



Asset Mapping Report

Benton Harbor, Berrien County, Michigan



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- Benton Harbor Area Schools
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- Berrien County Sheriff's Department
- Berrien RESA
- Berrien Springs Public Schools
- Boys and Girls Club of Benton Harbor
- City of St. Joseph
- Cook Nuclear Site
- Cornerstone Alliance
- Countryside Academy
- Early Middle College Program
- Eau Claire Public Schools
- Fifth Third Bank
- Gast Manufacturing
- Hanson Mold
- Horizon Bank
- Junior Achievement
- Kinexus Group
- Lake Michigan College
- Lyons Industries
- MI Works! Berrien, Cass, Van Buren
- Michigan Rehabilitation Services
- Michigan's Great Southwest Strategic Leadership Council
- Special Lite
- Spectrum Health
- St. Joseph Public Schools
- The First Tee of Benton Harbor
- The OutCenter
- United Way of SW Michigan
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- Whirlpool Corporation
- Youth Solutions

About JFF

JFF is a national nonprofit that drives transformation in the American workforce and education systems. For nearly 40 years, JFF has led the way in designing innovative and scalable solutions that create access to economic advancement for all. www.jff.org

About Pathways to Prosperity

Launched in 2012, Pathways to Prosperity is a joint initiative of JFF and the Harvard Graduate School of Education that seeks to ensure that many more young people complete high school, attain postsecondary credentials with currency in the labor market, and launch careers while leaving open the prospect of further education. www.jff.org/pathwaystoprosperity

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Introduction

The Inspiring Futures: Benton Harbor initiative is working to build college and career pathways that support young people in Benton Harbor and across Berrien County in the attainment of their educational and career goals. The vision of Inspiring Futures is that “channeling the right support, with the right partners, at the right times, will lead to long-term career success for Benton Harbor-area youth.”¹ The work of the initiative is organized around three pillars, and subject matter experts serve on pillar-aligned committees dedicated to identifying and tackling relevant challenges. Inspiring Futures has identified what it hopes to achieve through each pillar, as follows:

- **Continuum of Services:** A community that provides a self-sustaining continuum of services that empower youth to realize their potential, pursue successful career pathways, and achieve professional goals
- **Engaging Employers:** A network of employers delivering a consistent and equitable framework that engages, develops and mentors local youth with the necessary skills for life-sustaining career success
- **Breaking Down Barriers:** A path for every student to connect with opportunities, overcome barriers, and engage with local mentors to reach their potential.

This report is intended to advance the aims of the Inspiring Futures initiative. It provides insights about the region aligned to the initiative’s three pillars of work, and it will serve for future initiative planning and design. JFF’s national expertise, networks, and resources, in particular the Pathways to Prosperity framework, are aligned with these pillars and serve as the basis for the structure and content of this report. The JFF team carried out virtual interviews with regional stakeholders in May and June of 2021.

Aligning the skills students learn in school with the requirements of the labor market requires ongoing communication and collaboration between industry and education. The education system must support young people’s exploration of potential career options and provide rigorous, relevant instruction that prepares them for college and careers upon graduating from high school or obtaining a high school equivalent. Students must be able to see the real-world applications of education experiences in order to set and pursue career goals.

Two particular aspects of the Pathways to Prosperity approach are important to student success: work-based learning and attaining college credit while in high school. Work-based learning helps young people apply the knowledge they learn in school; it makes preparing for the future real. Attaining college credit while in high school gives students an early start on the

postsecondary learning that is essential for almost all careers. Particularly for students who are not sure that college is for them, trying and succeeding in college courses is a powerful way to change that belief. In fact, research confirms that early college credit increases the likelihood that students will earn a postsecondary credential.²

Pathways to Prosperity ties these conceptual strands together in a coherent framework that includes five elements of a college and career pathways system for grades 9 to 14:

- Career pathways with clear structures, timelines, costs, and requirements that link and integrate high school and community college curricula—and align both with labor market needs
- An early and sustained career information and advising system that is strong enough to help students and families make informed choices about education and career paths
- Employers that are committed to providing learning opportunities at the workplace and supporting young people’s transition into the labor market
- Local or regional intermediary organizations to provide the infrastructure and support for the development of such pathways
- A high-visibility stakeholder group representing employers, policymakers, and K-12 and higher education who support the regional work as public spokespeople and champions and are ready to develop, promote, and enact policies that create enabling conditions for the development of pathways systems

Pathways to Prosperity Framework

Goal: College and Career Pathways Linked to Local Labor Market Needs

This framework aims that demonstrably more young people in key regional labor markets can complete high school, attain a postsecondary credential with currency in that labor market, and launch a career while leaving open the prospect of further education.

Implementation Levers	What the Work Looks Like
College and Career Pathways	High schools and community colleges create college and career pathways with clear structures, timelines, costs, and requirements that link and integrate high school and postsecondary curricula—and align both with labor market requirements.
Career Information and Advising System	Starting in the middle grades, students are exposed to a wide range of opportunities to learn about career options and high school and postsecondary courses of study leading to careers. Students engage in a continuum of work-based learning opportunities in their chosen career areas. Intermediaries, employers, and community-based organizations help young people make informed choices throughout each college and career pathway.
Work-Based Learning and Employer Engagement	Employers commit to providing a continuum of learning opportunities at the workplaces throughout each college and career pathway. Employers collaborate with educators and are supported by intermediaries in structuring and managing workplace learning. Employers support students' transition into the local labor market.
Intermediaries	Local or regional intermediaries serve as conveners, brokers, and technical assistance providers to schools and employers engaged in building and sustaining pathways. Intermediaries recruit business, nonprofit, and public employers and ensure that participating leaders understand and support the vision.
Policy Environment	State dual enrollment policies ensure access for low-income students. Districts and community colleges have financial incentives and sustainable funding to provide college and career programs of study in career and technical education and leading to diplomas, certificates, and/or associate's degrees. Accountability systems weight dual enrollment courses as they weight AP and IB. The state provides incentives for employers and unions to provide opportunities for work experience.

The Purpose of Asset Mapping

The asset mapping report that follows provides baseline data for Berrien County, including the Benton Harbor community, in Michigan to support building college and career pathways, expanding relationships between educators and industry leaders, and supporting the Inspiring Futures initiative's efforts to improve student outcomes across the K-12 system and for young people who are disconnected from school and work.

The purposes of asset mapping are as follows:

- To assemble baseline demographic and labor market data about the region to provide a factually grounded basis for planning career pathways
- To assess the region's assets and gaps against critical college and career pathways components, in alignment with the Inspiring Futures initiative's three pillars of work
- Within the limits of short, virtual interviews, to bring a helpful "outsider" look at the region from a national perspective
- To serve as the foundation for further planning
- To help to identify regional leaders with the energy and commitment to make and implement pathways plans

The Inspiring Futures initiative is committed to ensuring the success of all young people in the region, including those who have left school without a diploma and those who have graduated from high school, but have not gone on to postsecondary education. As such, JFF has incorporated findings about this population and about the options available for them to get back on a path to postsecondary and labor market success. We applaud this commitment to all youth and hope this report will help local stakeholders in developing a regional pathways system that offers equitable options for all young people in the area.

This report provides a preliminary look at the region's many resources for pathways development. It describes demographic and economic characteristics of Berrien County, which includes the Benton Harbor community, and the surrounding labor market, then presents key findings aligned to each lever in the Pathways to Prosperity framework and each pillar of work in the Inspiring Futures initiative. It concludes with a set of opportunities and key questions to inform future planning.

Overall, Berrien County is well-positioned for success in developing high-quality college and career pathways aligned to regional labor market needs. Many state-level policies, initiatives, and programs are aligned with key elements of pathways, including career and technical education, dual enrollment, work-based learning, and career advising. There are also

opportunities to tap into pandemic relief funding in the short term to bolster supports for those most impacted and remove barriers to accessing career programming. Many opportunities for accelerated coursework such as dual enrollment and for career and technical education exist and could be expanded; however, equitable access remains a challenge across the county, and there are limited on-ramps to opportunity for disconnected youth in particular.

To benefit from college and career pathways in the region, young people need support and advising to make sense of labor market information and explore the range of careers available in the region, beginning as early as the middle grades. Many organizations and service providers in the region, in addition to K-12 schools and colleges, provide career information and advising, but these efforts could be more intentionally coordinated and aligned to state-level requirements.

Greater coordination and collaboration between stakeholders in the region, especially employers and education partners, is also needed to expand the types and scale of work-based learning and deliver these opportunities equitably throughout the region. Many organizations and representative groups—including community-based organizations, education partners, workforce and economic development agencies, and cross-sector committees—are serving a wide range of intermediary functions, and a system of collaboration to coordinate the work of these intermediary entities will be critical to advancing the work of the Inspiring Futures initiative in the region.

Regional Overview

Demographics and the Economy

Benton Harbor is one of the two principal cities forming the urban cores of the Niles-Benton Harbor, MI Metropolitan Statistical Area (MSA), a geographical designation in southwest Michigan congruent with the boundaries of Berrien County. The population of Berrien County is 154,133 people, of which 9,843 reside in Benton Harbor (*see Table 1*). Since peaking at 19,136 in 1960, the population of Benton Harbor has declined by 48.6 percent overall.³ During the COVID-19 pandemic, Berrien County experienced a 6.6 percent increase over the prior year in the ratio of inflow to outflow of people, the third-highest rate among metro areas in Michigan with more than 1,000 people moving in and 1,000 moving out during both periods.⁴

Indicators of socioeconomic well-being show large differences between residents of Benton Harbor, where over one-third of persons in Berrien County who are Black reside, and those in the county and the state overall (*see Table 1*). Prior to the COVID-19 pandemic, Benton Harbor's

poverty rate was over three times higher than the rate statewide and almost three times the rate in Berrien County. Per capita income in Berrien County and in Michigan overall is over double the per capita income in Benton Harbor. Berrien County and Michigan also have better labor market outcomes, with unemployment rates in Benton Harbor more than double those in Berrien County and the state.

Table 1. Demographic and Economic Characteristics (2019)

Indicators		Benton Harbor	Berrien County	Michigan
Population		9,843	154,133	9,965,265
Children under 18		27.9%	21.9%	21.9%
Racial and ethnic composition	White	12.2%	78.7%	78.4%
	Black or African American	84.7%	14.6%	13.8%
	American Indian and Alaska Native	0.0%	0.4%	0.5%
	Asian	0.0%	1.9%	3.1%
	Native Hawaiian and other Pacific Islander	0.0%	0.0%	0.0%
	Two or more races	2.8%	3.1%	2.9%
	Hispanic or Latino (of any race)	5.4%	5.5%	5.1%
Median household income		\$31,149	\$64,477	\$72,600
Per capita income		\$14,197	\$30,864	\$31,713
Poverty rate (all people, 2019)		45.4%	16.1%	14.4%
Poverty rate (all people, 2010)		48.7%	16.4%	14.8%
Change in poverty rate (all people, 2010 to 2019)		-3.3%	-0.3%	-0.4%
Child poverty rate (under 18)		66.1%	25.0%	19.9%
Received food stamps/SNAP benefits in past 12 months		47.4%	14.0%	13.3%
Unemployment rate (2019)		14.0%	5.9%	5.9%
Unemployment rate (2018)		17.1%	6.4%	6.5%
Year-over-year change in unemployment rate		-3.1%	-0.5%	-0.6%

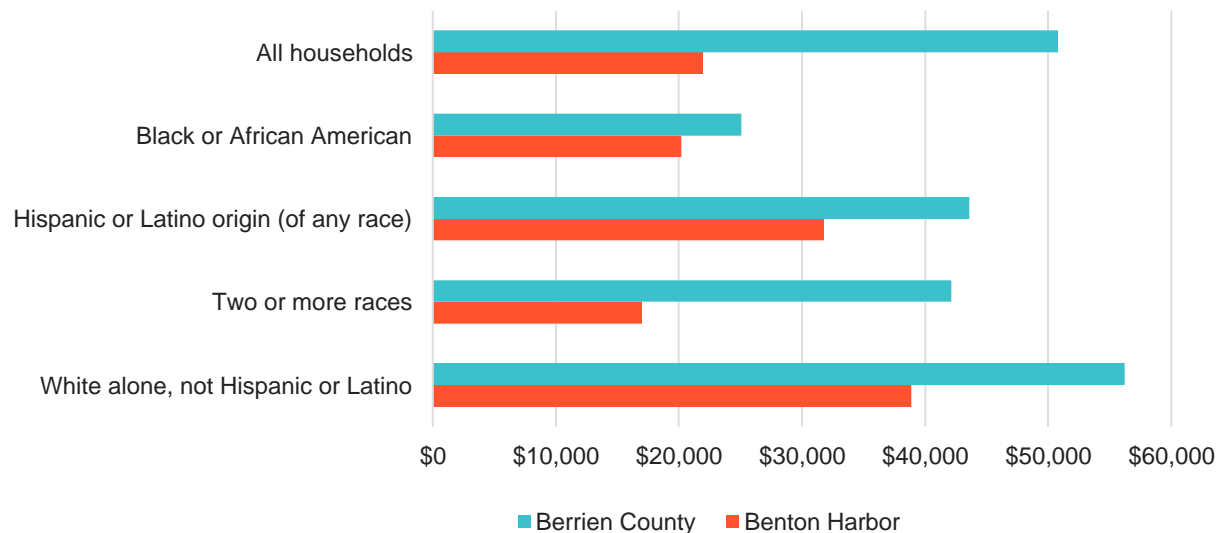
Source: U.S. Census Bureau 2019 American Community Survey 5-Year Estimates.

