YOUTH POLICY LAB
UNIVERSITY OF MICHIGAN

Livingston County College and Career Opportunities Study

Lynn Meissner and Katja Robinson, U-M Youth Policy Lab

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Key Takeaways

- **Multiple College and Career Opportunities:** Among college and career opportunities in Livingston County, Career and Technical Education (CTE) is the most popular option. Enrollment in CTE and Advanced Placement (AP) courses is much higher than in Dual Enrollment (DE) or Early Middle College (EMC) programs.

- **Enrollment Differences by School**: Of the 5 major high schools, Fowlerville HS has relatively low enrollment in all four programs and Hartland HS has relatively high enrollment, especially in CTE.

- **Gender Differences:** Female students are overrepresented in AP and DE, which mirrors state and national trends. Male students are generally overrepresented in CTE, making up the majority of students in 31 of the 40 CTE programs, with 13 programs being over 80% male.

- **Other Demographic Differences:** Non-White students, economically disadvantaged students, English Learner students, and students with disabilities are generally underrepresented in all programs, though numbers are often too small to report for privacy reasons.

- **Barriers** – Three issues were identified as key barriers to student participation:
    - **Not having enough room in their daily schedules** is a barrier to participation in all programs.
    - **Not enough seats in high-demand courses** is a barrier to CTE participation.
    - **Lack of transportation** was cited as the biggest barrier to participation in off-site CTE, EMC, and DE.

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Introduction

In the summer of 2025, the Livingston Educational Service Agency (LESA) partnered with the University of Michigan (U-M) Youth Policy Lab (YPL) to collaborate on a report about Advanced Placement (AP), Dual Enrollment (DE), Early Middle College (EMC), and Career and Technical Education (CTE) in Livingston's five school districts and three public charter high schools.

LESA and YPL requested data from each school/district about the number of students enrolled in each of the programs and their basic demographic information for the 2023-2024, 2024-2025, and 2025-2026 school years. YPL supplemented the district-reported data with official reports (e.g., MI School Data, CTEIS, LESA records) to compile complete information about program participation and patterns of enrollment by student demographic categories[1].

YPL also developed online surveys and distributed them to school administrators and counselors from each district. The survey asked about the courses available at each school and included both open- and closed-ended questions about the challenges of expanding course offerings and the barriers to student participation. It also asked school staff for their thoughts on why students choose certain courses and their ideas about ways to reduce barriers and increase enrollment. The survey was sent to 42 school staff. Complete responses were returned by 20 people, including between 2 and 5 respondents from each of the five main school districts and 1 or 2 responses from two of the three charter schools. The only school not represented in the survey results is FlexTech High School.

This report is organized by program type, starting with AP/IB courses, then dual enrollment, CTE, and finally EMC. In each section, we include background information about the program, a description of available courses at each school, and enrollment patterns by gender, race/ethnicity, and other student categories (when sufficient data

[1] It is important to note that the data we collected reflects enrollment *in a given year* and not overall rates of enrollment *at any point* in high school. For example, while 25% of Pinckney students may be enrolled in an AP course in a given year, the total number of students who complete at least one AP course by the time they graduate may be much higher. Our data shows trends by year, not cumulatively.

are available). We then discuss the barriers to participation for each program and provide a few recommendations for further research or action steps that could increase access, enrollment, and success. **The report concludes with a summary of enrollment patterns across programs and districts, insights into why students choose certain programs over others, and potential ways to expand the options available to Livingston's high school students.**

Overview of High Schools in Livingston County

There are 14 public high schools in Livingston County. The five main school districts – Pinckney, Fowlerville, Hartland, Brighton, and Howell – each have both a traditional comprehensive high school and at least one alternative high school. There are also three public charter high schools – FlexTech High School, Charyl Stockwell Preparatory Academy, and Kensington Woods. See **Table 1** for the basic demographics of each school. See **Map 1** in the Appendix for the physical locations of all the schools.

Pinckney and Fowlerville's main schools are relatively small, with about 600-800 total students, while Hartland, Brighton, and Howell's main schools are 2-3 times bigger with about 1,600–2,000 students. Most of the alternative schools are very small (20-70 students). Howell's Innovation Academy is the largest with about 185 students. All of the main high schools are 90-93% White and the English Learner populations are very small (mostly less than 1%).

Looking at gender, Brighton HS is about 50/50 male and female. Pinckney HS is the only school that skews female (54%) while the other three main schools have slightly higher male enrollment (51-53%). Among the alternative schools, five of them skew male (53-60% male) while Hartland Virtual Academy (HVA) skews female, though their very small enrollment makes this estimate less reliable.

Brighton HS has the lowest percentage of economically disadvantaged (ED) students (10%) and Fowlerville HS has the highest (27%). Hartland HS is in the middle (14%) and Pinckney HS and Howell HS each have about 20% ED students. The alternative schools have much higher proportions of ED students, with all but Hartland Virtual at 45-61% ED students. The alternative schools also have much higher proportions of students with disabilities (SWD), with the main schools having 9-15% SWD and the alternative schools having 19-36% SWD.

The charter schools are much smaller than the five main high schools. Charyl Stockwell Preparatory Academy (CSPA), in Brighton, is the largest with about 325 students. FlexTech, also in Brighton, has about 170 students and it is notably less White (81%) and more economically disadvantaged (57%) than the main high schools. Kensington Woods is a middle and high school (grades 6-12) located in Lakeland, in the Pinckney school district boundaries, with about 110 students total (about 80 in grades 9-12). It has higher proportions of ED students (30%) and SWD (19%) than the main high schools.

Table 1. Demographics of the 14 Public High Schools in Livingston County

	Total Enrollment	% Male	% Female	% White	% EL	% ED	% SWD
Main High Schools							
Pinckney Community High School	620	46	54	91	0.6	20	15
Fowlerville High School	760	51	49	93	0.9	27	12
Hartland High School	1,610	52	48	93	0.6	14	9
Brighton High School	1,890	50	50	92	0.8	10	10
Howell High School	1,950	53	47	90	1.3	21	11
Charter Schools							
Kensington Woods	78	47	53	90	*	30	19
FlexTech	170	51	49	81	*	57	19
Charyl Stockwell Preparatory Academy	325	46	54	92	*	19	5
Alternative Schools							
Pinckney Link	18	54	46	94	*	61	36
Fowlerville Online Learning Academy (FOLA)	55	55	45	94	*	53	19
Hartland Virtual Academy (HVA)	23	44	57	94	*	24	*
Hartland Legacy High School (LHS)	57	54	46	85	*	45	21
Brighton Bridge	70	57	43	85	5	46	30
Howell Innovation Academy	184	60	40	92	*	51	33

Source: MI School Data. Numbers are averages across 2023-24, 2024-25, and 2025-26.

Notes: * Indicates that numbers are too small to report. EL = English Learner, ED = Economically Disadvantaged, SWD = Students with Disabilities.

Advanced Placement (AP) and International Baccalaureate (IB)

Advanced Placement (AP) and International Baccalaureate (IB) courses are rigorous high school classes with standardized curricula and exams that are designed to prepare students for college. Many colleges and universities award postsecondary credit for high scores on AP and IB final exams. **AP courses** are designed and managed by the College Board, a U.S. nonprofit, and there are currently 40 possible AP courses that schools can offer. In Michigan, 72% of all public high school students attended schools that offered at least 5 AP courses in 2023-24 and 57% of students attended schools that offered 10 or more[2].

IB courses are designed and managed by the International Baccalaureate Organization (IBO), based in Switzerland, and the administrative processes necessary to offer them are more complex; while they are less common in U.S. high schools, they are offered in over 150 countries and are globally recognized as a very challenging curriculum. Charyl Stockwell Preparatory Academy is the only public school in Livingston that offers IB classes. They offer 10 IB courses, including all the requirements for the IB Diploma.

Access and Enrollment Patterns in AP and IB

The number of AP/IB courses each school offers is determined by several factors, including staff availability, student interest/demand, and other resource constraints. Larger schools tend to offer more courses because they have more students and teachers. We see that trend within LESA, with the larger districts offering more than twice as many AP courses as the two smaller districts.[3]

Table 2 shows the number of in-person **AP/IB courses offered** in the 8 main schools and overall **participation rates**. Brighton High School offers the most courses and has the highest AP participation rate (34%), followed by Hartland HS (27%), Pinckney HS (25%), and Howell HS (20%). Fowlerville's 12% participation rate is

[2] https://apcentral.collegeboard.org/about-ap/ap-data-research/national-state-data

[3] Students may also be able to access AP courses through Michigan Virtual with the districts covering all or most of the additional costs. According to MI School Data, the five main school districts in LESA provide access to an additional 4 to 12 online AP classes through Michigan Virtual. These were not included in our analyses.

notably lower than all the other districts, which is especially significant when compared with Pinckney HS – a smaller school with a similar number of courses but more than double the participation rate.

Charyl Stockwell stands out as having many AP and IB courses and high overall enrollment while all the other charter and alternative schools have very little or none. Kensington Woods offers 1 in-person AP course and reported fewer than 5 students participating. FlexTech and all 6 alternative schools do not offer any in-person AP courses and reported little to no engagement with online AP options[4].

Table 2 also shows the **demographics of students who enrolled in AP** compared to the demographics of the overall student body in each school. Female students are consistently overrepresented in AP courses, by margins ranging from 3 percentage points in Brighton to 14 percentage points in Fowlerville. White students are slightly overrepresented in four of the five main schools (by 1-4 percentage points) and slightly underrepresented in Fowlerville (-2 points). District reporting shows that the proportion of White students has been declining each year in Pinckney and Fowlerville. Economically disadvantaged students are underrepresented in AP courses by margins of -2 pts in Brighton to -13 pts in Pinckney.

Enrollment numbers for students with disabilities were generally too small to report, which in most cases implies that they are underrepresented because a representative number would be larger than the suppression threshold. Enrollment of English Learner students was also too small to report.

In general, the demographic trends in AP enrollment within Livingston County mirror broader patterns that have long been documented in other studies about AP access and participation[5].

[4] Hartland Virtual Academy is the only alternative school that reported any AP participation. Fewer than 5 students participated each year, though because overall enrollment is quite small this represents about 10-15% of all students.

[5] Bleske-Rechek, A. (2025). The pursuit of equity and excellence: Advanced placement exam participation and performance by sex and by race/ethnicity, 1996–2022. *Intelligence*, *108*, 101894.

Table 2. In-Person AP/IB Course Offerings and Enrollment by Demographic Category compared to Overall Demographics

	School Enrollment	Number of AP courses	AP/IB Enrollment	Female % (gap)	White % (gap)	ED % (gap)	SWD % (gap)
Main High Schools							
Pinckney HS	620	9	25%	58% (+4 pts)	95% (+4 pts)	7% (-13 pts)	*
Fowlerville HS	760	8	12%	63% (+14 pts)	91% (-2 pts)	21% (-6 pts)	*
Hartland HS	1,610	20	27%	54% (+6 pts)	95% (+2 pts)	6% (-8 pts)	1% (-8 pts)
Brighton HS	1,890	22	34%	53% (+3 pts)	93% (+1 pt)	8% (-2 pts)	*
Howell HS	1,950	19	20%	55% (+8 pts)	93% (+3 pts)	14% (-7 pts)	1% (-10 pts)
Charter Schools							
Kensington Woods	78	1	*	*	*	*	*
FlexTech	170	0	-	-	-	-	-
Charyl Stockwell	325	8 AP/16 IB	63%	54% (0 pts)	90% (-2 pts)	12% (-7 pts)	*

Source: Course catalogs and district reporting. Averages across 2023-24, 2024-25, and 2025-26.

Notes: ED = Economic Disadvantage. SWD = Students with Disabilities (IEP/504). * Indicates that numbers are too small to report. All English Learner values were too small to report.

None of the six alternative high schools offer any in-person AP courses.

Barriers to Access and Participation in AP and IB

In our survey we asked school counselors and administrators both open- and closed-ended questions about the challenges to adding more AP and IB courses, the barriers to student participation in these courses, and reasons why students choose not to take the official AP or IB final exam.

Barriers to Offering Additional AP and IB Courses

There are several **costs to schools and districts** associated with offering AP and IB courses. Teachers must go through specific AP professional development and schools must purchase aligned textbooks and course materials and provide any necessary equipment. According to the College Board, the approximate cost to add a new AP course ranges from about $2,000 to nearly $12,000, with most in the $3,000-$5,000 range[6]. The process of becoming an IB World School takes several years and involves various fees including an application fee, candidacy and consultation fees, annual school fees, and fees for periodic evaluation visits[7]. IB courses also require specific professional development, textbooks, materials, and equipment.

When asked about the barriers to offering more AP courses, nearly all of the school administrators and counselors we surveyed said that the main constraints are not having **teachers who want to teach the course** or not having enough **student interest** to make the course viable. Several said that their school already offers a great variety of AP courses. Only one respondent mentioned cost and another said that some teachers do not want to go through the College Board's certification process.

Barriers to Student Participation in AP Classes

Our survey asked school counselors and administrators to rate a list of eight barriers to enrollment in AP courses on a scale from 1 "no barrier" to 5 "very large barrier" (see Table 8 in the Appendix for more detail).

The **highest rated barrier was lack of academic preparation**, with 9 of 20 respondents (45%) rating this as a moderate to very large barrier.

[6] https://apcentral.collegeboard.org/about-ap/start-expand-ap-program/start/consider-costs
[7] https://ibo.org/become-an-ib-school/fees-and-services/

The second highest barrier was **not having enough room in their daily schedule**, with 8 of 20 respondents (40%) rating this as a large barrier. While students can begin taking AP courses as early as 9th grade, most AP courses are taken in 11th and 12th grade and that compression makes scheduling more difficult. Some smaller AP courses are only offered in one class period, so students and counselors sometimes have to make hard decisions about how to prioritize among competing courses.

The other six items on our list were not generally seen as barriers to student participation in AP courses (see Table 8 for detail).

Barriers to Student Participation in AP/IB Exams

We also asked school counselors and administrators why they think some students who take an AP/IB course do not take the final AP/IB exam. Most (12 of 17 who answered, 71%) said students choose not to take the exam because they **do not feel confident that they will do well** or achieve a high enough score to receive college credit.

Several respondents mentioned that the **exam fee** is a factor. Students do not pay to take AP courses, but there is a $99 fee for each AP exam. It is common for students to take 5 or more AP courses, bringing the total exam costs to over $500 per student. For qualifying low-income students, the College Board reduces the AP exam fee by $37 and the State of Michigan contributes an additional $48, bringing the fee down to $5 per exam[8]. A few respondents mentioned that the subsidies for low-income students were helpful and one said that they try to put the fees in perspective by drawing comparisons to the cost of a college course.

A few respondents said that postsecondary credit policies shaped students' decisions, with some colleges not offering credit for certain AP exams or students wanting to take the class in college instead of testing out.

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8 https://apcentral.collegeboard.org/exam-administration-ordering-scores/ordering-fees/exam-fees/reductions. IB exams cost $124 each and the State of Michigan has a similar program to bring the fee down to $5 per exam for qualifying low-income students.

