26	\$15,864	45	\$4,197	49	\$5,366
HI	21	\$5,338	20	\$-	46	\$2,049		\$-	46	\$9,478	35	\$7,864	50	\$5,236
AK	19	\$5,523	20	\$-		\$-	25	\$-	50	\$4,629	47	\$2,551	51	\$4,626

Note: The populations referenced in these analyses include students who enrolled in post-secondary education in 2008 and 2009.

Source: Author's calculation of weighted median wages from Postsecondary Value Commission Equitable Value Explorer dataset. [www.postsecondaryvalue.org](http://www.postsecondaryvalue.org).

## REFERENCES

---

- 1 Education pays, 2022: Career Outlook. <https://www.bls.gov/careeroutlook/2023/data-on-display/education-pays.htm>
- 2 Sun, F., Zimmer, Z., & Zajacova, A. (2022). Educational differences in life expectancies with and without pain.. *The journals of gerontology. Series B, Psychological sciences and social sciences*. <https://doi.org/10.1093/geronb/gbac169>.
- 3 Krueger, P., Dehry, I., & Chang, V. (2019). The Economic Value of Education for Longer Lives and Reduced Disability. *The Milbank Quarterly*, 97, 48–73. <https://doi.org/10.1111/1468-0009.12372>.  
  
Keller, K.R.I. (2021). The External Social and Economic Benefits of Higher Education: Empirical Evidence from Worldwide Data. *Journal of Education Finance* 46(4), 431-455. <https://www.muse.jhu.edu/article/796975>.  
  
Case, A., & Deaton, A. (2023). Accounting for the Widening Mortality Gap between American Adults with and without a BA. *Brookings Papers on Economic Activity*.
- 4 Gutmann, A. (1999). *Democratic education*. Princeton University Press.  
  
Carnevale, A. P., Smith, N., Dražanová, L., Gulish, A., & Campbell, K. P. (2020). The Role of Education in Taming Authoritarian Attitudes. Georgetown University Center on Education and the Workforce.
- 5 Carnevale, A.P., Cheah, B., & Hanson, A. R. (2015). The economic value of college majors. Retrieved from <https://cew.georgetown.edu/wpcontent/uploads/Exec-Summary-web-B.pdf>  
  
Carnevale, A. P., Strohl, J., Campbell, K. P., Gulish, A., Cheah, B., Nyhof, N., & Fix, L (2024) Learning and Earning by Degrees: Gains in College Degree Attainment Have Enriched the Nation and Every State, but Racial and Gender Inequality Persists. Washington, DC: Georgetown University Center on Education and the Workforce, 2024. [www.cew.georgetown.edu/AttainmentGains](http://www.cew.georgetown.edu/AttainmentGains).
- 6 Psacharopoulos, G., & Woodhall, M. (1993). *Education for development*. Oxford: Oxford University Press.  
  
Psacharopoulos, G. (1972). Measuring the marginal contribution of education to economic growth. *Economic Development and Cultural Change*, 20(4), 641-658.  
  
Psacharopoulos, G., & Schultz, T. W. (1984). The contribution of education to economic growth: International comparisons (pp. 335-55). Washington, DC: World Bank.  
  
Hanushek, E. A., & Woessmann, L. (2010). Education and economic growth. *Economics of education*, 60(67), 1.  
  
Hanushek, E. A., & Woessmann, L. (2020). Education, knowledge capital, and economic growth. *The economics of education*, 171-182.