Table 2. Social Characteristics (2019)

Indicators	Benton Harbor	Berrien County	Michigan
Foreign born	1.5%	5.6%	6.9%
Language other than English spoken at home	4.0%	7.6%	9.7%
Under 18 with a disability	9.9%	5.5%	4.8%

Source: U.S. Census Bureau 2019 American Community Survey 5-Year Estimates.

The data on median household income, as well as poverty, across municipalities in Berrien County also raise equity concerns. The population of Benton Harbor is predominately Black (84.7 percent), while the populations of Berrien County and Michigan overall are predominantly white (78.7 and 78.4 percent respectively; *see Table 1*). Data on median household income show that income is lower in Benton Harbor than in Berrien County in households overall and for all racial and ethnic groups (*see Chart 1*). In Berrien County, median household income for people who are white is more than double the median household income of people who are Black. The median household income for people in Berrien County who are white is almost three times the median household income of people in Benton Harbor who are Black.

Chart 1. Median Household Income by Detailed Racial and Ethnic Group (in 2019 Inflation-Adjusted Dollars)

Source: U.S. Census Bureau 2019 American Community Survey 5-Year Estimates.

Educational Attainment

School enrollment patterns reveal significant differences in the racial and ethnic composition of districts across Berrien County (*see Table 3*). While Benton Harbor Area Schools (BHAS) serve a student population that is predominately Black (95.6 percent), Berrien RESA and public schools in Michigan overall serve majority white populations (62.6 percent and 65.0 percent respectively). In St. Joseph Public Schools, located across the river from Benton Harbor in the City of St. Joseph, students who are white make up 75.7 percent of the population, while students who are Black make up 7.8 percent. Coupled with data on educational outcomes (*see below*), these data suggest inequities exist by geography and racial and ethnic group.

Students in Michigan often have the option of enrolling in a range of districts and institutions. Michigan's Schools of Choice provisions "allow local school districts to enroll non-resident students and count them in membership without having to obtain approval from the district of residence."⁵ Students also have the option to enroll in Public School Academies, also known as charter schools.⁶ In 2020-2021, about two-thirds of Benton Harbor's approximately 5,029 resident students enrolled in a school outside the Benton Harbor Area Schools district.⁷ About 38 percent of Benton Harbor resident students enrolled in another local school district (LEA), while about 29 percent enrolled in a Public School Academy (PSA).

High school graduation rates in districts and schools within Berrien RESA reveal inequities across the county. The four-year adjusted cohort graduation rate in Benton Harbor High School (BHHS), for example, is 64.2 percent. This compares to high rates in other high schools such as St. Joseph High School (97.1 percent) and 82.1 percent across all public schools in Michigan. Furthermore, BHHS serves a student population with greater needs: all students in BHHS are classified as economically disadvantaged, as compared to 59.6 percent in Berrien RESA and 50.9 percent statewide, and BHHS has a larger proportion of students with disabilities than in Berrien RESA and in the state overall. Moreover, alternative high schools and virtual academies often have significantly lower graduation rates than traditional high schools in their districts.

Rates of advancement from high school into postsecondary education also vary by geography and racial and ethnic group. In 2019-2020, about 23.8 percent of all high school graduates in BHAS and 23.3 percent of graduates who are Black enrolled in college within six months after graduation.⁸ This compares to 32.4 percent overall across Berrien RESA for high school graduates who are Black and 42.5 percent for high school graduates who are white. Statewide, rates of enrollment are significantly higher than those in BHAS and Berrien RESA: 39.2 percent for students who are Black and 58.1 percent for students who are white. Low rates of transition into postsecondary education limit progress toward reaching statewide goals for educational attainment.

Table 3. School Enrollment for the 2020-2021 Academic Year (All Grades)

Indicators		Benton Harbor High School	Benton Harbor Area Schools	Berrien RESA	Michigan Public Schools
Total enrollment		540	1,613	24,402	1,437,612
Enrollment by race/ethnicity	American Indian or Alaska Native	-	<1%	0.5%	0.6%
	Asian	-	<1%	1.7%	3.5%
	African American	95.6%	94.1%	18.4%	17.7%
	Hispanic or Latino	<2%	1.7%	10.9%	8.4%
	Native Hawaiian or Other Pacific Islander	<2%	<1%	0.2%	0.1%
	Two or More Races	2.4%	2.5%	5.7%	4.7%
	White	<2%	1.1%	62.6%	65.0%
Four-year adjusted cohort graduation rate (2020 graduation cohort)		64.2%	55.9%	-	82.1%
English learner enrollment		0.9%	0.9%	5.3%	6.3%
Economically disadvantaged enrollment		100.0%	99.9%	59.6%	50.9%
Students with disabilities		14.8%	18.9%	12.0%	13.5%

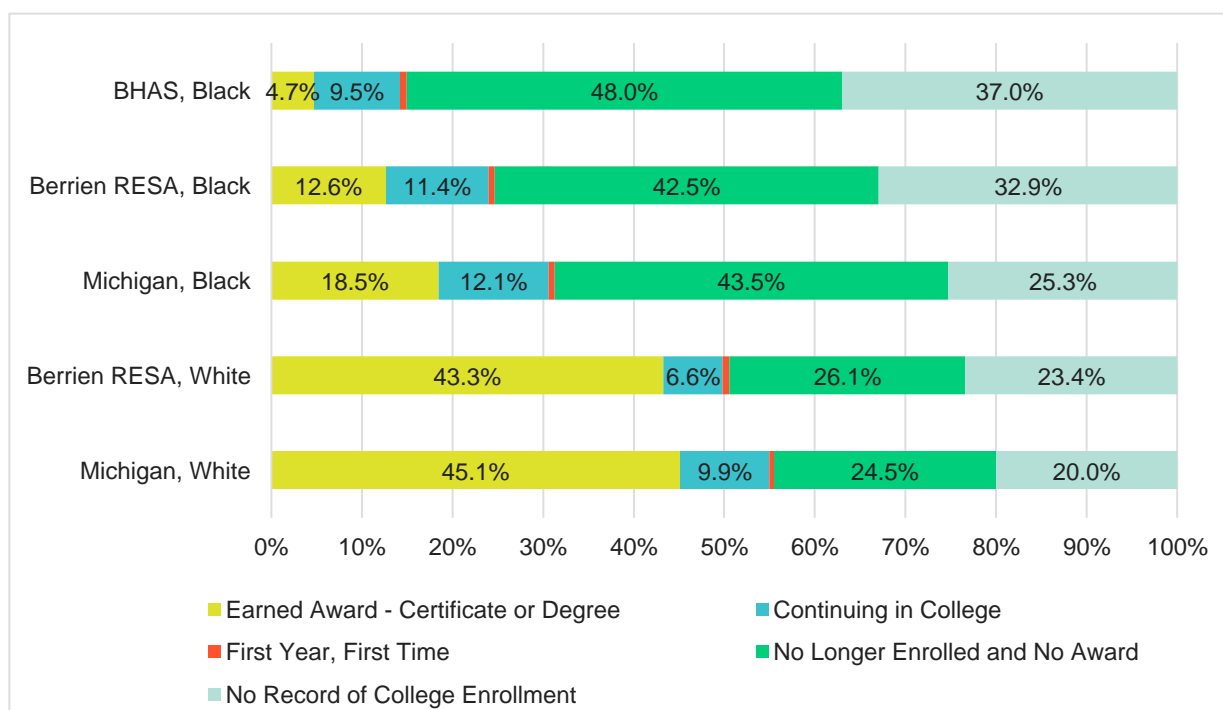
Source: Michigan's Center for Educational Performance and Information (CEPI); MI School Data.

Note: For the purposes of graduation rates, Benton Harbor Area Schools includes Benton Harbor High School and Career and Alternative Pathways to Education Center.

In 2019, at which point over 40 states had adopted similar goals, Governor Gretchen Whitmer announced a goal to increase “the number of Michiganders between the ages of 16 and 64 with a post-secondary credential to 60 percent by 2030”.⁹ Increasing the percentage of adults with a postsecondary credential is also a goal found in Michigan's Top 10 Strategic Education Plan (see *Policy Environment*). Statewide, 49.1 percent of adults had attained a postsecondary degree or short-term credential by 2020.¹⁰ To reach this goal with equity in Berrien County, further progress is needed to ensure all young people leaving high school enroll in and complete postsecondary programs. Data for the graduating class of 2013-2014 show that only 37.0 percent of high school graduates within Berrien RESA had attained a postsecondary certificate or degree after six years, as compared to 40.3 percent statewide and 5.3 percent in BHAS.¹¹ In addition, many young people in the county are disconnected, meaning they are neither in school nor working. The rate of youth disconnection for young people ages 16 to 24 is about 12 percent in Berrien County, above the rate statewide (10.6 percent) but below the national rate (11.2 percent).¹²

In addition to equity gaps within Berrien RESA, there are significant equity gaps along racial lines in college enrollment and progression (*see Chart 2*). Data from the graduating class of 2013-2014 show that there is no record of college enrollment after six years for about 37.0 percent of students who are Black in BHAS, as compared to 32.9 percent in Berrien RESA and 25.3 percent statewide. For students who are white, 23.4 percent within Berrien RESA and 20.0 percent statewide have no record of college enrollment. After six years, the percentage of students statewide who are Black and earned a certificate or degree was almost four times the percentage in BHAS, while the percentage in Berrien RESA was over 2.5 times higher than the rate of attainment for students who are Black in BHAS. Closing these gaps and lifting all boats will be key to meeting Michigan's Sixty by 30 goal.

Chart 2. College Enrollment and Credential Status as of 2019-2020, by Racial Group (Class of 2013-2014)



Source: MI School Data.

Economic and Labor Market Overview

Identifying pathways that can prepare young people for careers in high-growth, high-demand occupations that pay family-sustaining wages requires careful consideration of available labor market information. Pathways should prepare young people for careers in industries that offer career ladders and provide young people with opportunities to move up within their chosen fields as they gain additional postsecondary credentials and education. Other considerations in

identifying promising industries include family-sustaining wages, strong projections for growth, and large numbers of anticipated retirements in the next ten to twenty years. This section of the report explores possible areas for pathways development: health care, manufacturing, information technology, and business and finance.

Since labor markets function at the level of regions rather than cities, the labor market information in this section takes into account local commuter patterns to establish a geographical area for analysis. Data from the U.S. Census Bureau suggest that about 27.8 percent of employed residents of Benton Harbor travel more than 50 miles to get to their place of primary employment.¹³ Therefore, the labor market information in this section, unless otherwise noted, is defined by the 131 ZIP codes located within a 50-mile radius from central Benton Harbor (hereafter “target region”).

Data from Economic Modeling Specialists, Inc. (EMSI) indicate that while the target region is projected to see a small net increase of about 2,450 jobs (or 0.4 percent) in the next 10 years, many do not offer wages that meet the definition of a family-sustaining wage. According to MIT’s Living Wage calculator, a living wage in Berrien County for one adult and one child, which we refer to as a family-sustaining wage in this report, is \$60,593 annually or \$29.13 hourly; for a single person the living wage is \$27,710 annually or \$13.32 hourly (*see Visual 1*).