Recommendations for AP and IB

Do not prioritize adding more AP courses in the main high schools. All schools offer an array of course options and the main barriers to participation are lack of preparation and scheduling, not the number of courses offered. If students are interested in AP courses that are not offered in their schools, they should be able to take them virtually. Fowlerville HS, which offers the lowest number of in-person AP courses, already encourages students to take AP courses online. Virtual AP courses may also be a good option for the alternative and charter schools that do not offer any in-person AP courses if they have students who are interested and academically prepared.

Ensure that students who take an AP/IB course feel prepared to do well on the final exam. It could be beneficial for the districts to explore patterns of exam taking and exam scores across AP/IB courses and across student groups. Schools may want to convene subject area teams to discuss whether 9th and 10th grade courses are adequately preparing students for the rigor of AP, and consider offering official pre-AP courses[9]. Districts could also look for ways to offer additional supports, like dedicated study halls to ensure that students are mastering the course content. To reduce the barrier of exam fees, schools should make sure that all eligible low-income students know about the exam fee subsidies and consider subsidizing the costs for other students as well.

Explore why male students, economically disadvantaged students, and students with disabilities are underrepresented in AP courses to develop plans for addressing these disparities. We did not explore differences across AP courses (e.g., AP Biology vs AP Literature) so further investigation into how enrollment by student demographic group differs across courses could also shed more light on these important trends and highlight areas for targeted intervention.

[9] https://pre-ap.collegeboard.org/

Dual Enrollment (DE)

Dual enrollment (DE) allows high school students to enroll in college courses and earn high school credit, postsecondary credit, or both upon passing the course. Interested students must meet several requirements (e.g., test score thresholds, academic standing) and they have to apply directly to the college before their high school will approve their enrollment. In Michigan, over 35,600 students participated in dual enrollment in 2023-24, about 7.4% of all public high school students[10].

Access and Enrollment Patterns in DE

Students have quite a bit of flexibility when it comes to choosing dual enrollment classes, though there are several regulations in the state law around what the district will pay for. The Michigan Postsecondary Enrollment Options Act[11] outlines the eligibility criteria for students, institutions, and courses, and describes how associated costs are paid by the district or the student. Eligible courses must be academic in nature (i.e., not hobby, craft, or recreation courses), cannot be religious education courses, and cannot be courses already available to students at their high school.

State law requires districts to pay for up to 10 DE courses per student, though there are limits to how many a student can take in any given year – not more than two per year in 9th and 10th grades and not more than six per year in 11th and 12th grades. Most students who participate in DE take one or two courses per semester in their junior or senior year.

Some dual enrollment programs require students to travel to the university/college campus for in-person classes while a growing number of DE courses are offered virtually, either synchronously or asynchronously. Livingston County does not have a community college or any public postsecondary institution within county lines, so most students participate virtually.

The colleges that LESA students most commonly attend as dual enrollment students are Washtenaw Community College (WCC), Lansing Community College (LCC), and Cleary University. For students attending in person, Cleary is about an

[10] https://www.mischooldata.org/college-opportunities-for-high-school-students/
[11] https://www.legislature.mi.gov/documents/mcl/pdf/mcl-Act-160-of-1996.pdf

11-24-minute drive from the five main high schools, Washtenaw Community College is 31-48 minutes away, and Lansing Community College is a 34-50-minute drive. Students have also dual enrolled in Schoolcraft College, Eastern Michigan University, Mott Community College, Oakland Community College, and others.

The University of Michigan-Flint offers a special Dual Enrollment Education Partnership (DEEP) program that allows students to enroll in one of five cohesive programs of study that offer 3 to 4 courses in person in LESA buildings: Business at Brighton High School, Pre-Engineering at Hartland High School, and Business/Economics, Medical Science, and General Studies programs at the Hartland Educational Service Support Center.

Table 3 shows rates of dual enrollment participation across the 8 main schools and the demographics of dual enrollment students compared to the demographics of each school. Four of the five U-M DEEP programs are offered in Hartland, so it is unsurprising that Hartland HS has the highest number of in-person DE students. All other schools reported an average of fewer than 10 students participating in in-person DE across the study years.

Pinckney's overall dual enrollment participation rate (8% of all students) is notably higher than the other districts and Brighton and Fowlerville have relatively low participation (about 2% each). If we consider that most students participate in DE in 11th or 12th grade and we change the denominator to only 11th and 12th graders the rates basically double to 16% for Pinckney, 11% for Howell, 10% for Hartland, 4% for Fowlerville, and 3% for Brighton.

Charyl Stockwell has a relatively high rate of dual enrollment while Kensington Woods, FlexTech, Howell's Innovation Academy, and both of Hartland's alternative schools have a handful of students participate in virtual DE. The other three alternative schools have no DE participation.

Across the 5 main high schools, female students are dramatically overrepresented in DE courses – by margins ranging from 6 percentage points in Brighton to 28 percentage points in Fowlerville. At a state level, female students have consistently made up about 60% of dual enrollment participants over the last

several years[12]**.** White students are also overrepresented by between 1 and 7 percentage points. Counts of economically disadvantaged students, students with disabilities, and English Learner students were mostly too low to report, though they are generally underrepresented.

[12] https://www.mischooldata.org/college-opportunities-for-high-school-students/

Table 3. Dual Enrollment (DE) Participation by Type and Demographic Category Compared to Overall Demographics

	School Enrollment	In-Person DE (N)	Virtual DE (N)	Total Participation (%)	Female % (gap)	White % (gap)	ED % (gap)
Main High Schools							
Pinckney HS	620	*	48	8%	61% (+7 pts)	98% (+7 pts)	*
Fowlerville HS	760	*	15	2%	77% (+28 pts)	98% (+5 pts)	*
Hartland HS	1,610	51	33	5%	58% (+10 pts)	94% (+1 pt)	*
Brighton HS	1,890	*	26	2%	56% (+6 pts)	94% (+2 pts)	*
Howell HS	1,950	*	108**	6%	58% (+11 pts)	95% (+5 pts)	10% (-11 pts)
Charter Schools							
Kensington Woods	78	*	*	2%	*	*	*
FlexTech	170	*	*	3%	*	*	*
Charyl Stockwell	325	*	49	15%	64% (+10 pts)	90% (-2 pts)	12% (-7 pts)
Alternative Schools							
Hartland Virtual Academy	23	*	*	4%	*	*	*
Hartland Legacy	57	*	*	7%	*	*	*
Howell Innovation Academy	184	*	*	4%	*	*	*

Source: District reporting. Averages across 2023-24, 2024-25, and 2025-26.

Notes: ED = Economic Disadvantage.

* Indicates that numbers are too small to report. All English Learner and Students with Disabilities counts were too small to report.
** Howell did not separate in-person and virtual.

Barriers to Access and Participation in DE

Logistically, it is easier for students to fit virtual asynchronous dual enrollment courses into their schedules but synchronous courses raise issues with **timing** and **transportation**. Students have to arrange their own transportation and coordinate schedules to attend courses on college campuses. Semester start and end dates, holidays, and school breaks often do not align across institutions, causing further scheduling complications.

Our survey asked school counselors and administrators to rate a list of 15 barriers to dual enrollment participation on a scale from 1 "no barrier" to 5 "very large barrier" (see Table 8). The highest rated barrier was **not having enough room in their daily schedule**, with 7 of 20 respondents (35%) rating this as a moderate to very large barrier. A few respondents said that their district's policy of counting DE classes as equivalent to one high school class (instead of two) leads to overloaded schedules.

The second highest barrier was **lack of transportation**— 6 out of 20 respondents (30%) rated this as a moderate to high barrier to DE enrollment. Several respondents mentioned the lack of a local community college and the driving distance to in-person courses as barriers that "pushes a lot of our students to online." They mentioned that Cleary University is closest but their courses are mostly in Business and that may not be attractive to a wide range of students. One respondent said that each postsecondary institution having their own requirements and enrollment processes is cumbersome to manage and another said that while community colleges welcome DE students, 4-year schools "throw up hurdles."

The district pays for most tuition, registration, course, and materials fees, though if costs exceed the per-pupil state aid allowance ($9,150 to $10,050 across the study years) they may charge the student the difference. Students are responsible for transportation costs, parking costs, and activity fees. Importantly, if students do not complete a course or do not earn credit (i.e., withdraw late or fail the course) they are responsible for paying the district back for any costs incurred. Only four survey respondents (20%) said that costs to students were a barrier, though one said that costs are a bigger issue for the U-M DEEP program[13]. Another said that WCC's tuition

[13] The additional costs to students for the UM-DEEP program are about $1,000-$2,000 total.

is lower than LCC's tuition and students are more attracted to courses that are fully covered by the district. Several mentioned the financial incentive to earn college credit for free (or at a low cost) and a few mentioned that students prefer to earn college credit "without the uncertainty of an AP score."

We also asked counselors and administrators why they think female students are overrepresented in DE. Of the 10 respondents who offered their thoughts, 9 said that they think female students are generally more mature, have higher academic achievement, or tend to have a clearer plan for the years after high school. They suggested that male students may be more interested in taking regular electives and staying in high school classes with their friends. One respondent said that for the programs that male students are more interested in – like Engineering and Business – there are concerns about the ability to transfer credits into specific college programs.

When asked why students choose to take DE courses, survey respondents emphasized the influence of peer and family support. Several said that family and parents' experiences in postsecondary education were a huge factor in encouraging students and that students whose older siblings have done DE tend to follow their example. One respondent said that students recruit their friends to take DE classes with them, and another said that their school purposely encourages students to take DE classes together "so that they will have a cohort of support built into their experience."

Perspectives on Different Modes of Delivery for DE

Finally, we asked school counselors and administrators whether they think some types of dual enrollment are more beneficial to students than others. Many said that the flexibility of online courses has expanded access and is very attractive to students – especially those who want to participate in extracurriculars in their home schools. But more than half (10 of 18 who answered) said they think students likely benefit more from in-person classes than virtual classes. They remarked that the consistency and structure of synchronous classes hold students more accountable for attendance and engagement. Several also said in-person was beneficial because virtual "lacks the quality and experience you can only get in an in-person atmosphere" and may not provide "a true college course experience."

Recommendations for DE

Increase awareness of dual enrollment opportunities to increase student participation, with a particular focus on Brighton and Fowlerville. Michigan's dual enrollment participation rate of 7.4% is one of the lowest in the nation. In recent years it has become a state priority[14] to increase participation in dual enrollment and provide additional funding to ease the financial burden on districts[15]. In Livingston County, efforts to increase awareness and participation could focus on Brighton and Fowlerville, which have much lower participation rates than the other three districts. Brighton HS has the highest rate of AP participation, so it may be that students are choosing AP instead of DE as their preferred way to earn early postsecondary credit.

Conduct additional research on success rates for students participating in different types of dual enrollment (i.e. virtual, in-person, hybrid). We did not collect data about success rates (e.g., grades, passing vs failing, credits earned) for students in different types of DE courses. The existing peer-reviewed research on this topic is thin, but some studies show that students may have better postsecondary outcomes after taking in-person dual enrollment courses[16]. Further research is needed to explore this question in Livingston County. It could also be interesting to see whether the story varies for different students or subject areas. For example, are female students more successful in virtual DE math while male students are more successful in in-person DE math? Enrollment numbers are likely too low within each district to do this type of analysis, but if all dual enrollment students in the county were combined there may be enough statistical power to look at course type by student group interactions. **If the results show that students are more successful in face-to-face classes, then addressing the transportation barrier is critical to allow more students to attend courses in person.**

[14] https://www.michigan.gov/mileap/higher-education/dual-enrollment-task-force

[15] https://bridgemi.com/talent-education/michigan-wants-more-college-grads-can-boosting-spending-dual-enrollment-help

[16] Liu, V. Y. T., Minaya, V., Zhang, Q., & Xu, D. (2020). High school dual enrollment in Florida: Effects on college outcomes by race/ethnicity and course modality.

Career and Technical Education (CTE)

Career and Technical Education (CTE) refers to specialized high school and postsecondary programs designed to prepare students for high-demand, high-skill, living wage career paths. CTE programs of study offer progressively intensive technical skill building aligned with rigorous academic standards and career-relevant training that often includes leadership roles, work-based learning, and opportunities to earn industry-recognized credentials. State-approved CTE programs rely on strong alignment between K-12 districts, postsecondary institutions, and employers, and require input from business, industry, labor, and community partners. Many postsecondary institutions award credit for high school CTE courses and CTE credentials through articulation agreements.

Access and Enrollment Patterns for CTE

Livingston County offers about 40 high school CTE programs spanning 15 different career clusters. Unlike many counties in Michigan, Livingston does not have a centralized CTE center so most programs are offered at one of the five main high schools and four are offered at specialized locations (Crosswinds Aviation, Brighton School of Cosmetology, and Livingston County EMS).

Within each district, some CTE classes are only available to students from that district (i.e., non-shared programs) and some are open to students from other schools and districts (i.e., shared programs). Some programs have both shared and non-shared sections, with certain class periods reserved for the district's own students and other periods being open to students from other schools. The allocation of seats in the shared programs is determined through a complicated set of consortium agreements and negotiations (described in more detail in the CTE Barriers section). **Table 4** lists all of the programs that are offered as either non-shared, shared, or both across the districts.

Marketing, Finance, and Computer Programming are offered in 4 of the 5 districts (all but Fowlerville). Auto Tech, Education, and Health Sciences are offered at three locations; Construction, Engineering, and Digital/Multimedia are offered in two locations; and the remaining 12 programs are only offered in one location.

Table 4. Locations of CTE Programs (SH = Shared, NS = Non-shared)

	Fowler-ville	Pinckney	Hartland	Brighton	Howell	LESA
Marketing	*NS**	NS	NS	NS	NS	
Finance		NS	NS	NS	NS	
Computer Programming		NS	NS	NS	NS	
Agri Science	NS & SH					
Robotics/Mechatronics		*SH***				
Welding		NS & SH				
Automobile Technician		NS & SH	NS	NS & SH		
Engineering Technology			NS	NS		
Digital/Multimedia			NS	NS		
Cybersecurity			SH			
Construction Trades			NS		SH	
Education			NS	SH	NS & SH	
Graphics				NS & SH		
Health Sciences				NS & SH	SH	SH x2
Manufacturing					NS & SH	
Mechanical Drafting					NS & SH	
ROTC					SH	
Firefighter					SH	
Culinary					SH	
Aviation						SH
Cosmetology						SH
TOTAL BY DISTRICT	**1**	**5**	**9**	**9**	**11**	**4**

Source: LESA reports of CTE programs offered in 2023-24, 2024-25, and 2025-26.

Notes: * Fowlerville had Marketing in 2023-24 but not in 2024-25 or 2025-26.