- 
- Moretti, E. (2004). Workers' education, spillovers, and productivity: evidence from plant-level production functions. *American Economic Review*, 94(3), 656-690.
- 7 Biasi, B., Deming, D. J., & Moser, P. (2021). Education and innovation (No. w28544). National Bureau of Economic Research.
- Hanushek, E. A., & Woessmann, L. (2020). Education, knowledge capital, and economic growth. *The economics of education*, 171-182.
- 8 Hershbein, B., & Kearney, M. (2014). Major decisions: What graduates earn over their lifetimes. Washington, DC: The Hamilton Project, Brookings Institution.  
[http://hamiltonproject.org/earnings\\_by\\_major](http://hamiltonproject.org/earnings_by_major)
- Julian, T. (2012). Work-life earnings by field of degree and occupation for people with a bachelor's degree: 2011. *American Community Survey Briefs*. Washington, DC: U.S. Census Bureau.
- Ma, J., Pender, M., & Welch, M. (2016). Education pays 2016: The benefits of higher education for individuals and society. New York: The College Board.
- Schanzenbach, D.W., Nunn, R., & Nantz, G. (May 2017). *Putting your major to work: Career paths after college*. Washington, DC: The Hamilton Project, Brookings Institution.  
[https://www.hamiltonproject.org/papers/putting\\_your\\_major\\_to\\_work\\_career\\_paths\\_after\\_college](https://www.hamiltonproject.org/papers/putting_your_major_to_work_career_paths_after_college)
- U.S. Census Bureau, (2016). American community survey 1-Year estimates; S2002: median earnings in the past 12 months (in 2016 inflation-adjusted dollars) of workers by sex and women's earnings as a percentage of men's earnings by selected characteristics. Washington, DC: U.S. Census Bureau.
- Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook*, Field of degree. <https://www.bls.gov/ooh/field-of-degree/home.htm>.
- 9 Kim, C., & Tamborini, C. R. (2019). Are they still worth it? The long-run earnings benefits of an associate degree, vocational diploma or certificate, and some college. *RSF: The Russell Sage Foundation Journal of the Social Sciences*, 5(3), 64-85.
- 10 McDonnell, L., Weatherford, M. S. (2020). Evidence, Politics, and Education Policy. United States: Harvard Education Press.
- Carnevale, A. P., Strohl, J., Campbell, K. P., Gulish, A., Cheah, B., Nyhof, N., & Fix, L (2024) Learning and Earning by Degrees: Gains in College Degree Attainment Have Enriched the Nation and Every State, but Racial and Gender Inequality Persists. Washington, DC: Georgetown University Center on Education and the Workforce, 2024.  
[www.cew.georgetown.edu/AttainmentGains](http://www.cew.georgetown.edu/AttainmentGains).
- 11 Blake, J. (2023, July 11). American confidence in higher ed hits historic low. Inside Higher Ed | Higher Education News, Events and Jobs.



---

<https://www.insidehighered.com/news/business/financial-health/2023/07/11/american-confidence-higher-ed-hits-historic-low>

Belkin, D. (2023, March 31). Americans Are Losing Faith in College Education, WSJ-NORC Poll Finds. Wall Street Journal. <https://www.wsj.com/articles/americans-are-losing-faith-in-college-education-wsj-norc-poll-finds-3a836ce1>

12 M Murphy, P. & Cox, S. (2023b, April 13). Reevaluating degree requirements for government jobs. National Governors Association. <https://www.nga.org/advocacy-communications/letters-nga/reevaluating-degree-requirements-for-government-job>

13 Wildavsky, B. (2023, August 25). Opinion | College degrees still matter in the job market. The New York Times. <https://www.nytimes.com/2023/08/21/opinion/skills-based-hiring-college-degree-job-market-wage-premium.html>

14 Carey, K. (2023). The Myth of the Unemployed Undergraduate. The Atlantic. <https://www.theatlantic.com/ideas/archive/2023/12/myth-unemployed-college-grad/676364/>

15 Lumina Foundation. (2022). 2022 national report a stronger nation learning beyond high school builds American talent. <https://www.luminafoundation.org/f6b2cc06-3f7e-4856-a1a6-b6108416745>

16 Equitable Value Explorer - Postsecondary Value Commission. (2021, November 10). Postsecondary Value Commission. <https://postsecondaryvalue.org/equitable-value-explorer/>

17 Postsecondary Value Commission: What is college worth? (2021, November 2). Postsecondary Value Commission. <https://postsecondaryvalue.org>

18 Exploring equitable postsecondary value. (n.d.). <https://equity.postsecondaryvalue.org/datatool>

19 Michigan School Data | Workforce Landing Page. <https://www.mischooldata.org/workforce-landing-page/>

20 CEPI. <https://www.michigan.gov/cepi>

21 MSDS: STARR. <https://www.michigan.gov/cepi/ihe/starr>

22 National Student Clearinghouse. <https://www.studentclearinghouse.org/>

23 Unemployment Insurance Agency. <https://www.michigan.gov/leo/bureaus-agencies/uia>

24 Michigan WLDS. <https://www.michigan.gov/leo/bureaus-agencies/wd/data-public-notices/wlds>

25 Harmon, T. (2021). The Current State of Earnings Data: State Definitions of Earners and Private Earnings Data Sources for Institutions. Postsecondary Value Commission.