A challenge in the target region is that average wages in many industries are less than the required income to support one adult and one child. Table 4 shows all industries in the target region sorted by predicted growth in the number of jobs between 2020 and 2030, with health care and social assistance expecting the most growth (7,524 positions) and manufacturing expecting the greatest decline (7,389 positions). Throughout this section, numbers in red text in a “change” column indicate a decline in the number or percentage of jobs over the next ten years. Text in red under an “earnings” column indicates that earnings are below a living wage for one adult, while text in blue indicates earnings are above a living wage for one adult but below a family-sustaining wage. Average wages in eight out of twenty of the industries in the target region, accounting for 33.9 percent of all in-region payrolled employment in 2020, are below a family-sustaining wage.

Visual 1. Living Wage in Berrien County, Michigan



One Adult

\$13.32/hour

\$27,710 annually



One Adult, One Child

\$29.13/hour

\$60,593 annually

Source: MIT's Living Wage Calculator, 2021.

Labor market data, qualitative research from interviews conducted for this report, and resources such as the Michigan Bureau of Labor Market Information and Strategic Initiatives suggest that health care, manufacturing, information technology (IT), and business and finance are promising areas of focus for pathway development in Berrien County. These areas have the highest pathways potential due to factors such as: the number of jobs and projected growth in sectors, industry groups, and occupations; an industry's location quotient, a value that compares an industry's share of employment regionally with its share nationally; the number of anticipated separations, including retirements; the availability of career ladders; and opportunities for family-supporting wages (*see Table 4*).¹⁴ In other words, these are areas that are important for workforce and economic development in the target region and also provide robust opportunities for advancement for young people and young adults.

Table 4. Sectors by Projected Payrolled Job Growth over the Time Period 2020-2030, Target Region

Sector	Jobs (2020)	Jobs (2030)	Change 2020- 2030	Percent Change 2020- 2030	Location Quotient (2020)	Location Quotient (2030)	Avg. Earnings Per Job
Health Care and Social Assistance	69,971	77,495	+7,524	+10.8%	0.94	0.95	\$62,168
Professional, Scientific and Technical Services	17,380	19,549	+2,169	+12.5%	0.49	0.51	\$76,779
Educational Services	24,803	26,198	+1,395	+5.6%	1.77	1.74	\$47,175
Management of Companies and Enterprises	6,221	7,375	+1,154	+18.6%	0.72	0.83	\$148,645
Leisure and Hospitality	48,246	49,204	+958	+2.0%	0.96	0.96	\$21,344
Wholesale Trade	22,313	23,240	+927	+4.2%	1.05	1.15	\$71,111
Construction	21,429	22,287	+858	+4.0%	0.78	0.80	\$71,518
Other Services (except Public Administration)	26,530	27,304	+775	+2.9%	1.05	1.09	\$31,540
Finance and Insurance	15,946	16,385	+440	+2.8%	0.66	0.69	\$87,118
Unclassified Industry	476	827	+351	+73.6%	0.87	1.21	\$43,943
Real Estate and Rental and Leasing	6,229	6,537	+308	+4.9%	0.74	0.80	\$54,022
Mining, Quarrying, and Oil and Gas Extraction	146	170	+23	+15.9%	0.07	0.08	\$100,819

Transportation and Warehousing	13,032	12,939	-93	-0.7%	0.61	0.58	\$66,728
Utilities	3,089	2,886	-204	-6.6%	1.53	1.55	\$168,071
Agriculture, Forestry, Fishing and Hunting	5,126	4,833	-293	-5.7%	0.94	0.89	\$39,233
Information	3,060	2,594	-466	-15.2%	0.30	0.26	\$72,366
Retail Trade	54,015	52,847	-1,168	-2.2%	0.97	1.01	\$36,747
Government	64,010	62,828	-1,183	-1.8%	0.71	0.72	\$61,666
Admin., Support, Waste Mgmt./Remediation	22,721	19,085	-3,637	-16.0%	0.70	0.59	\$39,704
Manufacturing	130,888	123,499	-7,389	-5.6%	2.88	2.88	\$77,874

Source: Economic Modeling Specialists, Inc. (Emsi). Data Set 2021.2.

Health Care

With average earnings per job that are greater than the living wage threshold for one adult and one child in Berrien County and the highest projected payrolled job growth of any sector in the target region, Health Care and Social Assistance, or simply health care, is a promising option for pathways development and related career laddering (*see Table 4*). This sector accounts for about 12.6 percent of total employment in the region, and by 2030 the number of jobs is expected to grow by 10.8 percent (7,524 new jobs).

However, among the top twenty health care occupations with the greatest number of openings¹⁵ projected between 2020 and 2030, fifteen have median hourly earnings below the living wage threshold for one adult and one child (*see Table 5*). Of the five occupations listed that do provide median hourly earnings above the living wage for a family, only one—dental hygienists—typically requires less than a bachelor’s degree. Nevertheless, most middle-skill occupations—those that require some postsecondary education but less than a bachelor’s degree—pay a living wage for a single adult. Health care offers many opportunities to move up in the industry, and it will be important that relevant career ladders and educational pathways that lead to family-sustaining wages are clear and accessible to youth and young adults considering this industry.

Analyzing health care occupations by typical entry-level education and number of projected openings reveals possible careers to which educational pathways and career ladders might align. Looking at the top five entry-level, middle-skill, and high-skill occupations with the highest number of job openings between 2020 and 2030, none of the entry-level occupations pay a family-sustaining wage, one of the middle-skill occupations does, and four of the five high-skill occupations do (*see Table 6*). The occupation with the largest projected number of openings within the 2020-2030 time frame is Home Health and Personal Care Aides, but this occupation pays about 40 percent of a family-sustaining wage and is below the living wage for a single adult. The top 15 middle-skill occupations in health care pay a living wage for a single adult, including Nursing Assistants, the occupation with the largest number of openings among these top 15 (*see Table 7*). With almost as many openings as Nursing Assistants, Registered Nurses typically require a bachelor’s degree and pay above the threshold for a family-sustaining wage.

Table 5. Top 20 Healthcare Occupations with Largest Number of Openings, 2020-2030, Target Region

Occupation	Jobs (2020)	Jobs (2030)	Change 2020- 2030	Percent Change 2020- 2030	Openings 2020- 2030	Median Hourly Earnings	Typical Entry-Level Education
Home Health and Personal Care Aides	9,078	11,186	+2,108	+23.2%	17,361	\$11.64	High school diploma or equivalent
Nursing Assistants	5,166	5,505	+340	+6.6%	6,492	\$14.42	Postsecondary nondegree award
Registered Nurses	10,678	11,164	+486	+4.6%	6,440	\$32.63	Bachelor's degree
Medical Assistants	2,753	3,090	+336	+12.2%	3,601	\$16.61	Postsecondary nondegree award
Medical Secretaries and Administrative Assistants	2,165	2,286	+121	+5.6%	2,670	\$17.06	High school diploma or equivalent
Licensed Practical and Licensed Vocational Nurses	1,771	1,972	+202	+11.4%	1,673	\$23.96	Postsecondary nondegree award
Medical and Health Services Managers	1,351	1,717	+366	+27.1%	1,574	\$44.16	Bachelor's degree
Dental Assistants	1,026	1,083	+57	+5.5%	1,251	\$19.24	Postsecondary nondegree award
Pharmacy Technicians	1,463	1,342	-121	-8.3%	1,153	\$16.05	High school diploma or equivalent
Clinical Laboratory Technologists and Technicians	1,444	1,456	+12	+0.8%	969	\$22.14	Bachelor's degree

Nurse Practitioners	846	1,197	+351	+41.5%	938	\$49.12	Master's degree
Medical Dosimetrists, Medical Records Specialists, and Health Technologists and Technicians, All Other	973	1,066	+93	+9.6%	900	\$18.78	Postsecondary nondegree award
Healthcare Social Workers	731	798	+67	+9.2%	798	\$25.89	Master's degree
Dental Hygienists	978	992	+15	+1.5%	703	\$32.65	Associate's degree
Surgical Technologists	688	704	+16	+2.3%	598	\$23.50	Postsecondary nondegree award
Emergency Medical Technicians and Paramedics	792	820	+27	+3.4%	597	\$16.30	Postsecondary nondegree award
Phlebotomists	468	510	+42	+8.9%	563	\$16.28	Postsecondary nondegree award
Physical Therapist Assistants	369	428	+59	+16.0%	537	\$27.85	Associate's degree
Radiologic Technologists and Technicians	775	796	+21	+2.7%	450	\$28.50	Associate's degree
Physicians, All Other; and Ophthalmologists, Except Pediatric	1,249	1,275	+26	+2.1%	439	\$108.98	Doctoral or professional degree

Source: Economic Modeling Specialists, Inc. (Emsi). Data Set 2021.2.

Note: Openings refers to the change in the number of workers employed in an occupation plus the sum of the number of workers permanently leaving an occupation and needing to be replaced each year over the period 2020-2030. For further information, see: <https://kb.emsidata.com/methodology/how-does-ems-i-calculate-job-openings/>.

Table 6. Health Care Occupations with Largest Number of Openings from 2020 to 2030 by Skill Level, Target Region

Job Skill Level	Occupation	Openings 2020-2030	Median Hourly Earnings	Typical Entry-Level Education
High-Skill	Registered Nurses	6,440	\$32.63	Bachelor's degree
	Medical and Health Services Managers	1,573	\$44.16	Bachelor's degree
	Clinical Laboratory Technologists and Technicians	969	\$22.14	Bachelor's degree
	Nurse Practitioners	936	\$49.12	Master's degree
	Medical Scientists, Except Epidemiologists	677	\$37.94	Doctoral or professional degree
Middle-Skill	Nursing Assistants	6,493	\$14.42	Postsecondary nondegree award
	Medical Assistants	3,603	\$16.61	Postsecondary nondegree award
	Licensed Practical and Licensed Vocational Nurses	1,674	\$23.96	Postsecondary nondegree award
	Dental Assistants	1,252	\$19.24	Postsecondary nondegree award
	Medical Dosimetrists, Records Specialists, Other	703	\$32.65	Associate's degree
Entry-Level	Home Health and Personal Care Aides	17,361	\$11.64	High school diploma or equivalent
	Medical Secretaries and Administrative Assistants	2,671	\$17.06	High school diploma or equivalent
	Pharmacy Technicians	1,153	\$16.05	High school diploma or equivalent
	Healthcare Support Workers, All Other	403	\$14.72	High school diploma or equivalent
	Orderlies	345	\$14.15	High school diploma or equivalent

Source: Economic Modeling Specialists, Inc. (Emsi). Data Set 2021.2.

Note: Openings refers to the change in the number of workers employed in an occupation plus the sum of the number of workers permanently leaving an occupation and needing to be replaced each year over the period 2020-2030. For further information, see:

<https://kb.emsidata.com/methodology/how-does-emsidata-calculate-job-openings/>.

Table 7. Top 15 Middle-Skill Health Care Occupations with Largest Number of Openings from 2020 to 2030, Target Region

Occupation	Jobs (2020)	Jobs (2030)	Change 2020-2030	Percent Change 2020-2030	Openings 2020-2030	Median Hourly Earnings	Typical Entry-Level Education
Nursing Assistants	5,166	5,505	+340	+6.6%	6,492	\$14.42	Postsecondary nondegree award
Medical Assistants	2,753	3,090	+336	+12.2%	3,601	\$16.61	Postsecondary nondegree award
Licensed Practical and Licensed Vocational Nurses	1,771	1,972	+202	+11.4%	1,673	\$23.96	Postsecondary nondegree award
Dental Assistants	1,026	1,083	+57	+5.5%	1,251	\$19.24	Postsecondary nondegree award
Medical Dosimetrists, Medical Records Specialists, and Health Technologists and Technicians, All Other	973	1,066	+93	+9.6%	900	\$18.78	Postsecondary nondegree award
Dental Hygienists	978	992	+15	+1.5%	703	\$32.65	Associate's degree
Surgical Technologists	688	704	+16	+2.3%	598	\$23.50	Postsecondary nondegree award
Emergency Medical Technicians and Paramedics	792	820	+27	+3.4%	597	\$16.30	Postsecondary nondegree award
Phlebotomists	468	510	+42	+8.9%	563	\$16.28	Postsecondary nondegree award
Physical Therapist Assistants	369	428	+59	+16.0%	537	\$27.85	Associate's degree
Radiologic Technologists and Technicians	775	796	+21	+2.7%	450	\$28.50	Associate's degree

Massage Therapists	278	318	+40	+14.6%	395	\$22.21	Postsecondary nondegree award
Medical Transcriptionists	272	262	-10	-3.6%	394	\$16.07	Postsecondary nondegree award
Veterinary Technologists and Technicians	377	426	+48	+12.8%	384	\$17.32	Associate's degree
Respiratory Therapists	493	576	+82	+16.7%	351	\$25.68	Associate's degree

Source: Economic Modeling Specialists, Inc. (Emsi). Data Set 2021.2.