** Pinckney had Mechatronics in 2023-24 and 2024-25 but not in 2025-26.

Main High Schools

Table 5 shows the number of CTE programs available in each district and the CTE participation numbers and rates for on-site CTE, off-site CTE, and both combined averaged across the 3 study years. Fowlerville stands out for having only one in-district CTE program and lower overall CTE participation (17%), while Hartland stands out for having especially high CTE participation (60%). Pinckney's 24% participation rate is also relatively low and Brighton and Howell both have participation rates around 40%, even though Howell offers more programs.

Table 5. Number of CTE Programs and Participation Rates by Location

	# of On-Site CTE Progs	On-Site (N)	On-Site (%)	Off-Site (N)	Off-Site (%)	Total (N)	Total (%)
Main High Schools							
Pinckney HS	6	116	19%	37	6%	151	24%
Fowlerville HS	1	80	11%	49	6%	129	17%
Hartland HS	9	880	55%	93	6%	973	60%
Brighton HS	9	715	38%	56	3%	771	41%
Howell HS	11	719	37%	80	4%	800	41%

Source: CTEIS and LESA reports. Averages across 2023-24, 2024-25, and 2025-26.

Looking at the distributions of on-site versus off-site, over 90% of the students who participated in CTE in Hartland, Brighton, and Howell attended programs in their district and about 10% traveled to off-site programs. In Pinckney about 76% attended on-site and 24% traveled out and in Fowlerville about 62% attended on-site and 38% traveled out.

On the receiving end, Howell receives many more students than any other district, with between 85 and 110 students travelling to Howell each year. The 4 LESA contracted programs also receive about 100–110 students per year. Pinckney receives about 50 students, Brighton receives about 20 students, Fowlerville receives about 22 students, and Hartland receives about 6 students per year.

Charters and Alternative Schools

Charyl Stockwell does not offer any state-approved CTE programs, but they do offer AP Computer Science, which counts as a CTE course in some districts, and they sent a few students per year to the LESA shared programs. In 2023-24 and 2024-25 they sent 7 students to LESA shared programs and in 2025-26 they sent 4 students, or about 1-2% annually. These numbers are too low to report on demographics.

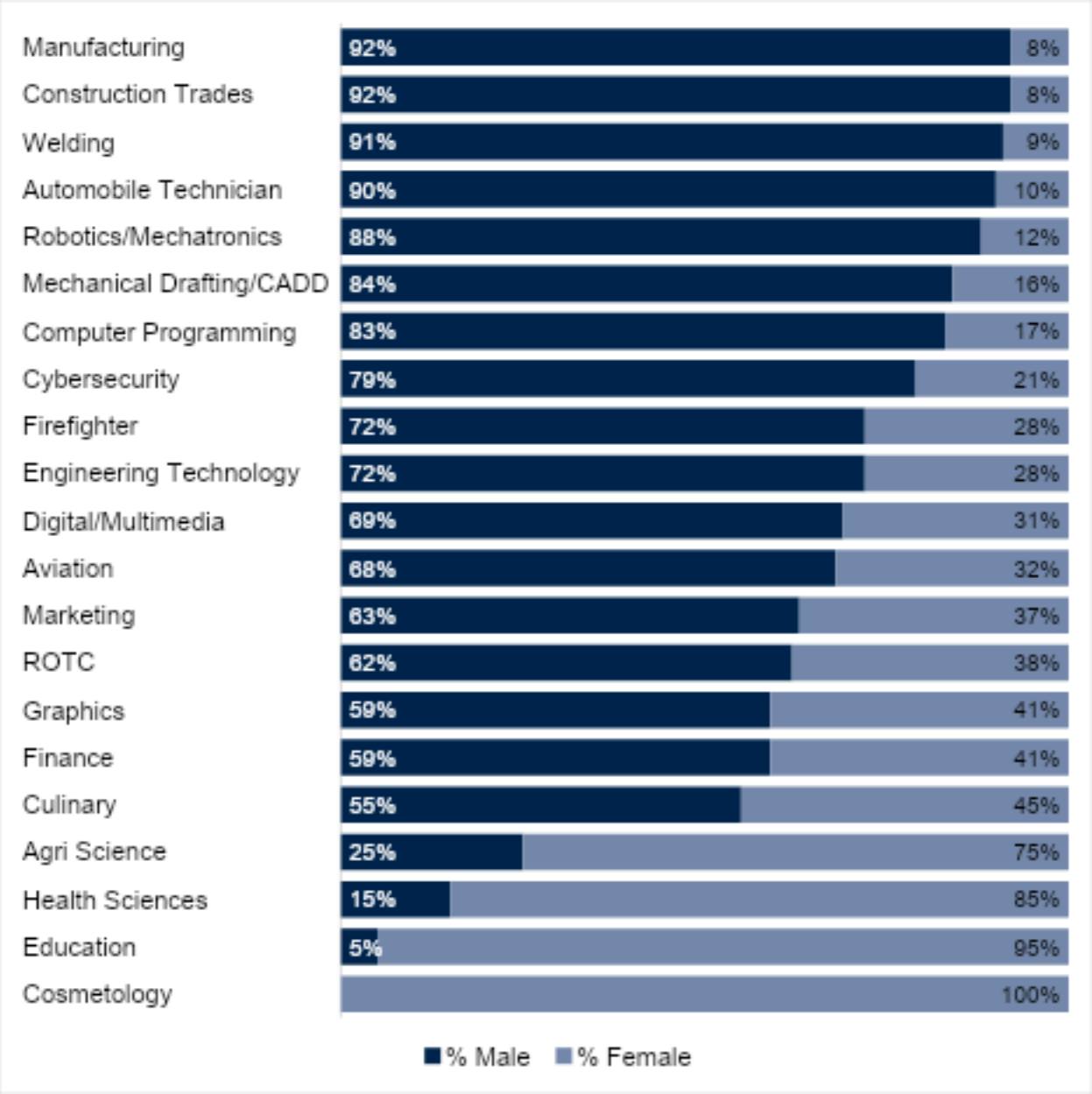
FlexTech and **Kensington Woods** also do not offer any state-approved CTE programs but students are eligible to participate in the LESA shared programs. Across the three study years, FlexTech sent 1-4 students per year to LESA shared programs (1-2%) and Kensington Woods only had 1 student in any of the CTE programs.

None of the alternative schools offer their own CTE programs but students are eligible to participate in the shared LESA programs. Only three students attended any of the LESA CTE programs over the three study years – one from Hartland Legacy, one from Hartland Virtual Academy, and one from Howell Innovation Academy.

Overall Demographics

Male students are notably overrepresented in CTE overall and in approximately 31 of the 40 CTE programs. Thirteen of the 40 programs are over 80% male. See **Figure 1** for the **gender breakdown by CTE field of study**.

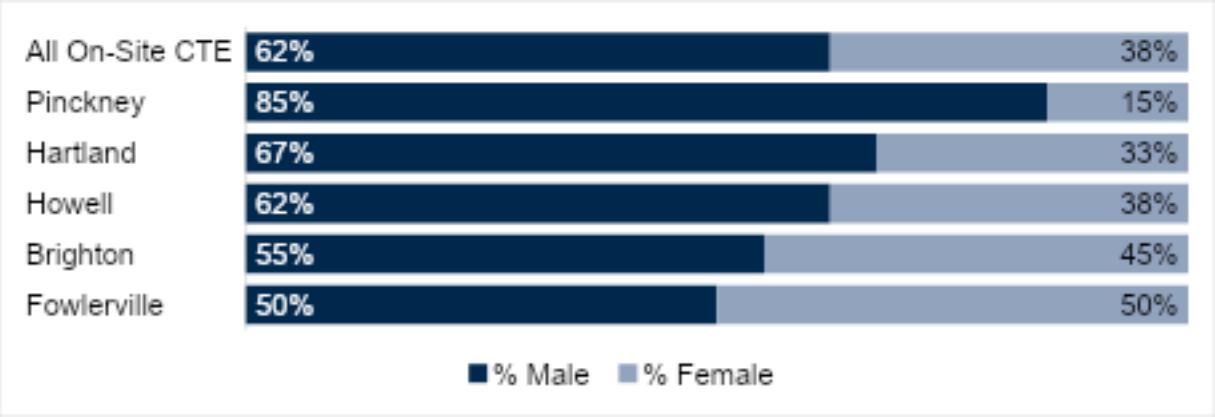
Figure 1. Gender Distribution within CTE Programs



Source: CTEIS reports. Numbers are averages across 2023-24 and 2024-25.

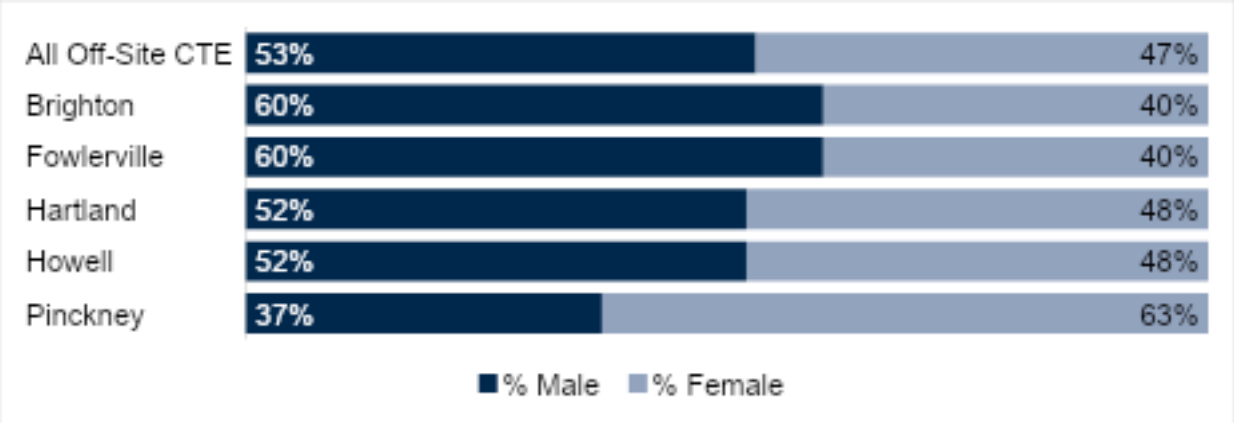
When we look at the gender of students attending on-site versus off-site, we see that **gender is generally more balanced among students who travel out**. Figures 2 and 3 show the gender distribution of students who attend on-site and off-site CTE within each district and overall. Many female students have to travel out to participate in the shared Health Science and Education programs and three of the four contracted programs (EMT, Phlebotomy, and Cosmetology) are predominantly female.

Figure 2. Gender Distribution of Students Attending On-Site CTE by District



Source: District reports. Numbers are averages across 2023-24, 2024-25, and 2025-26.

Figure 3. Gender Distribution of Students Attending Off-Site CTE by District



Source: District reports. Numbers are averages across 2023-24, 2024-25, and 2025-26.

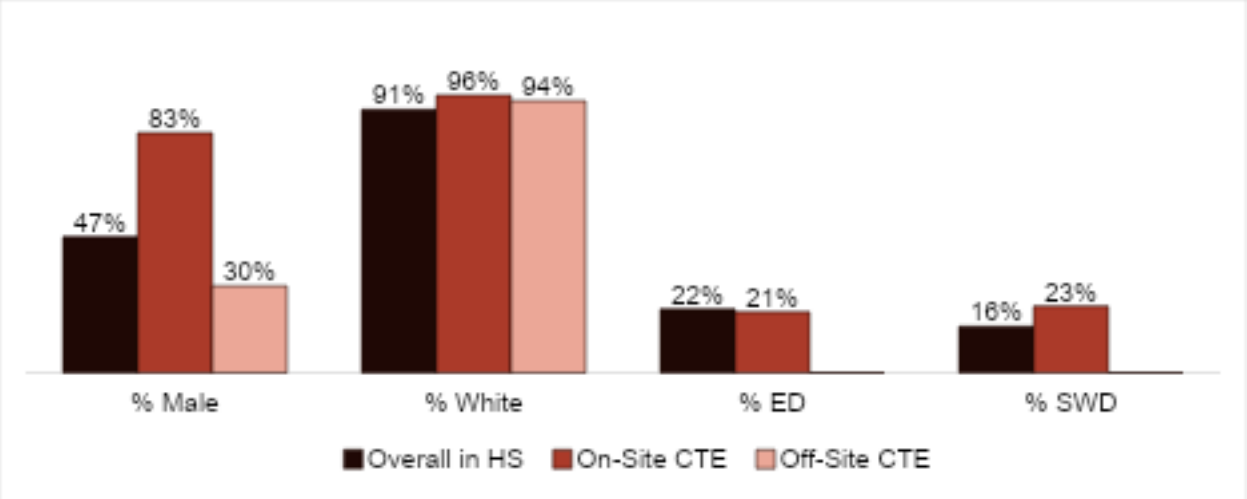
When it comes to **racial representation**, White and non-White students are generally representative in CTE overall but non-White students (8% across all districts) are notably overrepresented in JROTC (13%), Culinary (19%), and Cosmetology (20%). **Economically disadvantaged students** (17% across all districts) are overrepresented in JROTC (28%), Manufacturing (24%), Culinary (21%), and Education (20%), and underrepresented in Marketing (11%), Finance (9%), and Engineering (9%). **Students with Disabilities** (11% across all districts) are often too small to report, but of the fields with data they are overrepresented in Manufacturing (25%), JROTC (15%), and Construction (14%) and underrepresented in Health Science (6%), Finance (6%), and Marketing (5%). Enrollment of English Learner students was generally too low to report.

CTE at Pinckney HS

Pinckney HS offers 5 CTE programs, 3 of which are non-shared and 2 that have both shared and non-shared sections. The non-shared programs are Finance, Marketing, and Computer Programming (AP Computer Science[17]). The Auto Tech and Welding programs have both shared and non-shared sections. There was a fully shared Mechatronics program in previous years but it only had 7 students in 2024-25 and was discontinued in 2025-26.

Across the three study years, Pinckney had an average of 116 students (19% of all students) in its on-site CTE programs and about 37 students (6%) attending CTE in other locations. **Figure 4** shows the demographics of Pinckney students who attended on-site CTE and off-site CTE compared to the demographics of the entire high school for the most recent school year.

Figure 4. Demographics of Pinckney CTE Students by Location, 2025-26



Source: MI School Data and district reports.
Notes: ED = Economic Disadvantage. SWD = Students with Disabilities (IEP/504)
* Indicates that numbers are too small to report.