- 
- 26 Postsecondary Value Commission. (2021a). Equitable value: Promoting economic mobility and social justice through postsecondary education.
- 27 Home | College Scorecard. <https://collegescorecard.ed.gov/>
- 28 Postsecondary Value Commission. (2023). The Equitable Value Explorer – Data Documentation. <https://equity.postsecondaryvalue.org/explainer/tech.pdf>
- 29 <https://www.federalreserve.gov/econres/notes/feds-notes/non-completion-student-debt-and-financial-well-being-20230821.html>
- Akers, B. (2021). *Making College Pay: An Economist Explains How to Make a Smart Bet on Higher Education*. Penguin Random House Press.
- Flores-Lagunes, A., & Light, A. (2010). Interpreting degree effects in the returns to education. *Journal of Human Resources*, 45(2), 439-467.
- Hendricks, L., & Leukhina, O. (2018). The return to college: selection and dropout risk. *International Economic Review*, 59(3), 1077-1102.
- 30 Patten, E. (2016). Racial, gender wage gaps persist in U.S. despite some progress. Pew Research Center. Retrieved from <https://www.pewresearch.org/fact-tank/2016/07/01/racial-gender-wage-gaps-persist-in-u-s-despite-some-progress/>
- Carnevale, A. P., Strohl, J., Campbell, K. P., Gulish, A., Cheah, B., Nyhof, N., & Fix, L (2024) *Learning and Earning by Degrees: Gains in College Degree Attainment Have Enriched the Nation and Every State, but Racial and Gender Inequality Persists*. Washington, DC: Georgetown University Center on Education and the Workforce, 2024. [www.cew.georgetown.edu/AttainmentGains](http://www.cew.georgetown.edu/AttainmentGains).
- 31 Carnevale, A. P., Strohl, J., Campbell, K. P., Gulish, A., Cheah, B., Nyhof, N., & Fix, L (2024) *Learning and Earning by Degrees: Gains in College Degree Attainment Have Enriched the Nation and Every State, but Racial and Gender Inequality Persists*. Washington, DC: Georgetown University Center on Education and the Workforce, 2024. [www.cew.georgetown.edu/AttainmentGains](http://www.cew.georgetown.edu/AttainmentGains).
- 32 Carnevale, A. P., Strohl, J., Campbell, K. P., Gulish, A., Cheah, B., Nyhof, N., & Fix, L (2024) *Learning and Earning by Degrees: Gains in College Degree Attainment Have Enriched the Nation and Every State, but Racial and Gender Inequality Persists*. Washington, DC: Georgetown University Center on Education and the Workforce, 2024. [www.cew.georgetown.edu/AttainmentGains](http://www.cew.georgetown.edu/AttainmentGains).
- 33 Abel, J. R., & Deitz, R. (2014). Agglomeration and job matching among college graduates. Federal Reserve Bank of New York. Retrieved from [https://www.newyorkfed.org/research/staff\\_reports/sr587.html](https://www.newyorkfed.org/research/staff_reports/sr587.html)

- 
- 34 Carnevale, A. P., Fasules, M. L., Huie, S. A., & Troutman, D. R. (2017). Major matters most: The economic value of bachelor's degrees. from the University of Texas System. Retrieved from <https://cew.georgetown.edu/wp-content/uploads/UT-System.pdf>
- 35 Bleemer, Z., Davidson, A., & Mehta, A. (2023). Restricted access to lucrative college majors harms underrepresented students most. <https://www.brookings.edu/articles/restricted-access-to-lucrative-college-majors-harms-underrepresented-students-most/>
- 36 Grawe, N. D. (2018). *Demographics and the demand for higher education*. JHU Press.