Note: Openings refers to the change in the number of workers employed in an occupation plus the sum of the number of workers permanently leaving an occupation and needing to be replaced each year over the period 2020-2030. For further information, see:

<https://kb.emsidata.com/methodology/how-does-emsicalculate-job-openings/>.

Manufacturing

While the total number of manufacturing sector jobs in the target region is projected to shrink by an estimated 7,389 (-5.6 percent) over the period 2020-2030, the sector will continue to employ the largest number of people in the regional labor market (see *Table 4*). Manufacturing is estimated to account for 22.1 percent of total payrolled employment in the target region in 2030, only slightly lower than the sector's share in 2020 (23.6 percent). Manufacturing also benefits from a large location quotient (2.88), a value that compares an industry's share of employment in a given region with its share of employment nationally. The national average is represented by a location quotient of 1.00; a value higher than this indicates that an industry is more concentrated in a particular region than in the country as a whole, while a value lower than this indicates that an industry is less concentrated in a particular region than in the country as a whole. Industries with high location quotients are generally "export" industries that bring money into a region.¹⁶

However, like those in most "Rust Belt" manufacturing hubs, the sector's regional labor force is aging. Data from the U.S. Census Bureau indicate that 26.0 percent of those who work in Berrien County are aged 55 or older.¹⁷ By comparison, in Berrien County, over one-fourth (27.1 percent) of the manufacturing sector's payrolled workforce was ages 55 or older in 2020. Over one-half (50.7 percent) was over the age of 45, while only 46.0 percent of all non-manufacturing payrolled employees in Berrien County were ages 45 and over as of 2020.¹⁸ These data point toward impending waves of retirements that may disproportionately affect Berrien County's manufacturing sector in the coming years, which may serve to mitigate predicted negative job growth between 2020 and 2030. These waves may come sooner and impact some industry groups more than others. Table 8 shows the number and percentage of workers approaching

retirement, as well as changes in the number of jobs, in the 34 industry groups in the target region with location quotients greater than one and that pay family-sustaining wages.

Table 8. Family-Supporting Manufacturing Industry Groups with Location Quotients Greater than U.S. Average, Target Region¹⁹

Manufacturing Industry Group	Change (2020-2030)	Avg. Earnings Per Job	Location Quotient (2030)	Age 55-64	Age 65+	Total Age 55+	Age 55+ % of All Workers
Household Appliances	-265	\$188,512	13.04	456	41	497	15.7%
Medical Equipment and Supplies	154	\$146,928	3.82	671	128	799	18.1%
Pharmaceutical and Medicinal	122	\$117,722	5.67	1,414	151	1,565	22.7%
Petroleum and Coal Products	355	\$101,487	2.90	166	31	197	24.8%
Resin, Synth. Rubber, Artificial/Synthetic Fibers/Filaments	31	\$96,781	1.22	94	26	120	32.1%
Pulp, Paper, and Paperboard	200	\$93,551	2.84	214	19	233	31.4%
Other Foods	176	\$88,143	1.05	175	27	202	24.2%
Other General Purpose Machinery	196	\$86,811	3.81	942	197	1,139	31.4%
Dairy Products	-169	\$85,342	1.18	157	28	185	21.5%
Converted Paper Products	12	\$79,680	3.82	785	152	937	26.9%
Steel Products from Purchased Steel	-268	\$79,665	2.37	233	41	274	36.1%
Office Furniture (including Fixtures)	-432	\$77,300	7.02	848	107	955	31.0%
Metalworking Machinery	-568	\$76,328	4.31	858	234	1,092	34.2%
Ship and Boat Building	-240	\$75,648	3.31	256	57	313	18.0%
Motor Vehicle Bodies and Trailers	-4,213	\$75,173	47.26	3,564	762	4,326	14.9%

Industrial Machinery	-16	\$73,288	1.15	122	28	150	29.3%
Other Miscellaneous Products	127	\$72,011	2.27	444	144	588	27.2%
Forging and Stamping	-207	\$69,337	3.89	325	82	407	30.4%
Other Fabricated Metal Products	-416	\$68,860	3.78	859	185	1,044	26.8%
Foundries	53	\$68,527	5.73	526	116	642	29.1%
Boilers, Tanks, and Shipping Containers	-17	\$68,078	1.11	87	12	99	25.4%
Engine, Turbine, and Power Transmission Equipment	110	\$67,902	2.11	108	35	143	22.9%
Alumina and Aluminum Production and Processing	-151	\$67,048	6.86	340	58	398	26.8%
Cutlery and Handtools	18	\$64,930	2.41	66	14	80	31.4%
Hardware	-12	\$63,818	6.65	128	69	197	36.3%
Animal Slaughtering and Processing	310	\$63,548	1.48	352	113	465	17.3%
Spring and Wire Products	-114	\$63,081	2.19	82	17	99	24.8%
Paint, Coating, and Adhesives	358	\$62,798	4.05	96	38	134	20.0%
Printing and Related Support Activities	34	\$62,653	1.93	627	151	778	35.1%
Other Wood Products	-709	\$61,845	4.55	700	262	962	22.6%
Veneer, Plywood, and Engineered Wood Products	142	\$61,347	2.79	114	30	144	19.6%
Coating, Engraving, Heat Treating, and Allied Activities	-586	\$61,014	3.16	476	127	603	29.1%
Machine Shops; Turned Product; and Screws, Nuts, Bolts	54	\$60,948	2.44	667	239	906	29.1%
Motor Vehicle Parts	380	\$60,674	4.60	1,825	466	2,291	26.4%

Source: Economic Modeling Specialists, Inc. (Emsi). Data Set 2021.2.

Manufacturing also shows promise for pathway development due to average earnings for the industry that are significantly higher than the family-sustaining wage threshold (*see Table 4*). In addition, data from the top 20 industry groups with the highest projected growth in jobs show that 18 of those groups offer average earnings above a family-sustaining wage (*see Table 9*). Notably, the remaining two industry groups pay well above a living wage for a single adult.

Table 9. Top 20 Manufacturing Industry Groups with Highest Projected Growth in Jobs from 2020 to 2030, Target Region

Manufacturing Industry Group	Jobs (2020)	Jobs (2030)	Change 2020-2030	Percent Change 2020-2030	Avg. Earnings Per Job
Other Electrical Equipment and Components	1,507	2,183	+676	+44.9%	\$81,728
HVAC and Commercial Refrigeration Equipment	1,711	2,239	+528	+30.8%	\$63,715
Paint, Coating, and Adhesives	841	1,318	+477	+56.7%	\$67,751
Motor Vehicle Parts	8,453	8,910	+456	+5.4%	\$62,088
Household and Institutional Furniture and Cabinets	3,657	4,003	+346	+9.4%	\$56,371
Petroleum and Coal Products	733	1,068	+335	+45.8%	\$99,532
Semiconductor and Other Electronic Components	1,093	1,308	+216	+19.7%	\$71,565
Other General Purpose Machinery	3,317	3,531	+214	+6.4%	\$87,614
Animal Slaughtering and Processing	1,196	1,401	+205	+17.2%	\$61,393
Pulp, Paper, and Paperboard	741	941	+200	+27.0%	\$93,551
Beverage	1,248	1,441	+193	+15.4%	\$45,085
Medical Equipment and Supplies	4,366	4,543	+176	+4.0%	\$146,583
Other Foods	697	839	+142	+20.4%	\$92,658

Veneer, Plywood, and Engineered Wood Products	645	771	+126	+19.5%	\$61,547
Pharmaceutical and Medicinal	6,887	7,009	+122	+1.8%	\$117,730
Engine, Turbine, and Power Transmission Equipment	616	733	+116	+18.9%	\$67,497
Navigational, Measuring, Electromedical, and Control Instruments	1,387	1,462	+74	+5.4%	\$105,105
Machine Shops; Turned Product; and Screws, Nuts, and Bolts	3,066	3,138	+72	+2.3%	\$61,887
Other Chemical Product and Preparation	347	414	+67	+19.2%	\$68,327
Agriculture, Construction, and Mining Machinery	502	566	+64	+12.7%	\$66,316

Source: Economic Modeling Specialists, Inc. (Emsi). Data Set 2021.2.

Information Technology

While the number of jobs in the information sector is relatively small as compared to other sectors, and is projected to decrease over the time period 2020-2030 in the target region (*see Table 4*), this report casts a wider net for the IT field that encompasses a broad set of IT occupations (*see Table 10*). The number of jobs in this set of IT occupations is expected to grow by about 747 jobs (or 9 percent). These occupations cut across industries and require skills important to sectors such as manufacturing, government, finance and insurance, and health care, in particular as they look toward adopting cross-cutting technologies such as automation, integrated networking, and records digitization. Furthermore, IT jobs often provide the option to work remotely, which would open up opportunities for youth and young adults to continue to live in the community while working in jobs that pay living wages. Within the target region, all but three occupations have median hourly earnings above the threshold for a family-sustaining wage. Importantly, those three remaining occupations require less than a bachelor's degree and are part of an IT career ladder, though they pay above a living wage for a single adult only.

Table 10. IT Occupations by Number of Projected Openings in the Target Region, 2020-2030

Occupation	Jobs (2020)	Jobs (2030)	Change 2020- 2030	Percent Change 2020- 2030	Openings 2020- 2030	Median Hourly Earnings	Typical Entry-Level Education
Computer User Support Specialists	1,953	1,962	9	0%	1,529	\$22.99	Some college, no degree
Software Developers and Software Quality Assurance Analysts and Testers	1,388	1,735	347	25%	1,440	\$37.62	Bachelor's degree
Computer and Information Systems Managers	786	864	79	10%	703	\$53.01	Bachelor's degree
Computer Systems Analysts	807	866	59	7%	668	\$36.46	Bachelor's degree
Network and Computer Systems Administrators	850	867	17	2%	593	\$35.30	Bachelor's degree
Computer Occupations, All Other	510	541	30	6%	439	\$31.67	Bachelor's degree
Computer Network Support Specialists	343	368	25	7%	303	\$27.81	Associate's degree
Computer Programmers	299	256	-42	-14%	191	\$34.04	Bachelor's degree
Information Security Analysts	152	204	52	34%	189	\$39.67	Bachelor's degree
Web Developers and Digital Interface Designers	205	217	12	6%	180	\$25.84	Associate's degree
Data Scientists and Mathematical Science Occupations, All Other	132	172	40	30%	176	\$38.87	Bachelor's degree
Computer Network Architects	242	252	10	4%	174	\$38.27	Bachelor's degree
Operations Research Analysts	163	206	43	26%	170	\$37.37	Bachelor's degree

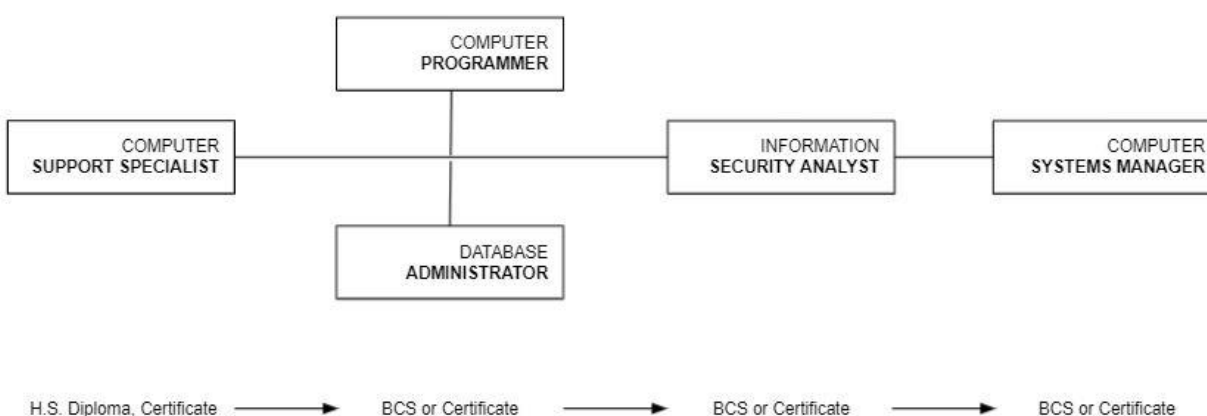
Database Administrators and Architects	193	215	22	11%	169	\$34.78	Bachelor's degree
Statisticians	79	114	35	44%	110	\$36.23	Master's degree
Computer and Information Research Scientists	26	36	10	40%	37	\$40.61	Master's degree

Source: Economic Modeling Specialists, Inc. (Emsi). Data Set 2021.2.