Male students are greatly overrepresented in CTE overall and within each of the 5 on-site CTE programs. There were fewer than 10 female students in any of the on-site CTE programs and as low as 1 or 2 in several programs. Among the district's two largest programs, Welding is typically over 90% male and Auto Tech is about 90%

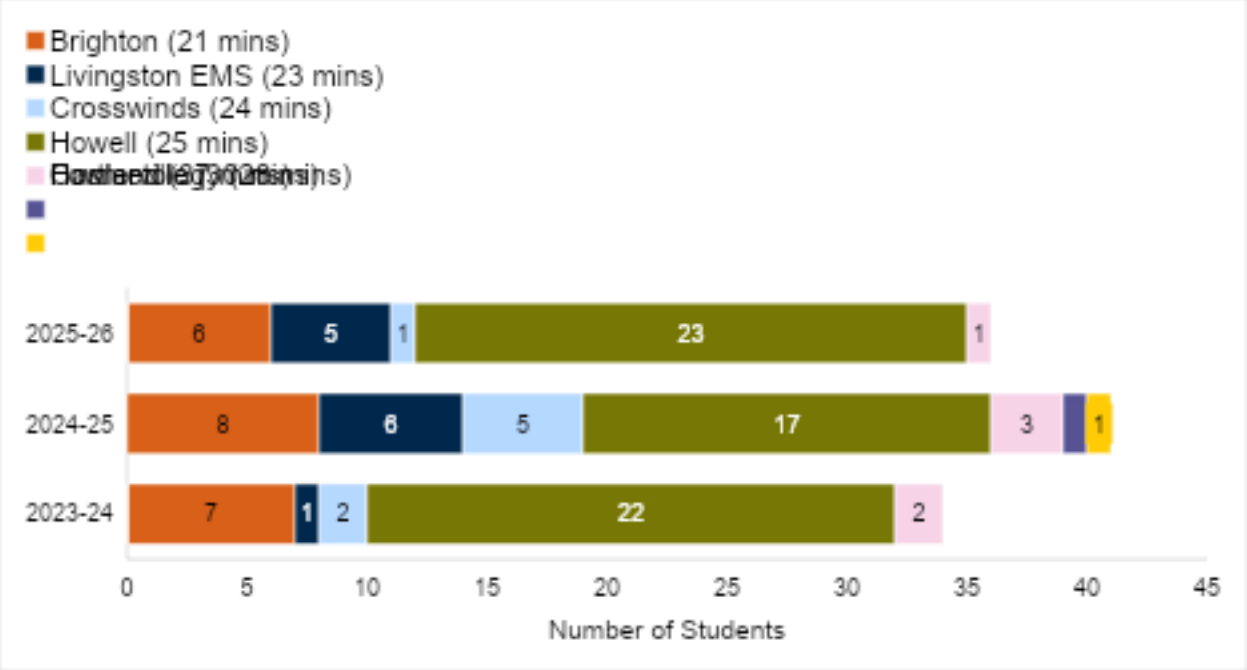
[17] AP Computer Science is counted as CTE Computer Programming in some districts but not all.

male. Conversely, male students are underrepresented among Pinckney students traveling to off-site CTE.

White students are overrepresented in both on-site and off-site CTE and economically disadvantaged students are slightly underrepresented among on-site CTE, while students with disabilities are overrepresented. All other comparisons are too small to report.

Figure 5 shows where Pinckney students attended off-site CTE and the travel time between Pinckney high school and each off-site location. **The largest share of students traveled to one of the 8 shared programs at Howell, with very few students attending programs in Fowlerville or Hartland.**

Figure 5. Where Pinckney Students Attend Off-Site CTE, 2023-24 through 2025-26



Source: LESA reports

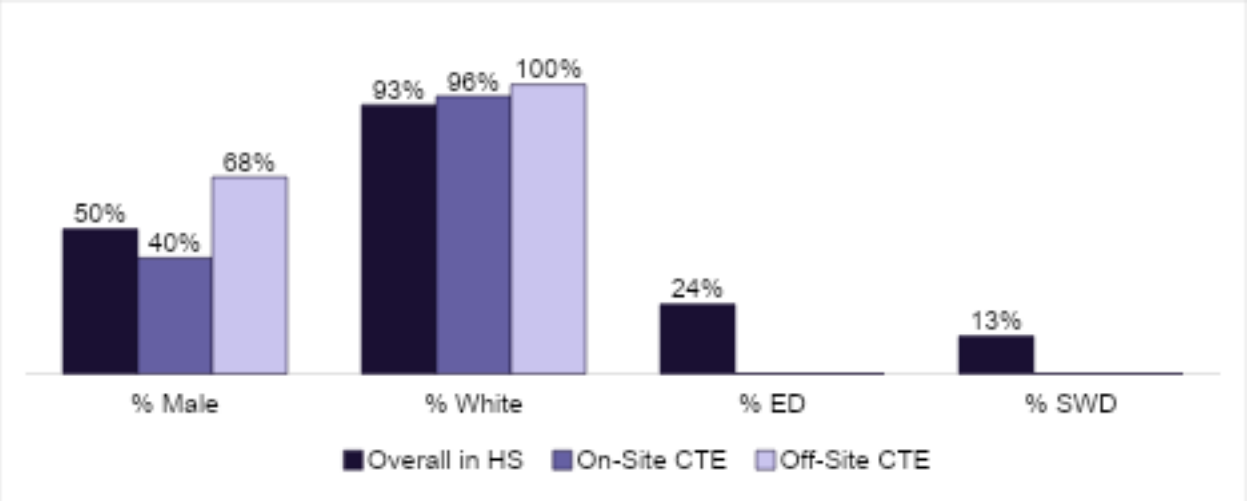
The shared Welding classes are a mix of Pinckney and non-Pinckney students, with Pinckney students comprising 77% of the students in 2023-24, 36% in 2024-25, and 49% in 2025-26. The shared Auto Tech classes tend to be mostly *non-Pinckney* students, with a majority coming from Howell.

CTE at Fowlerville HS

Fowlerville HS offers one CTE program, Agri Science, with both shared and non-shared sections. In previous years it also offered Marketing as a non-shared program but it has not been offered since 2023-24.

Across the three study years, Fowlerville had an average of 80 students (11% of all students) attending on-site CTE programs and about 50 students (6%) attending CTE in other locations. **Figure 6** shows the demographics of Fowlerville students who attended on-site CTE and off-site CTE compared to the demographics of the entire high school for the most recent school year.

Figure 6. Demographics of Fowlerville CTE Students by Location, 2025-26



Source: MI School Data and district reports.
Notes: ED = Economic Disadvantage. SWD = Students with Disabilities (IEP/504)
* Indicates that numbers are too small to report.

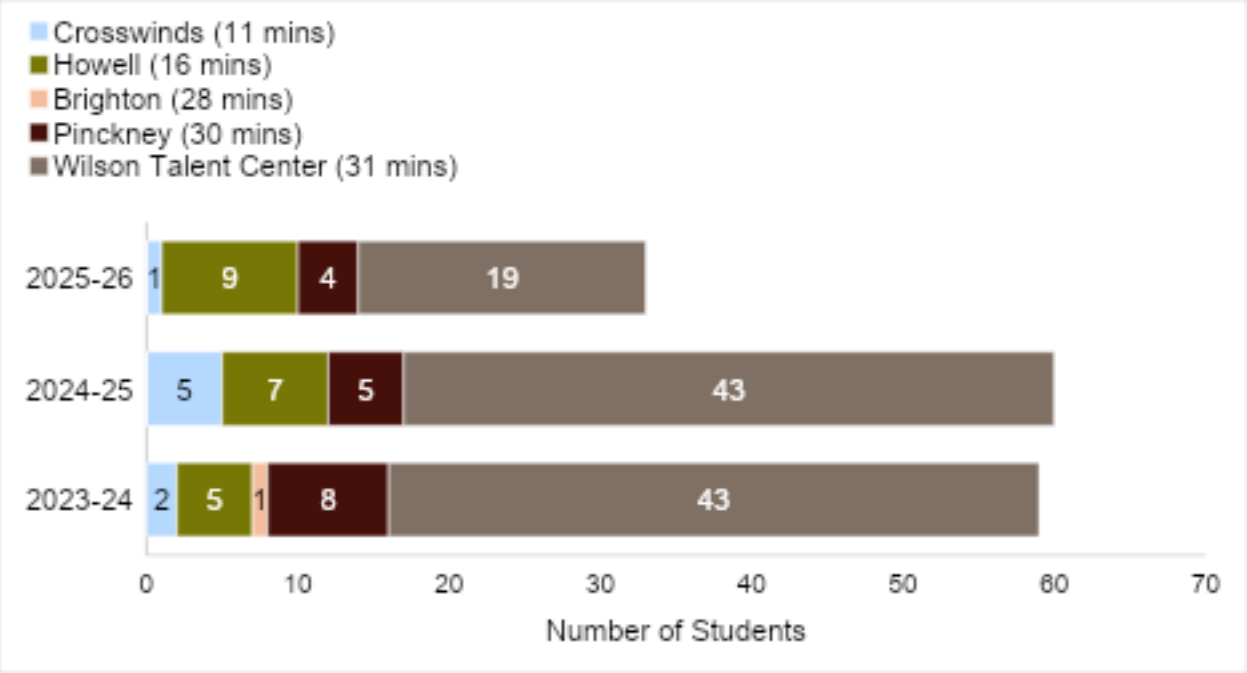
Male students are underrepresented in Fowlerville's Agri Science program and overrepresented among Fowlerville students who travel to off-site CTE. White students are overrepresented among both on-site and off-site CTE students. All other comparisons are too small to report.

The only data about the Marketing program is from 2023-24. Of the 112 Fowlerville students enrolled in this non-shared program, male students were overrepresented (64%), White students were overrepresented (95%), ED students

were representative, and SWD were very slightly underrepresented (11% vs 12% overall).

In addition to the options available in the LESA consortium, Fowlerville allows students to attend the Wilson Talent Center in neighboring Ingham County and provides a bus to the tech center. Figure 7 shows where Fowlerville students attended off-site CTE and the travel time between Fowlerville high school and each off-site location. The largest share of students traveled to the Wilson Talent Center, though there was a sharp decline from over 40 students per year to only 19 in 2025-26 because fewer spots were available. No Fowlerville students traveled to Hartland or the Livingston EMS or Cosmetology programs.

Figure 7. Where Fowlerville Students Attend Off-Site CTE, 2023-24 through 2025-26



Source: LESA reports

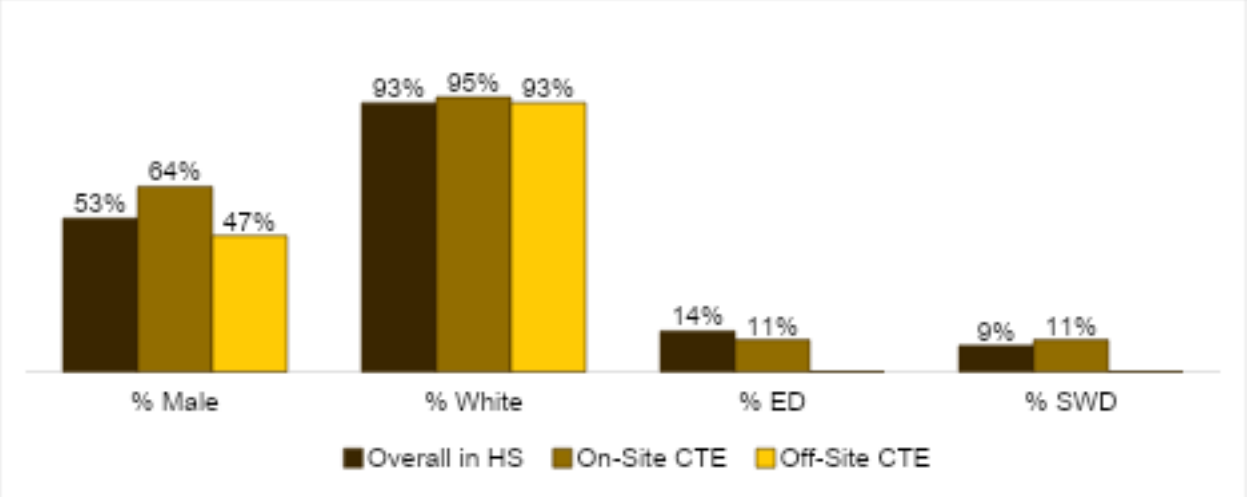
About 22 students per year travel in from other districts to the shared Agri Science program, mostly coming from Howell (about 60% of the students travelling in). The students who travel in are even more female (86%) and White (100%).

CTE at Hartland HS

Hartland HS offers 8 non-shared CTE programs and 1 shared CTE program. The non-shared programs, in order from largest to smallest, are Finance, Construction, Marketing, Auto Tech, Engineering, Computer Programming (AP Computer Science), Digital Multimedia, and Education.

Across the three study years, Hartland had an average of about 880 students (55%) in the 9 on-site CTE programs and about 93 students (6%) attending CTE in other locations. **Figure 8** shows the demographics of Hartland students who attended on-site CTE and off-site CTE compared to the demographics of the entire high school for the most recent school year.

Figure 8. Demographics of Hartland CTE Students, 2025-26



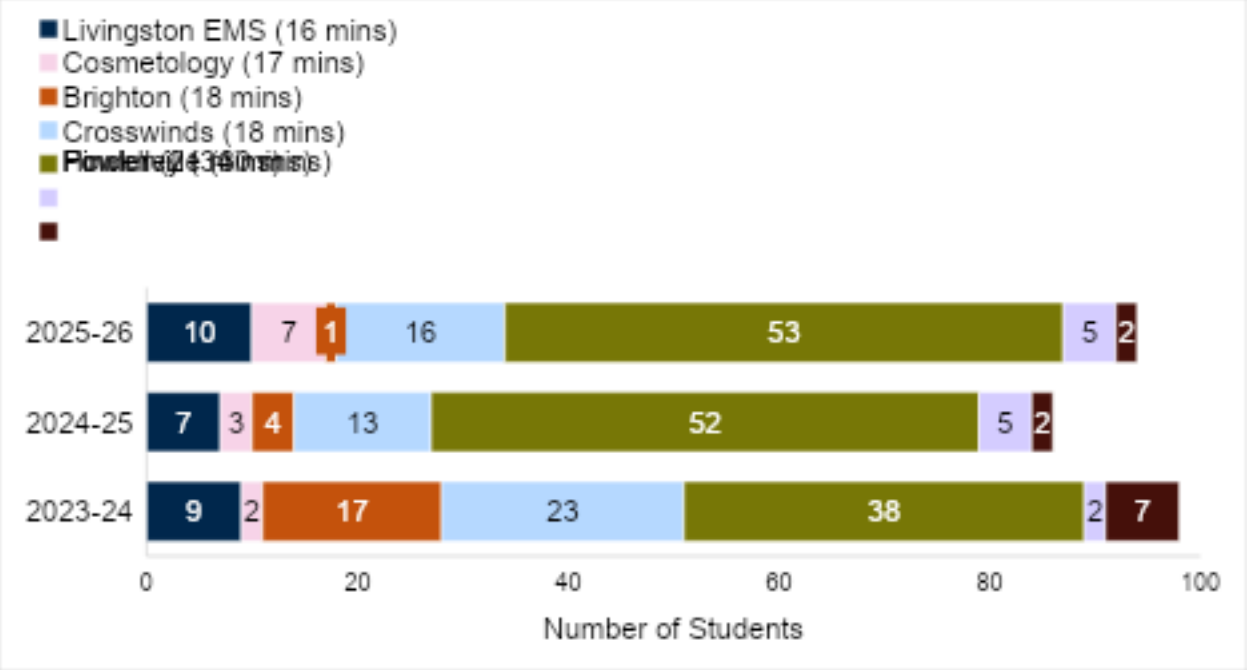
Source: MI School Data, CTEIS, and district reports.
Notes: ED = Economic Disadvantage. SWD = Students with Disabilities (IEP/504)
* Indicates that numbers are too small to report.