Note: Openings refers to the change in the number of workers employed in an occupation plus the sum of the number of workers permanently leaving an occupation and needing to be replaced each year over the period 2020-2030. For further information, see: <https://kb.emsidata.com/methodology/how-does-ems-i-calculate-job-openings/>.

The Michigan Department of Labor and Economic Opportunity (formerly the Department of Talent and Economic Development) has developed one example of a promising career ladder within the IT field based on broad occupational groupings (*see Figure 1*). A career ladder is a group of related jobs through which a person might progress in a career. Data for the target region show that jobs within this “Information Technology and Computer Science” career ladder are projected to grow by nearly 600 across all industries, with about 6,140 total job openings between 2020 and 2030 (*see Table 11*). At the first rung of the career ladder, jobs in the computer support specialists occupational group provide opportunities for entry with less than a bachelor’s degree, although median hourly earnings are below a family-sustaining wage. Further along the ladder, typical educational requirements increase to the level of bachelor’s or higher for almost all occupations (except web developers), and median hourly wages also increase to levels above a family-sustaining wage.

Figure 1. Information Technology and Computer Science Career Ladder



Source: *Marshall Plan for Talent: Career Ladders by Sector*, Michigan Department of Talent and Economic Development, 2018.

Table 11. Employment Projections for the IT and Computer Science Career Ladder in the Target Region, 2020-2030

Occupational Group	Jobs (2020)	Jobs (2030)	Change 2020-2030	Percent Change 2020-2030	Openings 2020-2030	Median Hourly Earnings
Computer Support Specialists	2,297	2,330	+33	+1.4%	1,833	\$23.60
Software and Web Developers, Programmers, and Testers	1,892	2,208	+317	+16.7%	1,811	\$35.51
Database and Network Administrators and Architects	1,286	1,335	+49	+3.8%	936	\$35.76
Computer and Information Analysts	959	1,070	+111	+11.6%	857	\$36.89
Computer and Information Systems Managers	786	864	+79	+10.0%	703	\$53.01

Source: Economic Modeling Specialists, Inc. (Emsi). Data Set 2021.2.

Note: Openings refers to the change in the number of workers employed in an occupation plus the sum of the number of workers permanently leaving an occupation and needing to be replaced each year over the period 2020-2030. For further information, see:

<https://kb.emsidata.com/methodology/how-does-emsidata-calculate-job-openings/>.

Business and Finance

Data for the target region by sector also show relatively high growth, high demand, and high wages for two sectors that fall under the umbrella of business and finance pathways: Professional, Scientific, and Technical Services and Finance and Insurance. These two sectors include occupations in management of companies, sales, office support, and business and financial operations. Among the top 20 occupations in these sectors and related subsectors, 13 pay family-sustaining wages and all pay living wages for one adult (*see Table 13*). However, there are no middle-skill jobs among the top 20 occupations. Most jobs among the top 20 typically require a bachelor's degree, and those that do not require a bachelor's require a high school diploma or less. Only one occupation that does not require a bachelor's degree offers median hourly earnings above a family-sustaining wage. These data provide important considerations for the design of business and finance pathways, which may benefit from emphasizing transferable skills such as communications and problem solving and creating clear educational and career ladders in this area.

Table 13. Top 20 Business and Finance Occupations by Projected Job Growth in the Target Region, 2020-2030

Occupation	Jobs (2020)	Jobs (2030)	Change 2020- 2030	Percent Change 2020- 2030	Openings 2020- 2030	Median Hourly Earnings	Typical Entry-Level Education
General and Operations Managers	8,686	9,111	425	5%	7,779	\$42.96	Bachelor's degree
Market Research Analysts and Marketing Specialists	1,512	1,843	331	22%	2,018	\$24.58	Bachelor's degree
Financial Managers	1,651	1,968	317	19%	1,650	\$52.75	Bachelor's degree
Project Management Specialists and Business Operations Specialists, All Other	2,841	3,148	308	11%	3,214	\$29.98	Bachelor's degree
Accountants and Auditors	3,679	3,907	228	6%	3,688	\$31.11	Bachelor's degree
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	7,174	7,369	195	3%	7,646	\$29.90	High school diploma or equivalent
Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	2,180	2,336	156	7%	2,850	\$28.19	High school diploma or equivalent
Management Analysts	1,041	1,179	138	13%	1,189	\$34.64	Bachelor's degree
Securities, Commodities, and Financial Services Sales Agents	1,024	1,149	125	12%	1,132	\$29.01	Bachelor's degree
Medical Secretaries and Administrative Assistants	2,165	2,286	121	6%	2,670	\$17.06	High school diploma or equivalent

Parts Salespersons	1,277	1,384	107	8%	1,748	\$13.90	No formal educational credential
Financial and Investment Analysts, Financial Risk Specialists, and Financial Specialists, All Other	796	902	106	13%	803	\$33.93	Bachelor's degree
Personal Financial Advisors	695	797	102	15%	671	\$37.92	Bachelor's degree
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	514	608	94	18%	683	\$37.45	Bachelor's degree
Marketing Managers	528	602	75	14%	575	\$49.59	Bachelor's degree
Administrative Services and Facilities Managers	948	1,019	71	8%	899	\$42.87	Bachelor's degree
Training and Development Specialists	982	1,051	70	7%	1,109	\$26.86	Bachelor's degree
Fundraisers	534	602	68	13%	646	\$28.80	Bachelor's degree
Sales Managers	1,032	1,098	66	6%	1,004	\$55.95	Bachelor's degree
Compliance Officers	655	719	64	10%	656	\$33.12	Bachelor's degree

Source: Economic Modeling Specialists, Inc. (Emsi). Data Set 2021.2.

Note: Openings refers to the change in the number of workers employed in an occupation plus the sum of the number of workers permanently leaving an occupation and needing to be replaced each year over the period 2020-2030. For further information, see:

<https://kb.emsidata.com/methodology/how-does-ems-i-calculate-job-openings/>.

Pathways development in Berrien County must take into account the credentials needed to obtain jobs that offer family-sustaining wages. In the area of Business and Finance in particular, few jobs require more than a high school diploma but less than a bachelor's degree, and most jobs that offer family-sustaining wages require at least a bachelor's degree. One solution to this challenge is to develop pathways that equip young people to move up career ladders within a chosen industry. While wages are a critical factor in determining job quality, entry-level jobs that do not provide family-sustaining wages can sometimes serve as starting points, depending on other indicators of job quality and a young person's needs and interests. Such jobs should offer opportunities for advancement and be linked to career ladders.

In a recent report, JFF analyzed data from millions of resumes to better understand career ladders within industries. The report differentiated the advancement potential of occupations into three categories: static jobs; springboard jobs; and lifetime jobs.²⁰

- **Static jobs** don't typically lead to careers. They offer low pay compared to other middle-skill roles and suffer from high turnover. There is little potential for advancement into higher-paying occupations or positions with greater responsibility. A pharmacy technician, home health aide, and medical assistant are examples of such occupations. Static jobs are most often found in the healthcare and manufacturing industries.
- **Springboard jobs** lead to careers. Workers often advance to different roles with responsibilities and greater pay within the same career area. An HR specialist, computer user support specialist, and computer systems administrators are examples of such occupations. Springboard jobs are most often found in the IT and business industries.
- **Lifetime jobs** are careers. They pay well and offer a high level of stability. For many workers, they are a final step on a career path, and most often the entry-level jobs where they begin are good bets in themselves. A dental hygienist, radiologic technologist, and machinist are examples of such occupations. Lifetime jobs are most often found in the healthcare and manufacturing industries.

These findings reinforce the importance of careful pathways design. For example, while health care and manufacturing offer lifetime jobs in which young people can expect to earn family-sustaining wages, the same two industries are also home to many far less promising static jobs.

As the work in the region moves forward, it will be critical to develop opportunities for youth and young adults that recognize the important distinction between jobs and career pathways. Defining features of pathways include coordinated involvement from major employers in the area, opportunities for young people to enter and move up within a company with increased education and experience, and a focus on careers in which young people can expect to earn a family-supporting wage. In using labor market data to inform pathways development, it is therefore important to ensure that pathways do not simply target occupations and industries in

which large numbers of job openings are projected. While consideration of labor-market demand is important, stakeholders should also seek to develop pathways into careers in which young people can expect to earn family-sustaining wages and move up within their chosen fields as they gain additional education and experience.

Key Findings

Breaking Down Barriers: Policy Environment

Several state policy initiatives align with essential components of the Pathways to Prosperity framework and embody the spirit of the Inspiring Futures pillar *Breaking Down Barriers*, which seeks to eliminate obstacles to opportunities by increasing supports for students. State policies aligned with college and career pathways components—such as career and technical education (CTE), dual enrollment, work-based learning, and career information and advising—provide context for opportunities to build, connect, and scale infrastructure for comprehensive services and supports for students in Berrien County. Additionally, new funding allocations unlocked by federal and state COVID-19 relief legislation will have regional implications and present an unprecedented opportunity to address existing inequities that have been exacerbated by the pandemic.

State Strategic Goals

Existing state strategic plans and initiatives could be leveraged to support the aims and activities of Inspiring Futures. These include Michigan's Top 10 Strategic Education Plan and the Sixty by 30 initiative. Michigan's path to an inclusive and robust economy is supported by these strategic plans, which provide a framework for the state's education and workforce systems to target equitable outcomes for residents, as well as useful goals, metrics, and benchmarks for local and regional actors.

The Top 10 Strategic Plan for Education is anchored by Michigan's Department of Education (MDE) and was initially created to achieve an aim of moving the state into the top ten ranked state education systems in the nation. The newest version of the plan was approved in August 2020 and provides more streamlined goals than the previous version. Of the eight new goals, four frame potential policy avenues to address access to quality college and career pathways for students:

- Expand secondary learning opportunities for all students
- Increase the percentage of all students who graduate from high school

- Increase the percentage of adults with a postsecondary credential
- Increase the numbers of certified teachers in areas of shortage

MDE has also developed metrics aligned to each of the goals. Data must be reported to the State Board of Education, and some statewide data can be found on the Top 10 Strategic Education Plan website.²¹ For the four goals most closely related to college and career pathways listed above, several metrics could be adopted at the local and regional level to inform the pathways work, and statewide data could serve as useful benchmarks for progress. For example, to expand secondary learning opportunities for all students, MDE is tracking enrollment in CTE, Advanced Placement (AP), International Baccalaureate (IB), Early Middle College (EMC), and dual enrollment, as well as success outcomes related to each. These data are being collected and reported, as available, by population subgroups such as race/ethnicity and economic status, which will be critical for revealing equity gaps in these programs.

Another important state goal is Sixty by 30, which guides, in part, Michigan's workforce development policy. In 2019, Michigan adopted a statewide goal to increase attainment of a postsecondary degree or credential to a rate of 60 percent among adults by the year 2030. At the time this goal was adopted, 48.9 percent of working-age adults in Michigan held a degree or credential.²² A state dashboard that tracks progress towards the Sixty by 30 goal shows that movement in the rate of credential and degree attainment has been incremental over the two years the goal has been in place. The state currently sits at an attainment rate of 49.1 percent, behind a national postsecondary attainment rate of 51.9 percent. The urgency of preparing more citizens for the future workforce underlines the Sixty by 30 call to action.

Michigan's Sixty by 30 initiative is powered by a variety of workforce initiatives. One of the state-led Sixty by 30 programs, Michigan Reconnect, has created infrastructure to address the often prohibitive cost of education by offering free college tuition to earn an associate's degree at participating community colleges, including Lake Michigan College and Southwestern Michigan College in the Southwest Michigan community.²³ This offering moves the state closer to providing universal access to postsecondary education; however, the Michigan Reconnect program and its free-tuition incentives target adult workers, excluding residents younger than age 25. Skills to Work, another of the state's lead programs connected to the Sixty by 30 goal, offers access to free online credit-bearing courses. Residents who access the Skills to Work site can take any College Level Examination Program (CLEP) test offered through a partnership with College Board or earn an industry-based credential through online certificate programs offered by state community colleges.²⁴ No age restriction was identified for the Skills to Work program.

The Sixty by 30 Alliance leads the development of a network to scale the adoption of the Sixty by 30 goal and expand program and service offerings aligned with the goal. The Alliance offers four levels of participation—Champion, Leader, Advocate, and Supporter—that allow organizations

to self-select their level of adoption of the attainment goal. At the champion level, organizations adopt the 60 percent postsecondary credential attainment goal as a primary organizational goal and create a strategic plan that embeds activities that address the goal. Only three organizations, including Michigan College Access Network (MCAN), are designated at this tier of adoption.²⁵ These organizations are implementing new practices to promote college degrees and certificates, publicly supporting Sixty by 30, and promoting attainment in their networks. This is of particular importance as MCAN is one of the few organizations with initiatives aligned to Sixty by 30 that focus intentionally on young people. MCAN contributes to the goal through initiatives such as Advise Michigan and College Bound Michigan that seek to foster a college-going culture, identify multiple postsecondary education pathways and facilitate smooth transitions, improve college affordability, and support credential completion. In Berrien County, the Berrien College Access Network (BCAN), which is associated with MCAN, is working directly toward this goal (*see Intermediaries and Ecosystem*); however, based on our interviews with stakeholders, not all actors in the region that serve the ages 16 to 24 population seem to be aligning their efforts to this state goal.

Michigan has continued to develop programs aligned to the Sixty by 30 goal, including several with a focus on young people. In June 2020, Michigan's Department of Labor and Economic Opportunity (LEO) launched the Summer Young Professionals initiative, which awarded \$2 million in grants to MI Works! Agencies across the state to address unemployment among young people ages 14-24 through summer programming.²⁶ The Summer Young Professionals initiative utilizes funding related to the federal Workforce Innovation and Opportunity Act (WIOA) to support the development or enhancement of a Summer Young Professionals employment program. The program offers stipends for youth in career exploration and preparation services and wages for participation in a work experience.

In 2021, Michigan Works! of Berrien, Cass and Van Buren was among the recipients of a grant to support a year-round version of the summer program, and the agency received about \$83,000 to support its Developing Young Professionals program.²⁷ The agency, as the lead of a regional consortium, was also recently awarded a \$2,000,000 award through the Michigan Learning and Education Advancement Program (MiLEAP).²⁸ The investment, announced by the Governor's Office in July 2021, is meant to create additional supports for those "who are dislocated, underemployed, serving as essential workers, living in distressed rural and urban communities or economically disadvantaged" by providing navigation supports and individualized training opportunities that lead to an industry-recognized credential in high-skill, high-wage careers.²⁹ In Berrien County, MiLEAP funding supports the placement of career navigators and a partnership with Lake Michigan College and Southwestern Michigan College through which participants can earn a technical certificate or degree.³⁰

Career Education Targets and Requirements

In 2019, Michigan passed legislation that set new requirements for K-12 career education. Revised School Code, MCL 380.1166a required MDE to develop the Michigan Career Development Model, which set targets for the types of career pathway experiences students should have at each grade level beginning in kindergarten.³¹ Under the new code, the state has set mandatory targets for career education, progressing from career awareness in elementary to more intensive career preparation activities during high school. The state utilizes grade level bands to map the progression of targets:

- Career Awareness: Grades K-3
- Career Awareness: Grades 4-6
- Career Exploration: Grades 7 & 8
- Career Preparation: Grades 9 & 10
- Career Preparation: Grades 11 & 12

K-12 systems are mandated to develop curriculum and experiences in elementary school that build awareness of Michigan's six career pathways, called career zones by the state: Arts and Communications; Business, Management, Marketing, and Technology; Engineering, Manufacturing and Industrial Technology, Health Sciences; and Human Services, and Natural Resources and Agriscience. Contextualized learning and out-of-school engagement with students and parents that begin in the awareness phase are meant to continue through graduation of high school. By middle school students should begin an introduction to occupations through exploration of Michigan's 17 career clusters.³² Career exploration during the middle grades is hallmarked by a new state requirement that mandates every student have the opportunity to develop an Educational Development Plan (EDP) in seventh grade.³³ The introduction of the EDP requirement marks a large shift in career preparation in Michigan, as the plans serve as the student's roadmap to postsecondary education and careers. The process of developing an EDP is meant to help students identify career goals, advise students how their goals may be achieved through high school courses, including career and technical education programs, and explain activities that can help them bridge into postsecondary courses of study that align with their interests. The EDP process is required to offer students:

- Information on various types of careers and current and projected job openings in the state, as well as those jobs' actual and projected wages
- An opportunity to explore careers specific to the student's interests and identify career pathways and goals for achieving success in those careers, including, but not limited to, the level and type of educational preparation necessary to accomplish those goals
- An opportunity to develop a talent portfolio

After a review of the EDP in eighth grade, K-12 systems are mandated to provide periodic counseling to students to review and update EDPs throughout high school. While the Michigan Career Development Model offers strategies and resources to support delivery of the mandatory activities, including planning and review of EDPs, use of the strategies is not required, and school districts must develop individual plans to meet the targets.

Career and Technical Education

Career and Technical Education (CTE) policy and programs can be a good starting point for pathways development, and Michigan engages in many state-level strategies that are aligned with the Pathways to Prosperity framework. For example, Michigan is supporting cross-agency collaboration and stakeholder engagement across initiatives through the Michigan Career Readiness Initiative (CRI), the Cross-Sector Team, and the CRI Planning Team.³⁴ The objectives of this work, which are aligned to Michigan's Top 10 Strategic Education Plan, include ensuring all students have meaningful access to high-quality career pathways, creating linkages between secondary and postsecondary education and training, and integrating all relevant funding sources. The CRI drives coordination across agencies, funding streams, and stakeholder groups to address inequities and gaps, avoid duplication of effort, and sustainably focus resources on shared priorities. The Cross-Sector Team includes education, workforce development, and business and industry leaders, and the CRI Planning Team includes staff from across relevant state agencies, as well as education and employer stakeholders.

Michigan is also cultivating CTE programming by incentivizing pathways development through grants such as the Career Pathways Grant, which supports the Top 10 Strategic Education Plan Goals and Sixty by 30. This grant—offered by the Michigan Department of Education, Office of Career and Technical Education (MDE-OCTE) and the Michigan Department of Labor and Economic Opportunity, Workforce Development (LEO-WD)—funds secondary-postsecondary partnerships to build programs of study that lead to postsecondary credentials.³⁵ Programs of study should provide on-ramps and off-ramps and be aligned to local labor market needs and student interests. Applicants are required to consult local employers to identify credentials valued by employers and to align credentials to state CTE program standards. Berrien RESA has received two grants under the Career Pathways Grant program, and additional grants under this program for 2021-2022 are an opportunity for expanding college and career pathways in Berrien County.

In Michigan, career education in high school supports state learning targets meant to provide access to advanced and real-world learning experiences that help students refine their career interests and build college and career readiness skills; CTE is an essential component of Michigan's delivery of career preparedness education in school. For example, the Michigan Merit Curriculum, which guides high school graduation requirements, allows students to

participate in state authorized CTE programs to satisfy partial credit requirements in science and world languages.³⁶ Students may also utilize elective credits to participate in CTE programs, or petition district superintendents to take additional CTE credits through creation of a personal curriculum based on a need documented in the student's EDP, which is approved by a guardian.³⁷

Michigan's CTE programs are structured into three classifications. Secondary CTE programs and EMC are overseen by MDE, while postsecondary CTE programs are administered through LEO-WD.³⁸ State-approved secondary CTE programs are required to include four components: integration of academic and technical skills to support core knowledge needs, hands-on learning to develop technical skills, work-based learning opportunities to further develop and apply skills, and student leadership opportunities to support employability. MDE-OCTE provides support and technical assistance to regional CTE administrators to implement and improve current programs and develop new ones.³⁹ There are 27 Perkins V regions in the state—Berrien County is part of Region 19 along with Van Buren and Cass counties—and 53 Career and Education Planning Districts. Berrien County is one such Planning District. Berrien RESA coordinates CTE programming across school districts in the county and manages funding of all programs and approval of new CTE programs.

While Michigan provides multiple options for young people to participate in CTE programming, ensuring equitable access to and enrollment in CTE is an area for improvement. Inequities in state CTE enrollments not only hinder the state's goal to reach 60 percent postsecondary degree and credential attainment among adults, but it also widens the attainment gap between residents of different races and ethnicities. A profile on Michigan CTE participation shows disproportionate enrollment in secondary and postsecondary CTE programs between students who are white and students of color.⁴⁰ Students who are white account for 76 percent of the state's total secondary CTE enrollments, compared to students who are Black who account for 10 percent of enrollments and students who are Latinx who account for 6.3 percent of enrollments. Postsecondary CTE program enrollment data show similar equity gaps: students who are white account for 67.3 percent of enrollments, compared to students who are Black (18.4 percent of enrollments) and students who are Latinx (5.8 percent of enrollments). The profile further highlights that students who enrolled in concentrated CTE programs graduate at a rate of 97 percent and matriculated to postsecondary education at a rate of 96 percent. Based on trends defined by the total enrollment across all CTE programs, Black and Latinx students are less likely to realize these attainment benefits. Patterns in educational attainment in Berrien County show similar disparities by race and ethnicity (*see Regional Overview*), and Berrien County would benefit from collecting, analyzing, and disseminating data on CTE enrollment and outcomes to ensure equity in CTE programming across the region.

Taking College Courses While in High School

The Postsecondary Enrollment Options Act 160 of 1996 and the Career and Technical Preparation Act 258 of 2000, or “dual enrollment bills” as they are commonly called, govern early college credit opportunities for Michigan students.⁴¹ These bills modified and expanded provisions under the State School Aid Act for students who wish to enroll in postsecondary courses, including CTE courses, and earn high school and/or college credit. Importantly, they require school districts (or PSAs) to provide information about postsecondary credit opportunities, including AP, dual enrollment, EMC, and CTE, to all students in eighth grade. Districts must also provide counseling, to the extent possible, to each eligible student and their parents on the benefits, risks, and consequences of enrolling in such coursework. Under these provisions, students are only eligible to take postsecondary classes not offered by their high school (or academy), and the classes must lead toward postsecondary credit, accreditation, certification, and/or licensing.⁴² Districts and PSAs are required to comply with an eligible student’s request to enroll in a postsecondary course, as long as the course and institution are also eligible. School districts are billed for eligible charges such as tuition, mandatory course or material fees, and registration fees, and students may enroll in up to 10 courses under these postsecondary options provisions while in high school. Districts may choose to make additional arrangements with a postsecondary institutions or further support students’ enrollment. Lake Michigan College offers three options for students to take college courses while in high school: dual credit, whereby courses taught by college credentialed teachers at the student’s secondary school during the school day; dual enrollment, whereby students take traditional college classes typically on the LMC campus but sometimes at a secondary institution; and EMC, whereby students remain in high school for a 5th year and take college courses while in high school.⁴³

Michigan’s EMC program provides an on-ramp to a postsecondary credential while in high school. Enrollment is a formal process that requires students to declare an intent to participate before grade 11 and build the additional year of course work into their EDPs with signature from their guardians and a school official.⁴⁴ The benefit of the program is the opportunity to earn an associate degree, industry-recognized certification, up to 60 college credits, or participate in an apprenticeship program at no cost, further reducing the threat of college-related debt.⁴⁵ Another strength of the program is the extra support and guidance provided by EMC program staff, beginning in sophomore year, which is not typically provided to students in dual enrollment programs (*see Career Information and Advising*).