Male students are overrepresented among Hartland students taking on-site CTE. This is largely driven by an overrepresentation of males in every program except Education, which is 96% female, and Finance, which is closer to parity. Male students make up 90% of the Construction students, 85% of the Auto Tech students, 82% of the Computer Programming students, and about two thirds (66%) of the Marketing and Engineering students. Male students are underrepresented, however, in Hartland students who travel to CTE in other locations.

Students who participate in CTE are relatively representative when it comes to race/ethnicity, but White students are notably overrepresented in Engineering (96%) and underrepresented in Education (91%). Economically disadvantaged students are underrepresented overall, but they are overrepresented in Construction (20%) and Auto Tech (22%). SWD are slightly overrepresented overall, which is driven by Construction (22%), Auto Tech (22%), and Engineering (19%).

Figure 9 shows where Hartland students attended off-site CTE and the travel time between Hartland high school and each off-site location. **The largest share of students traveled to one of the 8 shared programs at Howell.**

Figure 9. Where Hartland Students Attend Off-Site CTE, 2023-24 through 2025-26



Source: LESA reports

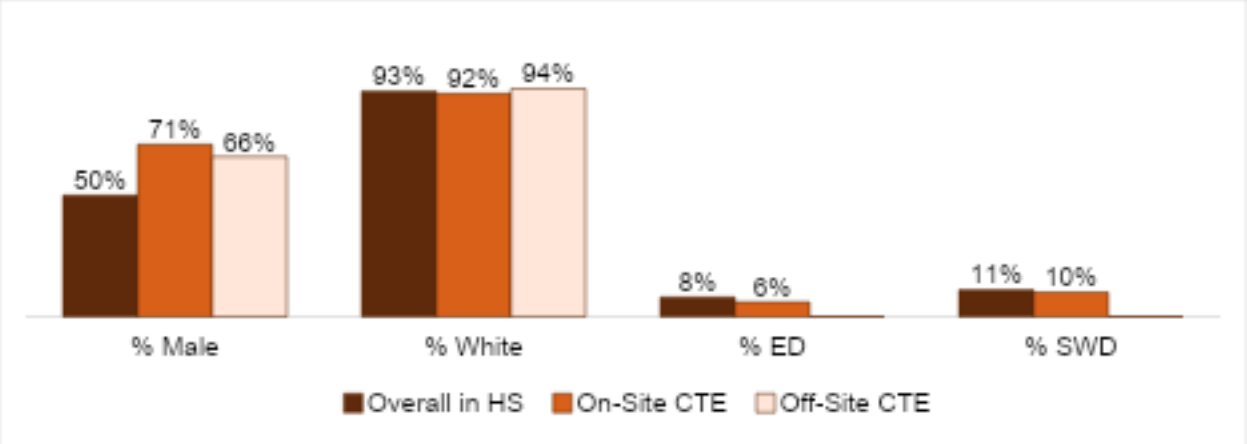
The only shared CTE program at Hartland HS is Cyber Security, which had 21 students in 2023-24, 13 students in 2024-25, and 16 students in 2025-26. The majority of the students in this program are Hartland students, with about 6 or 7 students travelling in from Brighton, Howell, and Pinckney each year.

CTE at Brighton HS

Brighton HS offers 9 CTE programs, 5 of which are non-shared, 3 of which have both shared and non-shared courses, and one of which is a fully shared program. The non-shared programs, in order from largest to smallest, are Marketing, Engineering, Digital Multimedia, Finance, and Computer Programming (AP Computer Science). The shared/non-shared programs are Auto Tech, Graphics, and Health. The fully shared program is Education.

Across the three study years, Brighton had an average of about 715 students (38% of all students) in the 9 on-site CTE programs and about 56 students (3%) attending CTE in other locations. **Figure 10** shows the demographics of Brighton students who attended on-site CTE and off-site CTE compared to the demographics of the entire high school for the most recent school year.

Figure 10. Demographics of Brighton CTE Students, 2025-26



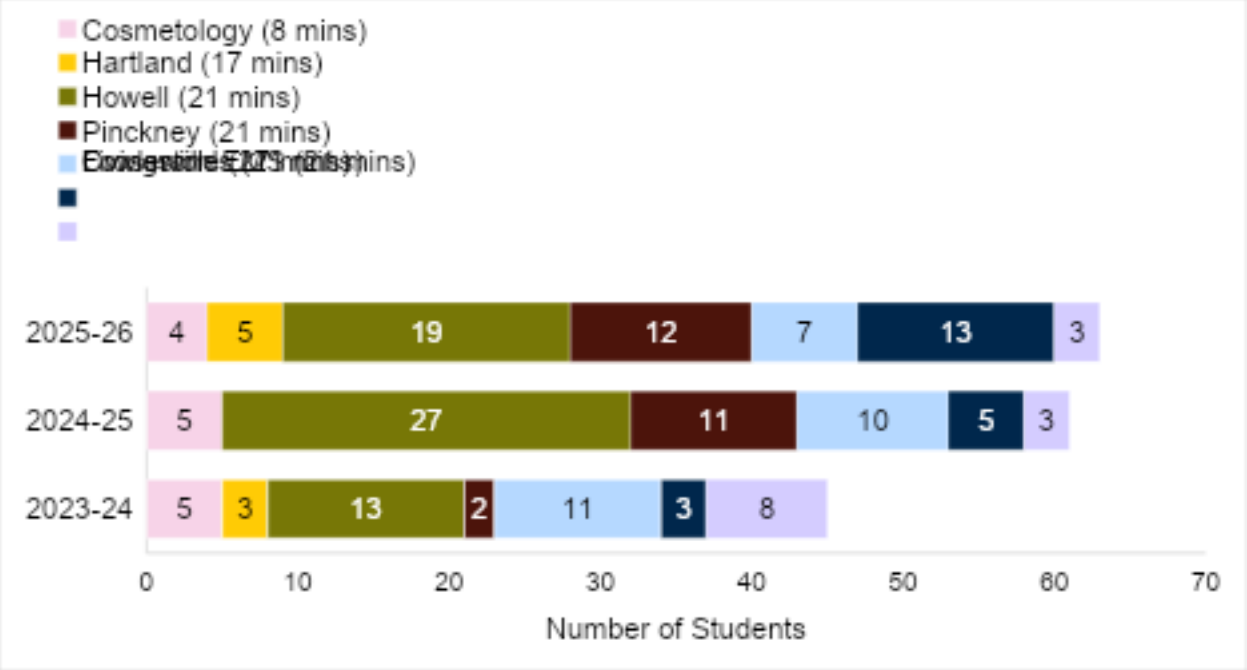
Source: MI School Data, CTEIS, and district reports.
Notes: ED = Economic Disadvantage. SWD = Students with Disabilities (IEP/504)
* Indicates that numbers are too small to report.

Male students are overrepresented among students attending both on-site and off-site CTE programs and they are especially overrepresented in Engineering, Auto Tech, and Computer Programming. Education is the only program that is overwhelmingly female (90%+). Brighton students who participate in the district's CTE programs are relatively representative when it comes to race. Economically

disadvantaged students and students with disabilities are slightly underrepresented in the on-site CTE programs. All other comparisons are too small to report.

Figure 11 shows where Brighton students attended off-site CTE and the travel time between Brighton high school and each off-site location. **The largest share of students traveled to one of the 8 shared programs at Howell.**

Figure 11. Where Brighton Students Attend Off-Site CTE, 2023-24 through 2025-26



Source: LESA reports

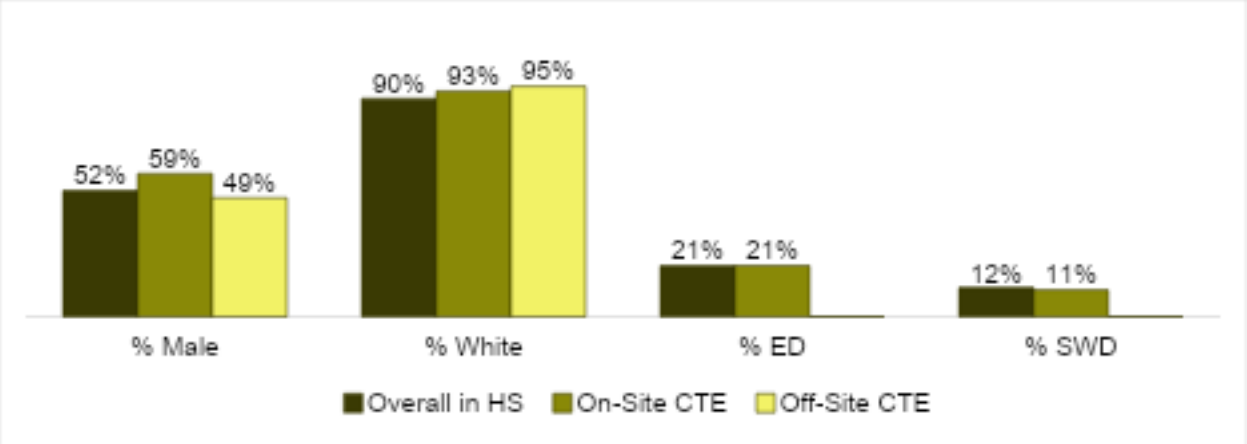
The majority of students in each of the district's 4 shared programs are Brighton students. Brighton students made up 84-100% of the students in the Auto Tech program, 53-72% of students in the Graphics program, 71-100% of the students in the shared Health program, and 43%, 75%, and 100% of students in the shared Education program across the three study years.

CTE at Howell HS

Howell HS offers 11 CTE programs, 3 that are non-shared, 5 that are fully shared, and 3 that have both shared and non-shared courses. The non-shared programs are Finance, Marketing, and Computer Programming. The fully shared programs are Culinary, Public Safety (Fire Fighter), Construction, ROTC, and Health Occupations. The 3 with both shared and non-shared courses are Education, Mechanical Drafting, and Manufacturing.

Across the three study years, Howell had an average of about 720 students (37%) in the 11 on-site CTE programs and about 80 students (4%) attending CTE in other locations. **Figure 12** shows the demographics of Howell students who attended on-site CTE and off-site CTE compared to the demographics of the entire high school for the most recent school year.

Figure 12. Demographics of Howell CTE Students, 2025-26



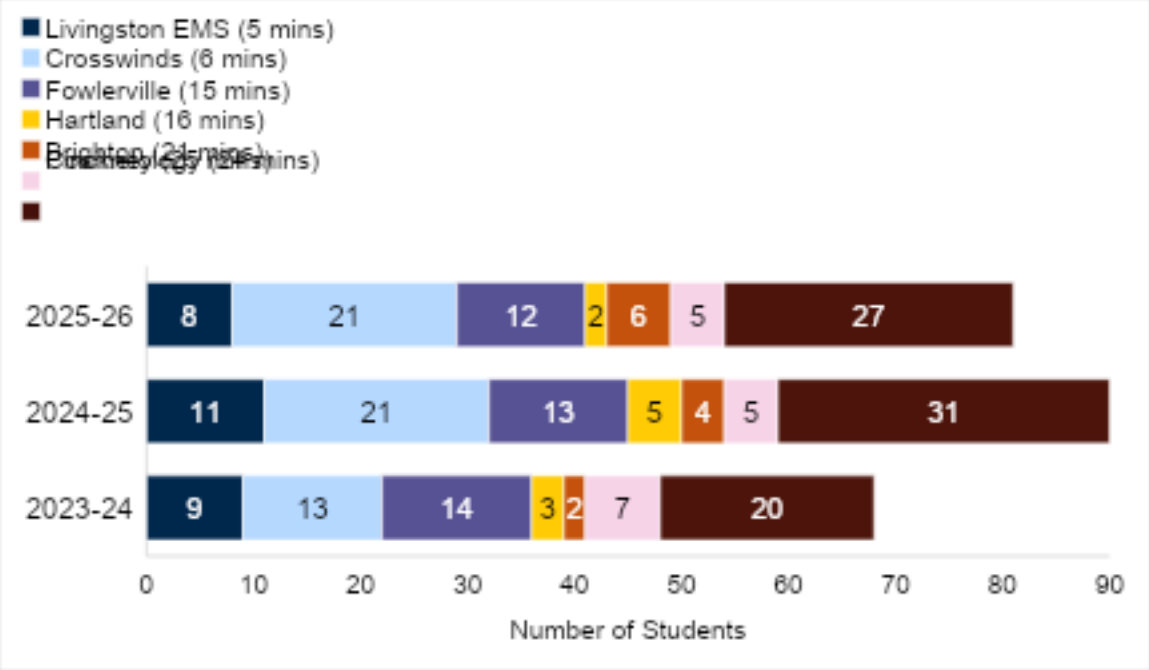
Source: MI School Data, CTEIS, and district reports.
Notes: ED = Economic Disadvantage. SWD = Students with Disabilities (IEP/504)
* Indicates that numbers are too small to report.

Male students are overrepresented among students attending on-site CTE, and they are especially overrepresented in Construction (95%), Computer Programming (94%), Manufacturing (91%), and Mechanical Drafting (90%). Female students are very overrepresented in Education (90%) and Health (86%). White students are overrepresented overall and they are especially overrepresented in Education (96%) and Mechanical Drafting (95%) and underrepresented in Finance (85%) and Culinary

(84%). Economically disadvantaged students are relatively representative and SWD are very slightly underrepresented among students attending on-site CTE. All other comparisons are too small to report.

Figure 13 shows where Howell students attended off-site CTE and the travel time between Howell high school and each off-site location. **The largest share of students traveled to the Auto Tech and Welding programs at Pinckney HS even though they are the furthest away.**

Figure 13. Where Howell Students Attend Off-Site CTE, 2023-24 through 2025-26



Source: LESA reports

In the district's 5 fully shared programs, Howell students make up the majority of the ROTC students (76%), Culinary students (70%), Construction students (63%), and Health Occupations students (55%). The only shared program in which Howell students are not the majority is Fire Fighting, which is about 22% Howell students and 78% other schools/districts. In the programs with both shared and non-shared sections, Howell students make up 92% of the Education students, 90% of the Mechanical Drafting students, and 80% of the Manufacturing students.

Contracted Programs

In addition to the 35 programs offered at one of the high schools, there are 4 CTE programs operated by LESA in other locations. These are the Aviation program at Crosswinds (in Howell), the Cosmetology program at Brighton School of Cosmetology, and the EMT and Phlebotomy programs offered at the Livingston County EMS Center (in Howell).

The Aviation program is the largest, with between 55 and 60 students across the 3 study years. The majority of students are male (68-82% across the years) and White (92%). All other comparisons are too small to report. Notably, about 5-9 students per year in the Aviation program are from charter schools or other neighboring districts (primarily Whitmore Lake and South Lyon).