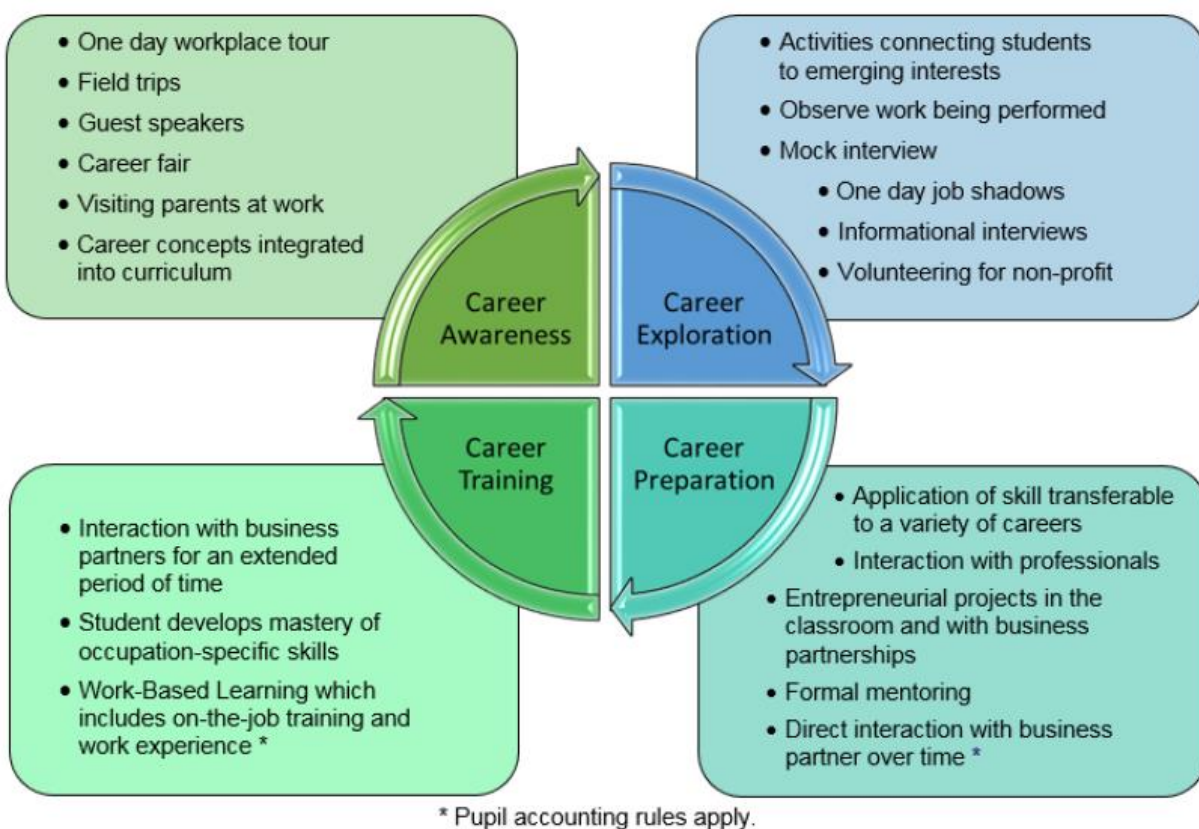
Students in Michigan can earn dual credit through CTE courses supported by statewide articulation agreements that are taught through school curriculum. Students may also earn credit through participation in CTE dual enrollment opportunities. To do this, students must take the Michigan Merit Exam (MME) or a department-approved assessment in the area of

study in which they wish to enroll prior to participating in a CTE dual enrollment program. Student must also have a qualifying MME score in math and have taken a job skills assessment.

Work-Based Learning

Opportunities to engage in work-based learning during middle school and high school are a critical component of career education that builds career readiness skills by exposing students to employers and real-world work environments. Work-based learning is built into the Michigan Career Development Model (MI CDM) career preparedness targets for high school students as well as CTE program offerings. In both instances, work-based learning is mapped along a progressive continuum of experiences that range from career awareness activities, such as conducting workplace tours, to career training activities, such as participating in a youth apprenticeship (*see Visual 2*).⁴⁶ The development of a work-based learning continuum as part of the Inspiring Futures work could align to this state-level continuum.

Visual 2. Michigan Work-Based Learning in K-12



Source: MDE-OC TE, Career Readiness Unit.

Registered Apprenticeships and on-the-job training are also important work-based learning models that allow participants to earn wages while they engage in hands-on training. These models are being supported in Michigan through programs such as the Going Pro Talent Fund, The program, through which MI Works! Berrien, Cass, Van Buren received an award of \$1,996,092 for fiscal year 2021, funds employers through Michigan Works! Agencies (MWAs) to assist in training, developing, and retaining employees. Eligible training includes first-year Registered Apprenticeships and on-the-job training. Additional state funding opportunities have included the State Apprenticeship Expansion Grant.⁴⁷ Existing and future funding streams that support apprenticeship and other work-based learning models will be important leverage points as the region works to equitably expand access to high-quality work-based learning.

COVID-19 Relief Funding

Much like the rest of the country, the current policy environment in Michigan is shaped by efforts to lead recovery from the COVID-19 pandemic. JFF has developed recommendations for uses of stimulus dollars to support workforce and education activities and systems.⁴⁸ In Michigan, Governor Gretchen Whitmer recently signed house bill 4421, a supplemental spending bill that will release \$4.4 billion in federal Elementary & Secondary School Emergency Relief (ESSER) funding to K-12 school districts across the state.⁴⁹ An additional \$363 million in American Rescue Plan (ARP) Act funds is expected to be released to local municipalities later in July. ESSER funds are meant to address lost instructional time and the needs of underserved students. Michigan will distribute ESSER dollars to districts in alignment with their Title I, Part A allocations, ensuring districts with high numbers or percentages of students who experience poverty indicators will receive larger allocations of funding. In accordance with federal guidelines, districts must use 20 percent of received ESSER funding to address learning loss due to the pandemic. Districts will have discretion to spend the remainder of their allocation on activities that address specific student support needs.

Career and Technical Education and Adult Education and Literacy are among areas where ESSER funds may be utilized. Michigan's state plan for ESSER and ARP spending further highlights allocation for remediation services such as summer programs, credit-recovery programs, and after-school programs that may offer an opportunity expand education access services that align with essential Inspiring Futures and Pathways to Prosperity components.⁵⁰ Berrien County is estimated to receive as much as \$30,016,571 in ARP dollars alone based on its population.⁵¹ These various funding streams present opportunities for supporting the development of college and career pathways in the short term.

Continuum of Services: College and Career Pathways

College and career pathways expand the range of options available to young people by preparing them for success in their education and professional pursuits. In high school, students can be motivated by the opportunity to take free college courses and accelerate postsecondary credit attainment. For out-of-school young adults, levers such as bridge programs that embed opportunities to earn industry-recognized credentials and on-ramps to advance technical training are vital strategies for reconnection to career pathways. Students who attain a postsecondary credential may choose to enter the labor market and/or pursue further education, including bachelor's and graduate degrees. College and career pathways encourage student success by equipping young people with the credentials and skills needed to do well in college and the workforce.

A scan of existing programs and services in Berrien County revealed the presence of essential components of career pathways systems, including CTE programming, early college credit options, and on-ramps for disconnected young people. However, equity of access to high-value opportunities for all students in the county could be improved, and additional opportunities and services, in particular for disconnected youth and young adults, would help remove barriers to access and equip more young people with high-value credentials. Stakeholders emphasized during asset mapping interviews that strong partnerships between K-12 and postsecondary institutions, employers, and community-based organizations are critical to delivering career pathways offerings, and there is strong interest among local stakeholders for new cross-sector collaborations that expand and scale pathways options for young people. As the region moves forward with this work, it will be critical for the landscape to create mechanisms that enable equitable access to pathways options for all students. Invested stakeholders must also consider strategies that will support the sustainability of pathways delivery over time and as new pathways are developed.

Career and Technical Education

Equitable access to CTE is a foundational component of the design and delivery of college and career pathways. The Berrien Regional Education Service Agency (Berrien RESA) serves a critical role as the coordinator of secondary CTE in Berrien County. Authorized by Michigan Public Act 56 (pA56), Berrien RESA operates a countywide CTE structure that allows any high school student in Berrien County to access a CTE program at any site designated as a learning center in the county.⁵² CTE learning centers in Berrien County consist of thirteen school districts, two colleges, one university, and industrial and community organizations that also serve as learning centers. A total of 66 programs aligned to six career pathways are offered across Berrien County. Students can opt to take CTE courses as an elective or to partially satisfy science and language requirements (*see Policy Environment*), but interviews with stakeholders

revealed that access to CTE courses can be a challenge for some students, especially those who must engage in credit recovery in their junior or senior year.

Data from Berrien RESA show that 2,345 high school students were enrolled in CTE programs in 2019-2020, and 31 percent of students in grades 10 through 12 participated in a CTE program.⁵³ Statewide data show that the four-year graduation rate for CTE concentrators—those who have completed over half of a CTE program—is significantly higher than Michigan’s statewide rate. In 2019-2020, the four-year graduation rate for CTE concentrators in Michigan was 95.6 percent, as compared to 81.4 percent for Michigan statewide.⁵⁴ In Berrien County, the four-year graduation rate for CTE concentrators was 94.5 percent.⁵⁵

Students who choose to participate in CTE programs outside their district do so through a shared time enrollment model, which poses certain challenges. Stakeholders indicated that one class was mapped to the equivalent of one or two hours of school hours, accounting for transition time. Berrien RESA intentionally places programs around the county to avoid long distances of travel for students to access CTE programs. This consideration is important as public transportation was identified as a barrier in the region by many stakeholders, with few school districts providing transportation for students who enroll in off-campus CTE programs.

Funding for new CTE programs is funneled through Berrien RESA, which also manages the approval process for new programs. Districts who wish to open a new CTE program participate in an application process with support from Berrien RESA. A network of CTE directors, along with Berrien RESA, makes a recommendation for approval to a subcommittee of superintendents—a decision-making body—from the PA 56 Consortium. The Consortium is a group “composed of Berrien County’s fourteen K-12 public schools, one charter school, and the Berrien Regional Education Service Agency.”⁵⁶ The approval process includes an analysis of labor market information and student demand to assess the need for a program.

Findings from the asset mapping process raise questions about the equity of access to secondary CTE programs aligned with high-growth, high-demand, and high-wage industries. Upon review of the 66 regional CTE programs, it appears that one secondary CTE program (Network Administration/ CISCO) aligned with local labor market analysis provided earlier in this report is offered in BHAS. Within neighboring school districts, three programs aligned to a high growth industry were identified in St. Joseph, three were identified in Coloma, and two were identified in Berrien Springs⁵⁷. In the coming school year, about 400 students plan to take a CTE class outside of their school district, or about one sixth of the total number of students typically enrolled in CTE across the county. This means a substantial majority of students who enroll in CTE are accessing programs within their school district. New CTE programs would benefit from alignment with opportunities in the local labor market, in particular new programs in areas

where fewer labor market-aligned programs exist. With the RESA's oversight of the funding and approval of new programs, there is a significant opportunity to expand offerings in new career pathways that will lead to credentials with high value in the labor market, as well as the placement of programs to ensure equity in the accessibility of CTE programs.

Connecting to college and career pathways begins with students' exposure to pathways options and learning about the benefits of participation. During interviews, stakeholders expressed an interest in building greater pathways awareness in the region by leading visible campaigns that highlight pathways initiatives and on-ramps that begin as early as middle school and extend through high school and postsecondary. In Berrien County, one way pathway opportunities are promoted at the county level is through the annual Career Pathways Day, produced by Berrien RESA, for students in ninth grade. During the event, students learn about career pathways in the region by visiting booths set up to showcase the respective CTE programs at districts across the county. After the event, the expectation is that guidance counselors from participating schools support students with selecting and enrolling in their program of choice. Career Pathways Day was attended by 2068 students in 2019 but has been postponed until further notice due to the COVID-19 pandemic.⁵⁸ Reactivating this career exposure and CTE awareness day and continuing to bolster its delivery by finding meaningful roles for more employers in the area is an opportunity to lay the foundation for new partnerships between K-12 systems and employers and increase industry and CTE programming knowledge among students and families. To align with recently revised requirements for career exploration and high school pathway awareness beginning in seventh grade through the Educational Development Plan (EDP) process, the region might benefit from conducting activities similar to Career Pathways Day during the middle grades to increase knowledge and understanding of CTE programming across the county (*see Policy Environment*).

One regional challenge raised during stakeholder interviews was recruiting and retaining CTE instructors. Developing a pipeline to meet the demand for certified CTE instructors is critical to ensuring the sustainability of current CTE offerings and growing college and career pathways in the region. Solving CTE teacher shortages may require a regional, cross-sector strategy that engages employers to help identify potential candidate pools and brings secondary and postsecondary institutions together to identify barriers to growing the CTE teacher workforce.