The EMT program had between 23 and 27 students in each of the study years. The Phlebotomy program started in 2024-25 with 10 students and grew to 14 students in 2025-26. About 4 students per year in the EMT program are from charter schools or other neighboring districts (Whitmore Lake and South Lyon). Demographics are not reported for these programs separately from the Health programs at Brighton and Howell, but overall the Health programs are majority female (85-89%), 90% White, 13% ED, and 6% SWD.

The Cosmetology program – which is designed as a 2-year program – consistently has 12 first year students (the enrollment limit) and 4 or 5 second year students. All the students in 2023-24 and 2024-25 were female and about 80-93% were White. All other comparisons are too small to report.

Barriers to Access and Participation in CTE

Barriers to Offering Additional CTE Classes

In our survey we asked school administrators and counselors why they offer the CTE programs they currently have**. Many respondents cited student interest, career trends, workforce needs, and instructor availability as reasons for current CTE course availability.** One respondent said, “We feel like the options that we provide equip our students with skills needed to pursue job opportunities after high school. We also have certified staff that are able to teach these subjects.”

We also asked about the barriers to offering more CTE options within their districts. **Many of the survey respondents mentioned lack of instructional staff and other resources, including space and equipment, as the main reasons for not adding additional programs**. One respondent said, "Major barrier #1: Finding people to teach these programs. Whether it's a current teacher going back for additional training or a person who works in the industry going back for teacher training [...] Major barrier #2: Resources, space, equipment. Our county doesn't have a CTE facility which is a bummer. So, we have redundancy in some areas, and we are lacking in others [...]" Some respondents said that they do not offer more because the consortium already provides a good variety of programs. One person said, "[...] with the shared time programs we cover a wide range of pathways from which students can choose."

Barriers to Student Participation in On-site CTE Classes

On-site CTE courses generally align with a school's daily schedule and students do not face substantial logistical challenges in accessing these courses. Similar to AP courses, however, most students participate in CTE in 11th and 12th grade and it can be challenging to fit all the courses a student wants to take into their daily schedules. Of the 11 barriers we asked survey respondents to rate, **the biggest barrier to participation in on-site CTE was not having enough room in the students' schedule**, with 14 of 17 (82%) respondents rating this as a moderate to large barrier. The only other barrier that received high ratings was not having enough seats in high-demand courses, with 10 of 17 (59%) respondents saying it was a moderate to large barrier. See Table 8 in the appendix for full details.

Barriers to Student Participation in Off-site CTE Classes

1. Seat Availability and Waitlists

Students who want to attend CTE programs in other locations, however, face substantially more barriers. Per the consortium agreements, seats in these shared programs are allocated to each of the five main districts in proportion to their 10th & 11th grade enrollment each year (e.g., if Hartland has 25% of all the 10th & 11th graders across the five districts then Hartland is allocated 25% of the seats in each shared program). If a district does not use all of its allotted seats, the seats first go back to the home district where the program is located and then any additional seats are opened

up to the charters, alternative schools, and other neighboring districts. Representatives from each district convene in April every year to begin allocating seats for the upcoming school year and changes are made through a series of regular meetings until enrollment is finalized in October.

In most cases students are able to get into the courses they want, though there have been waitlists for the Manufacturing, Construction, Mechanical Drafting, and Fire Fighter programs at Howell, Health Occupations at Brighton, and the contracted Phlebotomy and Cosmetology programs. The decline in Fowlerville students attending the Wilson Talent Center was also due to fewer seats being available. Sixteen of 20 survey respondents (80%) said that not having enough seats in high-demand courses was a moderate to very large barrier to participation in off-site CTE programs.

2. Lack of Transportation

Lack of transportation was another major barrier, with 15 of 20 survey respondents (75%) rating it as a moderate to large barrier to off-site CTE participation. Districts do not provide transportation to off-site CTE programs, with the exception of Fowlerville providing a bus to the Wilson Talent Center in Ingham County, about 30 minutes away. The driving time between the five main high schools ranges from about 15 minutes (Fowlerville to Howell) to 35 minutes (Pinckney to Hartland). The shortest distances are between Howell HS and the two contracted programs in Howell (Livingston EMS is 6 minutes away and Crosswinds Aviation is 8 minutes) and between Brighton HS and the Brighton School of Cosmetology (10 minutes). Pinckney HS students generally have the furthest to travel, with every shared CTE program being at least 20 minutes away. **Importantly, the costs related to transportation (e.g., access to a car, gas money) were cited as the main reason economically disadvantaged students are underrepresented in CTE.**

3. Misaligned Schedules Across Districts

Another complication is that the daily bell schedules and school calendars (i.e., semester start and end dates) are not aligned across the five main districts. Brighton and Howell are on a quarter schedule while Fowlerville, Pinckney, and Hartland are on a semester schedule. In 2025-26, Hartland started school on August 18th and finished the first semester on December 19th, while Brighton started on September 2nd and

finished their second quarter on January 23rd. Brighton, Fowlerville, and Pinckney have 6 class periods per day while Hartland and Howell have 7 and none of the periods start and end at exactly the same time.

Shared CTE programs tend to be offered in the first two periods or last two periods of the day, but the misalignment in timing across districts creates as much as a 30-minute difference in when those blocks start or end. Fourteen of 20 survey respondents (70%) rated misaligned semester or bell schedules as a moderate to very large barrier and 13 of 20 (65%) said that not having room in their daily schedules is a barrier – which is compounded by the impact of travel time on the periods before or after the actual CTE classes.

4. Funding

CTE courses often cost more to run than regular courses and extra funding for CTE comes from several federal, state, and local sources. Federal funding to support CTE is allocated to regions through the 2018 Strengthening Career and Technical Education for the 21st Century Act (Perkins V). Fiscal agencies receive CTE funding from the state through various parts of Section 61 of the State School Aid Act[18]. In addition to these sources, most ISDs/RESAs in Michigan also receive local funding through a vocational millage. These earmarked property taxes generate between $850K and $38.5M in additional local funding for CTE each year[19]. In November 2025, voters in neighboring Washtenaw County approved a new vocational millage that will generate approximately $25M annually for Washtenaw's nine public school districts[20]. Livingston is one of only 14 ISDs/RESAs in Michigan without this additional CTE funding.

Funding for the shared CTE programs follows several rules set forth in the consortium agreements. Funding to operate the consortium itself is paid 1/6 by LESA and the remaining 5/6 is split across the five member districts proportionate to the last

[18] https://www.michigan.gov/mde/services/octe/educators/funding-monitoring/school-aid

[19] https://www.michigan.gov/mde/-/media/Project/Websites/mde/top10/SBE-Presentation-Goal-4_December-10-2024.pdf

[20] https://www.chalkbeat.org/detroit/2025/10/28/michigan-has-career-technical-education-cte-deserts-key-vote-in-washtenaw

audited K-12 membership of each district. When member districts send students to other member districts to participate in shared programs, they pay a fee of 10% of their per-pupil foundation allowance ($1,050 in 2025-26) per student[21]. Non-member school districts (i.e., charters, neighboring districts) pay a fee of 2/6 of their per-pupil foundation allowance per student ($3,350 in 2025-26). Only about 25% of respondents from the five main schools said that financial concerns for the district were a barrier to CTE participation but all of the survey respondents from the charter schools mentioned the additional cost and financial concerns for the school/district as a hindrance to increasing CTE enrollment.

5. Gender Patterns

Finally, we asked school counselors and administrators about any particular barriers that may explain the stark gender disparities across CTE programs. Most respondents cited larger societal patterns of occupational segregation and male-dominated fields being unattractive to female students. To promote greater inclusion of female students in courses that are non-traditional for their gender, they suggested introducing students to female role models, hiring female teachers, and encouraging female students to take courses together so they are not alone in a class. One respondent suggested adding more female-dominated programs or adding seats in the existing programs to increase female participation overall.

Recommendations for CTE

Ensure all existing CTE programs are filled and then add more programs within the main schools. For many reasons it is easier for students to take CTE courses that are offered within their home high school. Therefore, the first suggestion for increasing CTE enrollment is to maximize enrollment in existing programs. Once the dust settles on course enrollments each year, many of the existing programs end up with space for a few additional students. Targeted efforts to increase enrollment in programs that are usually undersubscribed could raise overall enrollment and adding seats in programs

[21] The Cosmetology program had additional costs. The regular cost for the Brighton School of Cosmetology program is around $19,500. The two-year LESA program only costs $9,230 per student. Of this, the sending district pays about $3,844 (20% of their per-pupil foundation allowance each year) and the students/families pay the remaining $5,386 – $2,508 the first year, $1,500 for the summer, and $1,378 the second year.

that often have waitlists could help supply meet student demand. Offering more career exploration in middle school and short-term introductory courses aligned with the existing CTE programs could help spark student interest in the opportunities already available.

Consider Fowlerville as a top priority when exploring new CTE programs. Fowlerville currently only offers one on-site CTE program. In addition to bringing back the Marketing program they had in previous years, they could consider offering another program like Computer Programming or Business Administration that does not require the space and equipment that a program like Manufacturing or Welding requires. In April of 2026 Fowlerville was awarded grant funding from the Michigan Department of Education to open a CTE Digital Technology program at Fowlerville Junior High School in the 2026-27 school year[22]. Since the high school is right next to the junior high, it may be possible in future years to add high school digital technology courses as well.

Increase female student participation in CTE by adding programs in female-dominated fields. This is an important strategy to address gender disparities and increase overall CTE participation rates. It is especially critical in Pinckney, where all 5 of their current programs are in male-dominated fields and female students make up only 15% of their in-district CTE enrollment. Adding an Education, Health Science, or Agriculture program in Pinckney would help balance the gender disparity within the district.

As another means of increasing female participation in CTE, encourage more female students to feel comfortable taking courses in male-dominated fields. Exposing students to female role models in these fields, hiring female teachers or support staff, encouraging friends to enroll together, and using program marketing to combat gender stereotypes could all help draw more female students into traditionally male fields. These strategies could also be used to increase male enrollment in traditionally female fields, like Health Science, which is one of the fastest-growing employment sectors with many middle-skill career paths[23]. Collecting qualitative data

[22] Kensington Woods was also awarded MDE grant funding to open a middle school Arts, Entertainment, & Design program this fall.
[23] https://www.npr.org/2026/04/10/nx-s1-5773327/women-men-jobs-health-care-manufacturing

from female students through focus groups or surveys could help shed more light into their thoughts and feelings about the male-dominated CTE courses. It would be especially interesting to talk to the small number of female students who are enrolled in programs like Construction or Welding to understand their experiences and motivations for challenging norms and stereotypes.

Provide transportation with buses or subsidize transportation costs. Some of the largest barriers to off-site CTE are the time and costs related to transportation. Livingston County does not have a public transportation system. If the districts or LESA could provide buses or subsidize transportation costs (e.g., paying for gas or ride-sharing costs), more students would be able to attend the shared programs. Removing the barrier of transportation is an important equity issue because it especially limits the participation of economically disadvantaged students.

Address scheduling barriers related to bell schedules, academic calendars, and class times. Harmonizing bell schedules and semester calendars across all of the districts would help reduce the conflicts both within the school day and around school holidays. The challenge of not having enough room in the daily schedule is hard to solve, but exploring options like evening and summer classes could help students fit CTE courses in with all of their other classes and activities. Currently, students in the Cosmetology program are able to attend summer classes between their junior and senior years to complete 300 of the 1,500 hours required for a State of Michigan Cosmetology license.

Explore a vocational millage to raise funding for CTE. Many of these recommendations would be much easier to accomplish if Livingston had funding from a vocational millage. The funds generated by a millage could be distributed across the districts to add more on-site programs and provide transportation to off-site programs. They could also be used to fund summer classes so students whose schedules are full during the school year would still have opportunities to gain exposure to various career paths.

Another option with millage funding would be to build a centralized CTE tech center and either move some of the existing programs to the tech center or provide programming that complements and extends what is offered at the local schools. The

tech center could operate like an extension campus of a community college where students could take more advanced courses and complete industry-recognized credentials and focus on job training and work-based learning opportunities like apprenticeships. Lansing Community College used to operate a satellite campus in Howell but it closed in 2025. By partnering with LCC or WCC and other education and employment agencies, a central tech center could provide many different types of programming to meet the needs of various youth and adult populations in Livingston County[24]. In all cases it would be critical to provide free transportation and to standardize schedules to reduce the logistical barriers that make it difficult for students to access the programs they are interested in.

[24] Kalamazoo RESA's new Career Connect Campus is an example of what is possible with a centralized tech center. https://www.kresa.org/career-connect/programs-courses

Early Middle College (EMC)

Early Middle College (EMC) programs are like a more intensive version of dual enrollment where students choose a particular program of study and attend a 5th year of high school or "13th grade" to continue earning postsecondary credit and potentially complete an associate's degree or other postsecondary credential. Whereas regular dual enrollment allows students to take one or two courses across a broad range of fields like Sociology and Astronomy, EMC programs have a more prescribed sequence of courses and more requirements, structure, and individualized support.

Access and Enrollment Patterns in EMC

LESA offers seven EMC programs, six of which are aligned with specific CTE programs: Business Management, Nursing, Cyber Security, Mechatronics, Welding, and Automotive Tech. The seventh program is a College Foundations program that allows students to take any CTE courses in 11th grade and then adds WCC courses in English, Math, Science, Communications, Humanities, and Psychology to earn up to 39 Michigan Transfer Agreement credits. See **Table 6** for detailed information about the courses, locations, credits, and credentials offered in each of the seven EMC programs.

Table 6. Locations, Total Credits, and Credentials Offered in LESA EMC Programs, 2025-26

	College Foundations	Business Management	Nursing	Cyber Security	Mechatronics	Welding	Auto Tech
11th grade (HS Location)	Any CTE (All Districts)	Marketing or Finance (All Districts*)	Health Sci (Brighton or Howell)	Cyber (Hartland or WCC)	Mechatronics (Pinckney**)	Welding (Pinckney or Howell)	Auto (Pinckney, Hartland, or Brighton)
12th grade & 5th year (Location)	Core courses (WCC)	Business (Cleary)	Nursing (LCC)	Computer Science (WCC)	Mechatronics (WCC)	Welding & Fabrication (WCC)	Auto Tech (WCC)
Total Credits	39 credits	60 credits	46 credits	65 credits	63 credits	46 credits	60-64 credits
Credential	(MTA credits[1])	ABA in Business Management or Analytics Technology	(46 of 69 total credits required for AAS in Nursing)	AA in Applied Cyber Security	AAS in Mechatronics: Robotics and Automated Systems	Certificate in Welding and Fabrication Principles	AAS in Automotive Service, Automotive Test, or Powertrain Development

Source: LESA reports.

Notes: *Fowlerville had Marketing in 2023-24 but did not offer it in 2024-25 or 2025-26, making it the only district that does not offer the necessary courses for the Business Management EMC program. ** Pinckney did not offer Mechatronics in 2025-26.

[1] These courses are aligned with the Michigan Transfer Agreement (MTA), which allows the credits to transfer to other participating postsecondary institutions across the state.

Main High Schools

Figure 14 below shows enrollment in each of the 7 EMC programs by year and district. The Nursing program has historically been the most popular, with over 50 students per year, though in 2025-26 the Business Management and College Foundations programs have grown to similar sizes. Welding consistently has about 20 students, Auto Tech about 12, Mechatronics has 9, and Cyber Security has about 8 students per year.

Howell HS consistently has the highest EMC enrollment, with growth from 75 students in 2023-24 to 91 students in 2025-26 (5% of all students). Much of this growth has been in the College Foundations and the Business Management programs. Meanwhile, participation in Nursing – which starts with Health Science courses at Howell – declined from 28 students in 2023-24 to 19 students in 2025-26. White students are very slightly overrepresented (91% vs 90% overall) and female students are also slightly overrepresented (48% vs 47% overall). Economically disadvantaged students are notably underrepresented (14% vs 21% overall) as are students with disabilities (6% vs 11%).

Hartland HS has the second-highest enrollment, with growth from 30 students in 2023-24 to 55 students in 2025-26 (4% of all students). This has also been driven by growth in the College Foundations and the Business Management programs. Enrollment in the Nursing program has also grown and Hartland's participation in the Mechatronics program has consistently been the highest of all districts. According to district-reported data, White students are overrepresented (96% vs 93% overall) and female students are also overrepresented (51% vs 47% overall). Economically disadvantaged students are underrepresented (9% vs 15% overall) and numbers for SWD and ELL students are too low to report.

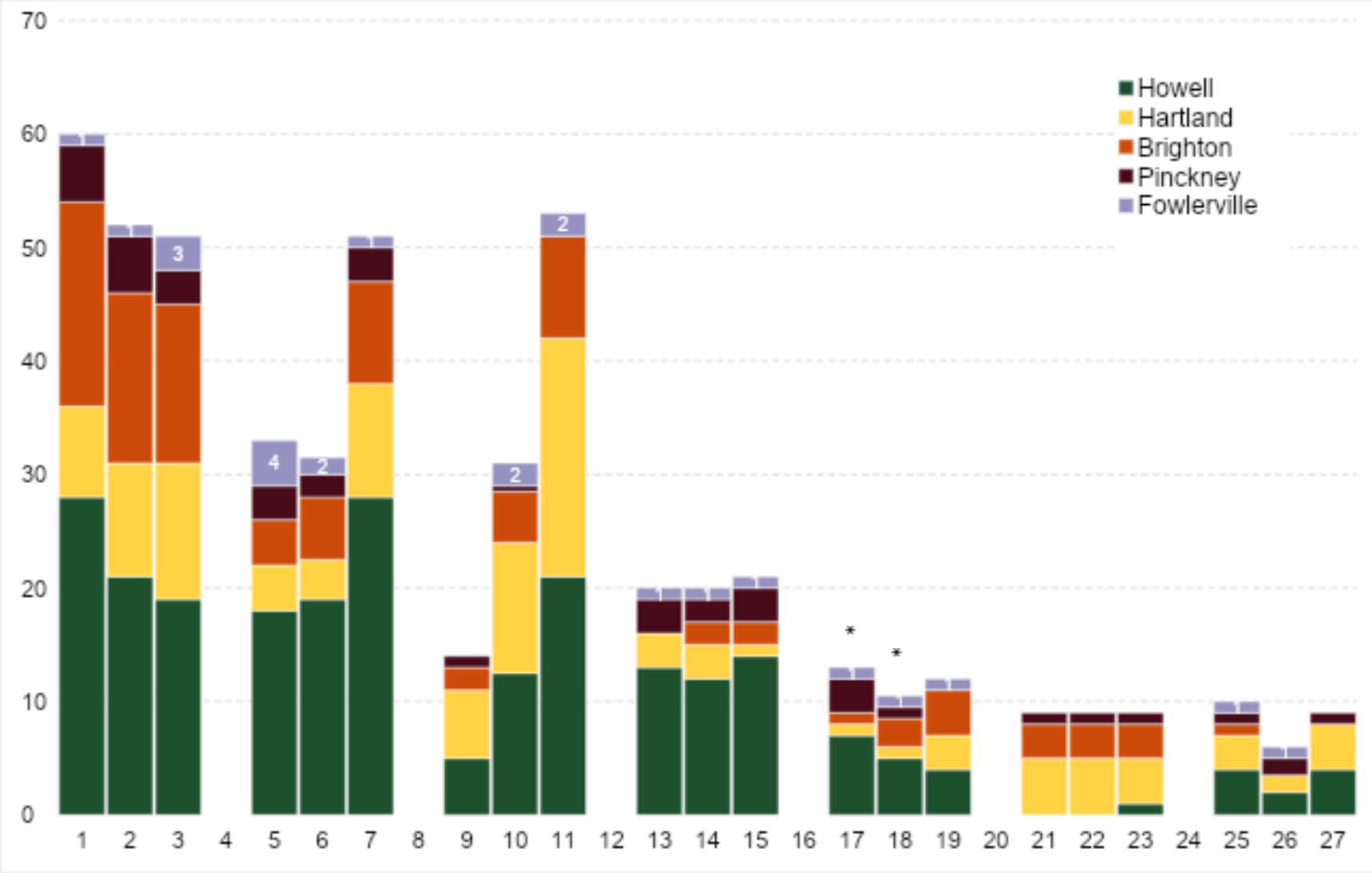
Brighton HS has had growth from 29 students in 2023-24 to 41 students in 2025-26 (2% of all students). Nursing – which begins with courses at Brighton – is most popular but has declined slightly between 2023-24 and 2025-26. Business Management and College Foundations have both grown over the study years. White students are slightly overrepresented (94% vs 92% overall) and female students are

strongly overrepresented (68% vs 50% overall). Numbers of economically disadvantaged, SWD, and ELL students are too low to report.

Fowlerville HS has consistently had about 8 EMC students per year (1% of all students) and they tend to be spread out across the programs with 1 or 2 students in 6 of the 7 programs (all but Mechatronics). These small numbers make reporting by demographic categories difficult, but according to the data from the district all of the EMC students are White and they are relatively representative in terms of gender. Numbers of economically disadvantaged, SWD, and ELL students are too low to report.

Unlike the other districts, **Pinckney HS** has seen a decline in EMC enrollment across the study years, from 17 in 2023-24 to 11 in 2025-26 (2% of all students). While Pinckney students have enrolled in all 7 EMCs at some point over the last 3 years, there are often only 1 or 2 students in each program. This is somewhat surprising given that the district offered on-site CTE courses for 5 of the 7 EMC programs during the study years (all but Nursing and Cyber Security). These small numbers make reporting by demographic categories difficult, but according to district-reported data White students are overrepresented (98% vs 91% overall) and female students are dramatically underrepresented (36% vs 54% overall), though the small number of students makes these estimates less reliable.

Figure 14. Number of Students Enrolled in LESA EMC Programs by District and Year, 2023-24 through 2025-26



Source: LESA reports. See Table 14 in Appendix.

Notes: * Indicates the district offers the required 11th grade courses to enter the EMC. Unlabeled sections = 1 student

Charters and Alternative Schools

Since 2023-24, **Kensington Woods** has operated its own Early Middle College in partnership with Washtenaw Community College (WCC). They offer more than 10 programs leading to WCC Certificates in Welding, Automotive Services, Robotics, Advanced Manufacturing, Graphic Design, 3D Animation, Audio Production, and AA degrees in General Studies, Computer Science, Human Services, and Fine Arts. Enrollment in the EMC has grown from 11 students in 2023-24 to 27 students in 2024-25 and 31 students in 2025-26 (about 30% of all students). In the first 2 years male students were slightly overrepresented (55% and 52% compared to 47% overall) but in 2025-26 it was more representative (45% male, 55% female). White students are overrepresented (100% in all 3 years) and economically disadvantaged students are underrepresented (about 20% vs 33% overall). Numbers are too small to report for SWD or ELL.

No students from Charyl Stockwell, FlexTech, or any of the alternative schools participated in any LESA EMC programs across the three study years.

Barriers to Access and Participation in EMC

Many of the barriers to EMC participation are the same as the barriers to off-site CTE and in-person dual enrollment – namely, that students have to transport themselves to the postsecondary institutions. Five of the 7 EMC programs require students to travel to WCC, which is about 30-48 minutes away from the main high schools. Cleary University is a bit closer (12-24 minutes away) while Lansing Community College is further away from most of the schools (34-51 minutes).

Of the 14 potential barriers we asked school administrators and counselors to rate on our survey, **transportation was rated the biggest barrier** with 12 of 19 respondents (63%) rating it a moderate to very large barrier (see Table 8 for more details).

The other major barriers to EMC participation are **lack of student and family awareness of the programs** and **lack of alignment between available programs and student interest**, with 9 or 10 of the 19 survey respondents (47-53%) rating them as moderate to large barriers.

Costs and funding for EMC programs are negotiated between LESA and each postsecondary partner separately. LESA generally pays for all costs associated with EMC participation other than transportation and parking. Most of the funding for EMC programs comes from the additional year of the per-pupil foundation allowance for every 5th year EMC student. Section 61b of the State School Aid Act also allocates additional funding for every student enrolled in a CTE EMC program. Students who would otherwise receive free meals at school may also have the additional cost of bringing or buying food when they are not in their main school building. Almost all the survey respondents (18 of 19) said that costs/financial concerns were not a barrier for the school or district, and about a fifth (21%, 4 of 19) said that financial concerns were a barrier for students, mostly related to transportation costs.

In our open-ended questions, a few survey respondents said that students who are involved with school activities and athletics do not participate in the EMC programs because they do not want to leave the building. Several respondents said that students with disabilities struggle in EMCs because they do not receive as much support in the postsecondary classes as they would in their high school classes.

Given that the EMC programs build off of the CTE programs available in LESA, we asked school counselors and administrators why students who are already in a CTE program would choose not to participate in the EMC. Of the 16 who responded, 11 (69%) said that students do not want to be off-site in 12th grade and they want to graduate with their friends and have a normal senior year. Half (8 of 16) said that students do not want to commit to a 5th year of high school and several said that students are sometimes unsure if they want to continue in the same field: “[It] is a big decision for a sophomore to commit to the next 3 years of their life if they are not sure what they want to do.” A few said that students were planning to go straight into the workforce or an apprenticeship after high school and others said that students with 4-year university plans had concerns about whether credits would transfer and some want to have a traditional first-year college experience.

Recommendations for EMC

Provide or subsidize transportation to allow more students to take advantage of EMC opportunities. As noted above with other off-site opportunities, addressing the transportation barrier may greatly increase the likelihood that students will participate.

Conduct surveys or interviews with students to understand the factors that influence their decision to leave EMC programs. Every year some students who enroll in an EMC program in 11th grade decide to switch back to the regular graduation track after their first year. It is unclear why students do this; it would be valuable to understand and address common issues.

Spread awareness about the EMC programs and emphasize to students and families how much money they could save. Overall, continued efforts to raise awareness of these programs and the fact that school districts will pay for college courses is likely to grow EMC enrollment.

Summary of Enrollment Across All Programs

Table 7 below shows participation rates in all four programs across the five main high schools averaged across the three study years. It is important to note that the data we collected reflect enrollment *in a given year* and not overall rates *at any point* during high school. Rates of students who *ever* participate are likely higher than our yearly snapshots. For example, 25% of Pinckney students may be enrolled in an AP course in a given year but 40% of Pinckney students may have completed an AP course by the time they graduate. It is also important to note that students can enroll in more than one program at the same time (e.g., AP and DE, AP and CTE) so we cannot add up the counts or percentages across programs to determine how many students participated in any program or in none. Further data collection would be necessary to assess how many students enroll in multiple programs and what patterns emerge. This analysis could reveal some important and interesting insights.

Table 7. Participation Rates Across All 4 Programs

	School Enrollment	AP/IB Participation	DE Participation	CTE Participation	EMC Participation
Main High Schools					
Pinckney HS	620	25%	8%	24%	2%
Fowlerville HS	760	12%	2%	17%	1%
Hartland HS	1,610	27%	5%	60%	4%
Brighton HS	1,890	34%	2%	41%	2%
Howell HS	1,950	20%	6%	41%	5%
Charter Schools					
Kensington Woods	78	*	2%	*	30%
FlexTech	170	-	3%	*	-
Charyl Stockwell	325	63%	15%	*	-

Source: MI School Data, LESA reports, and district reporting. Averages across 2023-24, 2024-25, and 2025-26.

Notes: * Indicates that numbers are too small to report. Dash represents no enrollment.

Overall, CTE is most popular, and enrollment in CTE and AP courses is much higher than in DE or EMC programs. Fowlerville HS has relatively low enrollment in

all four programs. Pinckney HS stands out for having the highest rate of dual enrollment and relatively high AP participation – the only district where AP participation is higher than CTE participation. Hartland HS has the highest rate of CTE participation and relatively high rates of participation in the three other programs as well. Brighton HS has the highest rate of AP participation and Howell HS has the highest EMC participation.

Charyl Stockwell stands out as having high AP/IB enrollment and also some DE and CTE engagement. Kensington Woods has low regular DE enrollment and almost no CTE enrollment but around 30% of its students are enrolled in their Early Middle College. FlexTech and all six of the alternative schools have little to no participation in any of these programs. Most are very small schools that likely do not have the capacity to offer these programs on-site or to overcome the barriers that prevent their students from enrolling in off-site programs.

Demographic Patterns Across All Programs

Female students are generally overrepresented in AP, DE, and EMC and underrepresented in CTE. The gender gaps for AP and DE mirror larger state and national trends of female students enrolling in college and completing postsecondary degrees at higher rates than men. **The underrepresentation of male students in AP and dual enrollment courses may warrant special attention and effort**. In our survey, we heard that some male students do not have as much clarity about their career interests or next steps and may prioritize athletics and other school activities over postsecondary credit opportunities. Schools may want to find creative ways to provide extra planning and counseling touchpoints for male students, like working with sports coaches or popular male adults in the building to encourage students to engage in these programs.

Male students may also be underrepresented in AP and DE in part because they are so overrepresented in CTE, which is also a strong and longstanding pattern at state and national levels. Within LESA, male students are the majority in 31 of the 40 CTE programs and 13 programs are over 80% male. Efforts to attract more female students could include adding programs in female-dominated fields or encouraging female students to enter male-dominated fields. Supportive peer networks, female role

models, and ensuring welcoming and inclusive classroom environments could help female students feel more comfortable enrolling in these CTE programs. The patterns for EMC enrollment generally mirror the patterns for CTE enrollment, with overall EMC participation being more balanced because the Nursing program is much larger than nearly all the other programs.

White students are slightly overrepresented in AP and DE, which also mirrors larger state and national trends. CTE is relatively representative when it comes to race/ethnicity overall, but White students are overrepresented in some fields and underrepresented in others. Economically disadvantaged students, students with disabilities, and English Learner students are generally underrepresented in all four programs. Focused efforts to reduce barriers and increase enrollment among these groups in particular is important.

Why Students Choose Certain Programs

In our survey we asked school counselors and administrators why students choose one program over another. In general, respondents explained that **program choice is mostly dependent on students' interests and career goals, the certainty of earning college credit, perceived chance of success, level of commitment, program flexibility, preferences for course modality (in-person vs online), and barriers related to transportation and scheduling.**

With regard to dual enrollment (DE) specifically, respondents said that students prefer DE courses over an EMC program because it offers greater flexibility, requires a lower level of commitment, and avoids any concerns with the 13th year. When comparing DE with AP, respondents mentioned that students may choose DE over AP because it provides more reliable college credits and because students perceive themselves to be more successful in DE. As one respondent noted, "Students choose DE over AP because they are guaranteed college credit when they pass the class. It is not guaranteed college credit when taking an AP class because you have to take the test and depending on the college they may or may not accept the test score."

On the flip side, students may choose AP over DE because of convenience, popular teachers at their school, and specific postsecondary goals. One respondent said, "For

students who desire to attend selective and/or highly selective colleges, AP courses are the best option to prepare them for a rigorous course load at these schools."

Regarding CTE, students may choose regular CTE over EMC because it requires a lower level of commitment. One respondent explained, "Students can take multiple CTE programs each year if they find they do not like a certain CTE program. For an EMC program, a student must commit and some students are not ready for this type of accountability yet. Also, they may not have the means of transportation to the college to take the required in-person classes." Finally, it was suggested that students may choose the EMC program over any other program because they would like to earn an associate's degree quickly and at low cost because they have a clear career plan.

Conclusions

The final question of our survey asked what changes the respondents would make to their course offerings if they had unlimited funding. These suggestions mirror several of the recommendations listed above for each of the individual programs. **Respondents most often focused on strategies for overcoming scheduling and logistical challenges. The most frequently mentioned idea was to create a countywide Tech Center where students from all the schools could go** – five people from three different districts mentioned this solution. One respondent explained, “I think that the better idea with "unlimited funding" would be to have a county skill center that could house all of the CTE classes for all five districts. This would be beneficial to everyone and remove many of the barriers for kids.” Given the logistical challenges with attending either off-site programs or the hypothetical Tech Center, five respondents mentioned providing transportation “to help with those who may not have the funds.”

Two respondents emphasized the need for more options to **address challenges related to scheduling barriers.** One said, “I would love to offer students the flexibility to experience college level coursework as well as technical/hands on, practical coursework. Often, they are forced to choose one path or the other, based on time and schedule constraints.”

A few respondents mentioned **adding more AP courses, CTE courses, EMC courses, or in-person DE courses. Two mentioned paying AP exam costs**. One said, “We would pay for all AP students to take the AP exam (it would be a requirement, perhaps aligned with a final exam for the course/credit). CTE Intro classes would be offered in our middle school; 9th-12th gr students can focus on completing their cores and a specific CTE program of interest, since their exploration had already begun [...]” Finally, respondents pointed to changes in rules and regulations related to class sizes, with two suggesting removing the minimum class size requirements to offer more course variety.

One idea to allow students to take more courses would be **expanding summer school options.** Currently most of the districts only offer summer classes to students who have failed core courses and need to recover the credit to be eligible to graduate

on time. Students can take a maximum of two classes and they are all virtual courses with varying access to in-person support. Some districts offer optional in-person support if students want it and others require students to attend school 4 days a week to complete the virtual courses. In most cases students also have to pay for these virtual summer classes, with costs ranging from $195 to $399 per course, though a few districts do not charge students if the course is for credit recovery. A similar arrangement could likely be made to allow students to take online AP and dual enrollment courses over the summer, potentially using the same staff and classrooms to provide in-person support as needed. Summer courses could also be an option for CTE and EMC programs, though most of those courses cannot be taught virtually so extra funding would be needed to cover the costs of in-person instruction and transportation would still be a major barrier for many students. Fee waivers should also be available to economically disadvantaged students to ensure that cost is not a major barrier for students interested in pursuing advanced courses.

Across the five main high schools in Livingston County, over 90% of students graduate on time and over half of graduates immediately enroll in postsecondary education. Every school offers an array of options for students to go beyond basic graduation requirements and take advantage of special programs and advanced coursework to get a head start on their future goals. **This report highlights the successes of all the teachers, administrators, and staff who show up every day dedicated to offering a quality public education to the young people in Livingston County.**

Appendix

Figure 15. Map of Livingston School Districts, Main Schools, and Contracted Programs

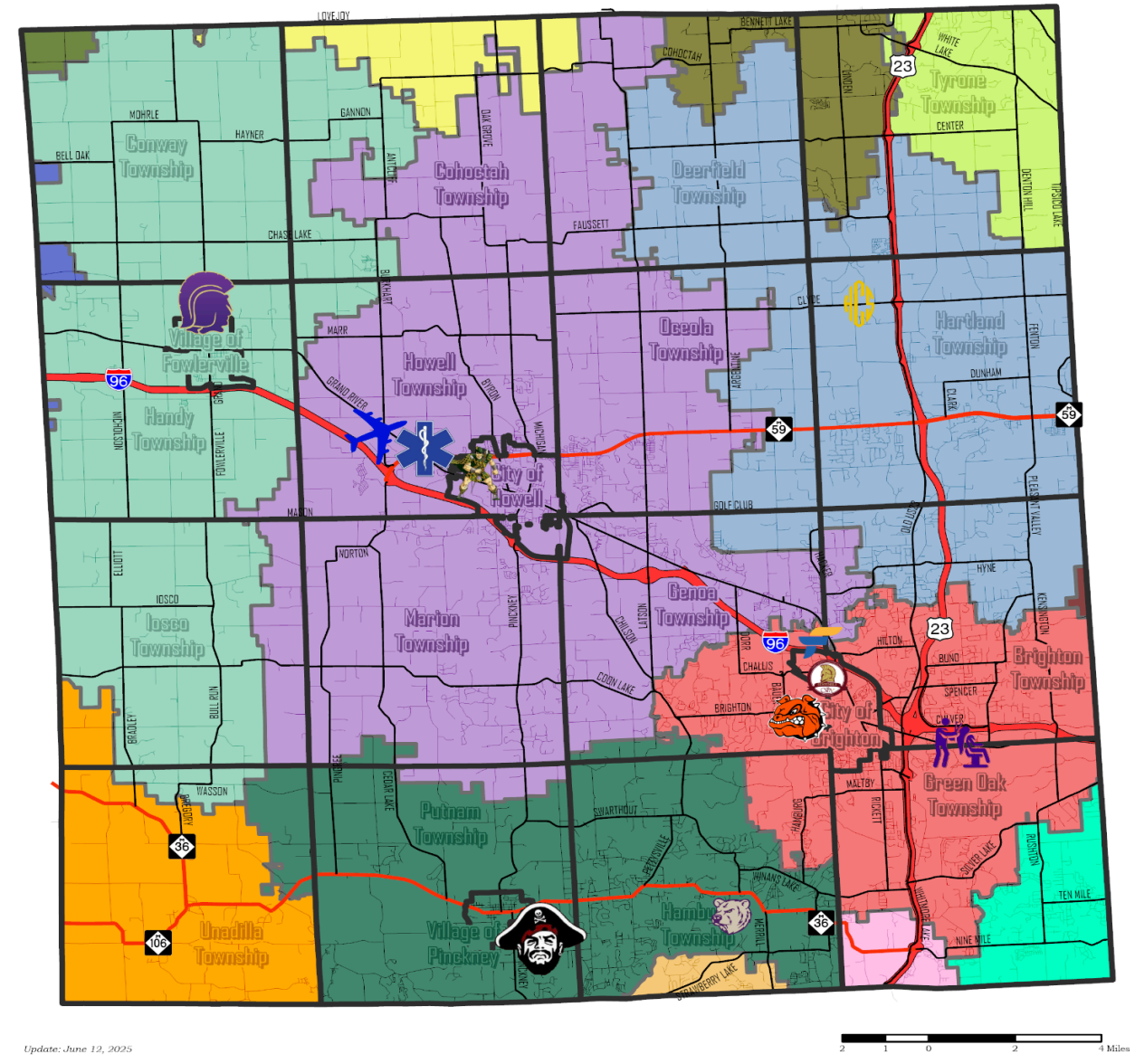


Table 8. Survey Ratings of Barriers Across Programs

	AP	On-site CTE	Off-site CTE	EMC	DE
Barriers					
Not enough seats in high-demand courses	1	**10**	**16**	1	-
Lack of transportation	-	-	**15**	**12**	6
Scheduling: Not enough room in schedules	**8**	**14**	**13**	**7**	**7**
Scheduling: Bell schedules	-	-	**14**	5	5
Scheduling: Semester calendars	-	-	**11**	6	3
Lack of student/family awareness of options	4	2	2	**10**	5
Students not academically prepared	**9**	1	0	**8**	5
Lack of awareness among school/district staff	-	1	1	6	3
Financial concerns for students	0	2	**7**	4	4
Financial concerns for school/district	-	5	**7**[b]	1	4
Programs do not align with student interests	2	4	4	**9**	1
Student/parent/family perceptions	-	4	1	5	2
School/district staff perceptions	-	0	0	3	4
Lack of support services for special populations	3	3	4	3	1
School staff's preference to keep students in the building	-	-	-	-	6
School staff's preference to keep students with regular peers	-	-	-	-	3
Insufficient guidance from teachers/counselors	1	-	-	-	-
Number of responses[a]	20	17	20	19	20

Notes: We asked school counselors and administrators to rate the barriers to each program on a scale from (1) “No barrier” to (5) “Very Large” barrier. This chart shows the number of respondents who rated each item as a (3) moderate, (4) large, or (5) very large barrier.

If 35% or more of respondents rated an item as a moderate to very large barrier it is shown in bold and shaded in yellow/gold, with darker gold indicating a higher proportion of responses. The dash means that the item was not included in the barriers list for the program (i.e., no transportation barrier for in-school programs).

[a] A total of 20 survey responses were collected. The charter schools do not offer any on-site CTE so they were not asked the questions about barriers to on-site CTE; thus, the denominator for that column is 17 instead of 20.

[b] All three charter school respondents rated financial concerns to the district as a moderate to very large barrier for off-site CTE. This was the strongest difference between the responses from the charter schools and the non-charter schools.

Table 9. Where Pinckney Students Attend Off-Site CTE, 2023-24 through 2025-26

Off-Site Location	Travel Time	2023-24	2024-25	2025-26
Brighton HS	21 mins	7	8	6
Livingston EMS	23 mins	1	6	5
Crosswinds	24 mins	2	5	1
Howell HS	25 mins	22	17	23
Cosmetology	28 mins	2	3	1
Fowlerville HS	30 mins	0	1	0
Hartland HS	37 mins	0	1	0
Total		**34**	**41**	**36**

Source: LESA reports. Notes: Data correspond to Figure 5. Travel times are from Pinckney HS to each off-site location.

Table 10. Where Fowlerville Students Attend Off-Site CTE, 2023-24 through 2025-26

Off-Site Location	Travel Time	2023-24	2024-25	2025-26
Crosswinds	11 mins	2	5	1
Howell HS	16 mins	5	7	9
Brighton HS	28 mins	1	0	0
Pinckney HS	30 mins	8	5	4
Wilson Talent Center	31 mins	43	43	19
Total		**59**	**60**	**33**

Source: LESA reports. Notes: Data correspond to Figure 7. Travel times are from Fowlerville HS to each off-site location.

Table 11. Where Hartland Students Attend Off-Site CTE, 2023-24 through 2025-26

Off-Site Location	Travel Time	2023-24	2024-25	2025-26
Livingston EMS	16 mins	9	7	10
Cosmetology	17 mins	2	3	7
Brighton HS	18 mins	17	4	1
Crosswinds	18 mins	23	13	16
Howell HS	21 mins	38	52	53
Fowlerville HS	30 mins	2	5	5
Pinckney HS	34 mins	7	2	2
Total		**98**	**86**	**94**

Source: LESA reports. Notes: Data correspond to Figure 9. Travel times are from Hartland HS to each off-site location.

Table 12. Where Brighton Students Attend Off-Site CTE, 2023-24 through 2025-26

Off-Site Location	Travel Time	2023-24	2024-25	2025-26
Cosmetology	8 mins	5	5	4
Hartland HS	17 mins	3	0	5
Howell HS	21 mins	13	27	19
Pinckney HS	21 mins	2	11	12
Crosswinds	21 mins	11	10	7
Livingston EMS	21 mins	3	5	13
Fowlerville HS	27 mins	8	3	3
Total		**45**	**61**	**63**

Source: LESA reports. Notes: Data correspond to Figure 11. Travel times are from Brighton HS to each off-site location.

Table 13. Where Howell Students Attend Off-Site CTE, 2023-24 through 2025-26

Off-Site Location	Travel Time	2023-24	2024-25	2025-26
Livingston EMS	5 mins	9	11	8
Crosswinds	6 mins	13	21	21
Fowlerville HS	15 mins	14	13	12
Hartland HS	16 mins	3	5	2
Brighton HS	21 mins	2	4	6
Cosmetology	24 mins	7	5	5
Pinckney HS	25 mins	20	31	27
Total		**68**	**90**	**81**

Source: LESA reports. Notes: Data correspond to Figure 13. Travel times are from Howell HS to each off-site location.

Table 14. Number of Students Enrolled in LESA EMC Programs by District and Year, 2023-24 through 2025-26

Program	Year	Howell	Hartland	Brighton	Pinckney	Fowlerville	Total
Nursing	2023-24	28*	8	18*	5	1	**60**
Nursing	2024-25	21*	10	15*	5	1	**52**
Nursing	2025-26	19*	12	14*	3	3	**51**
Business	2023-24	18	4	4	3	4	**33**
Business	2024-25	19	4	6	2	2	**33**
Business	2025-26	28	10	9	3	1	**51**
College Foundation	2023-24	5	6	2	1	0	**14**
College Foundation	2024-25	13	12	5	1	2	**33**
College Foundation	2025-26	21	21	9	0	2	**53**
Welding	2023-24	13*	3	0	3*	1	**20**
Welding	2024-25	12*	3	2	2*	1	**20**
Welding	2025-26	14*	1	2	3*	1	**21**
Auto	2023-24	7	1*	1*	3*	1	**13**
Auto	2024-25	5	1*	3*	1*	1	**11**
Auto	2025-26	4	3*	4*	0	1	**12**
Mechatronics	2023-24	0	5	3	1*	0	**9**
Mechatronics	2024-25	0	5	3	1*	0	**9**
Mechatronics	2025-26	1	4	3	1*	0	**9**
Cyber Security	2023-24	4	3*	1	1	1	**10**
Cyber Security	2024-25	2	2*	0	2	1	**7**
Cyber Security	2025-26	4	4*	0	1	0	**9**

Source: LESA reports.

Notes: * Indicates the district offers the required 11th grade courses to enter the EMC.