Within the current landscape of CTE offerings, there are examples of partnerships between school districts and local colleges that help address challenges with access and alignment of career pathways to local labor market needs, and these partnerships should be further cultivated and strengthened. Stakeholders in the region noted that Lake Michigan College (LMC) has served as a collaborative partner in the design and delivery of CTE offerings that meet the needs of individual school districts. Stakeholders at LMC noted that they are working with area high

schools to provide facilities to host district CTE programs on LMC's campus, an opportunity that could be further explored and developed. LMC has world-class facilities that make the college a perfect partner to serve this need. The Hanson Center of Technology located on LMC's Benton Harbor campus is one of three Michigan Technical Education Centers and designed in part to provide a space for high school students to engage in CTE courses. The center's fabrication lab offers students access to industry machinery and hands-on training. Interviews with stakeholders highlighted that the Hanson center is underutilized by secondary school districts and could be an even greater asset in delivering CTE programs.

Earning College Credit While in High School

Dual enrollment, dual credit, and direct credit offerings are important ladders for college and career pathways as they allow students to experience the rigor of college courses and gauge their interest in career fields earlier. These offerings also provide an incentive to continue postsecondary education by allowing students to use credits earned in high school towards a future degree. Some CTE courses offered in Berrien County have statewide articulation agreements as well as agreements with local colleges that allow students to earn college credit while in high school. Through articulation agreements with Lake Michigan College (LMC), Southwestern Michigan College (SMC), and Andrews University alone, students in Berrien County can access more than 17 credit-bearing CTE courses. While these offerings are aligned to programs of study at postsecondary institutions, the number of articulated courses could be expanded, in particular in the four areas with high potential for pathways development named in this report. The expansion of dual enrollment and dual credit opportunities across the county could also include non-CTE coursework that is also aligned with postsecondary programs of study in these four areas. Multiple studies have found that dual enrollment/dual credit has positive effects on academic attainment and achievement at the secondary and postsecondary levels—especially for low-income students and students of color.⁵⁹

Furthermore, while offering dual credit courses on the high school campus can expose students to a college-level curriculum, research shows that students taking college coursework benefit more by taking courses on the actual college campus. In addition to being fully immersed in the college experience, students experience the range of academic supports and other resources that are readily available. Building out a more robust dual enrollment program at the high school level will still entail investments in student preparation, professional development, and wraparound supports, in particular transportation. Formalized collaboration between high schools and postsecondary institutions will help students access early college opportunities that can propel them onto postsecondary pathways that they may not have otherwise considered.

Local colleges and universities work with school districts and Berrien RESA to provide access to college credit bearing courses through a range of early college models. For example, at LMC,

where interviewees noted that approximately one third of enrollments are high school students taking dual credit and dual enrollment courses, students can participate in dual enrollment programs on campus. To enroll, students must have qualifying ACT, SAT, or college placement exam scores and meet any prerequisite requirements for a particular course. The Math & Science Center, located on the Andrews University campus and coordinated by Berrien RESA, is another dual enrollment option in the region. Students in grades 9-12 who enroll in classes taught through the Center leave their home school to attend a mix of mathematics, science, or technology classes for half of a day on the Andrews campus. Students who attend the Math & Science Center fulfill high school math and science requirements and can earn college credit for classes taught by Andrews faculty. Berrien RESA also facilitates early middle college programming in collaboration with LMC and SMC (*see Policy Environment*), which offer associate's degrees in ten and four programs of study respectively.⁶⁰ The program brings in over 70 students each year for the last two years; however, like most dual enrollment and dual credit opportunities in Berrien County, interviewees reported that some districts are more or less represented than others. This may be due, in part, to costs associated with dual enrollment and Early Middle College (EMC), many of which are borne by school districts. Further collaboration between Berrien RESA, school districts, and postsecondary institutions will be important levers for ensuring more equitable student access to important on-ramps to college and career pathways such as dual enrollment and EMC.

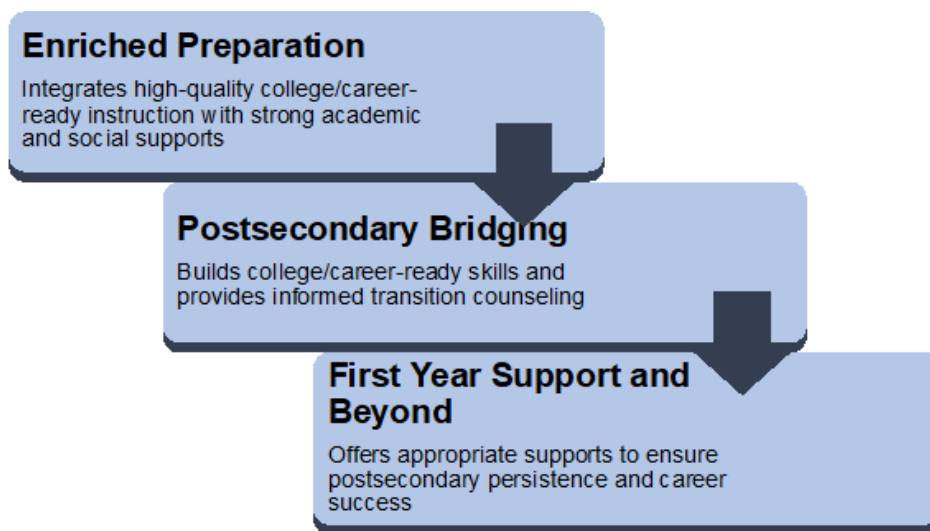
Barriers students face in persisting in pathways into postsecondary and career will also need to be addressed. These include academic barriers, such as meeting college and career readiness benchmarks, and non-academic barriers such as childcare, transportation, and costs. To eliminate the cost of college as a barrier to college enrollment, students who graduate from high schools in Benton Harbor—Benton Harbor High School, Dream Academy, or Countryside Academy—the Benton Harbor Promise offers eligible students a scholarship that will cover up to two years of tuition and mandatory fees at any community college in Michigan, including enrollment in CTE programs.⁶¹ The amount of the award depends on the length of time the student has lived in Benton Harbor. Students who live within the Benton Harbor Promise Zone—defined as the area within the zip code 49022—and complete a GED may receive up to 10 percent of the Promise Award.

On-Ramps for Disconnected Youth

To ensure all young people have an opportunity to reach a thriving future, systems of college and career pathways must embed safety nets and reconnection points for young people outside of traditional K-12 systems. Connecting adult education, technical training, postsecondary credentials, and supportive services allows students with a range of needs to prepare for, obtain, and progress in careers. JFF's Back on Track model provides framing for delivering quality education, training, and supportive services for out-of-school young adults. The model includes

three stages: enriched preparation, postsecondary bridging, and first-year supports (*see Visual 3*). The model outlines program features for each phase that are designed to meet students where they are and support students with identifying interests, building college- and career-ready skills, and connecting to next-step education, training, or employment options. During interviews, stakeholders pointed to several programs with services that align with components of the Back on Track model. The scan of services in Berrien County also revealed areas where program gaps in services for at-risk and out-of-school students exist.

Visual 3: JFF's Back on Track Model



For those young people disconnected from traditional high school models, there are some reconnection opportunities in the region. For example, Benton Harbor Area Schools' alternative high school, Dream Academy, supports students who are 18-22 years old and require high school equivalency services. Until July of this year, Bridge Academy of Southwestern Michigan (Bridge Academy) was another alternative school that focused on disconnected young adults, specifically students ages 16-24 who were under credit and over age. The program, delivered on-site at the MI Works! Berrien, Cass, Van Buren office, delivered many components aligned with the Back on Track model through its focus on accelerated academics, wrap-around supports, and building career readiness competencies through its CTE curriculum. Bridge Academy now serves students in grades 9-12 up to the age of 19, in an effort to reach students who may be at risk of disconnecting earlier in their education. MI Works! will continue to support young people over the age of 19 with adult basic education programming and high school equivalency exam preparation through its youth WIOA programming. However, there remains a gap in programming and effective on-ramps for disconnected youth in Berrien County.

Stakeholders saw a need for supports for students who graduate high school, attend some college, and disconnect. They noted that it is common for young people to attend a semester and not return, due to a lack of preparation for college courses or life circumstances that create barriers to persistence. There is a community need and opportunity to develop programs and partnerships between K-12 and postsecondary partners that boost preparedness for college and support transitions from high school to college. Programs that create warm hand-offs from high school to supportive services programs on college campuses are particularly important levers for ensuring high risk and underserved student populations matriculate and persist through college experiences.

In JFF's Back on Track model, the purpose of the First Year Supports phase is for high school graduates and equivalency earners to build attachment to the postsecondary institutions they attend and eliminate or accelerate enrollment in developmental courses which can negatively impact postsecondary persistence. This phase is supported by coaches or “navigators” who develop a relationship with the young person and help facilitate their awareness and utilization of supportive services offered by the postsecondary site. In Berrien County, the Start to Finish program at LMC provides such integrated postsecondary bridging and first-year support services. LMC also offers targeted services for high-need populations through programs such as Student Support Services, Upward Bound, and the Education Opportunity Centers which are part of the school's TRiO program.

During a scan of programs in the region, there was a noticeable absence of adult basic education programs located on college campuses. High school equivalency programs on college campuses provide the opportunity for young adults to streamline the transition into postsecondary courses through exposure to college settings and by leveraging mechanisms such as Ability to Benefit to offer dual enrollment opportunities. As an example of comprehensive on-ramps through adult basic education, the Accelerated Career Education (ACE) program at Delgado Community College in New Orleans, LA allows student to work toward a high school equivalency and an industry-based credential simultaneously while providing wraparound services to support persistence.⁶² LMC, which provides GED testing, noted a need for additional high school equivalency preparation programs that incorporate coaching and advising services. A preparation course was in development at LMC prior to the start of the pandemic, but was put on hold due to the pandemic. In addition, community-based organizations (CBOs) can often play an important role in supporting disconnected youth as they prepare for high school equivalency exams and bridge into postsecondary education or employment. The absence of CBOs in Berrien County that intentionally fill this role, as well as other key roles for providing on-ramps, supports, and training to disconnected youth, is a missing link in the community's ecosystem of services.

Continuum of Services: Career Information and Advising System

Youth often have little access to information about the world of work, even though they are at an age when their choices may affect their future opportunities. A strong career and advising system is therefore an important component of the Pathways to Prosperity framework. Access to a strong career and advising system is also critical for helping out-of-school and off-track youth and young adults reconnect to education and the labor market. This system should provide a seamless continuum of experiences—from awareness to exploration to immersion—that familiarize students with the world of work and the range of career possibilities available to them. In Berrien County, there are promising efforts toward developing such a system, but also areas for improvement and progress such as: building capacity in districts and schools to fully implement state-mandated Educational Development Plans and related career activities across the region; aligning the career advising efforts of CBOs and other support providers with those of schools, districts, and the state, as well as the efforts of secondary schools and postsecondary institutions; expanding access and the availability of career information and advising services to out-of-school young people; and providing tailored labor market information and opportunities to learn more about a range of career to families and school personnel.

There was a general consensus among stakeholders about the importance of exposing students early to career exploration opportunities. Activities and supports that expose students as early as the middle grades to the world of work help ensure they understand the wide range of options available to them, are able to make informed choices about pathways and careers, and have access to advising that will help them navigate these choices. The Inspiring Futures initiative presents an opportunity to better align available opportunities in order to ensure that students have access to the resources and tools they need to make decisions about their futures.

In Michigan, recent legislation has set forth requirements for school districts with respect to their role in career development education (*see Policy Environment*).⁶³ These requirements include incorporating career development education once per grade level, supporting every student to develop an Educational Development Plan (EDP) in seventh grade and identify career goals, and ensuring students review and update their plans every year under the supervision of a counselor or qualified designee. Importantly, students must be provided with information on types of careers, and current and projected job openings and wages, and they must have an opportunity to sample careers and career pathways, including the educational preparation needed to achieve their career goals. To provide guidance to schools in developing their own local or regional model program, MDE has developed the Michigan Career Development Model (MI CDM), which includes targets and suggested instructional strategies by grade level bands. Michigan also provides a variety of online tools to support career exploration and navigation,

including Roadmap to Opportunity through the Michigan College Access Network (MCAN) and Pure Michigan Talent Connect through the Department of Labor and Economic Opportunity⁶⁴.

During interviews, stakeholders shared that implementation of EDPs and key elements of the MI CDM has been uneven across school districts. For example, while CTE funds exist for school districts to access Xello (formerly Career Cruising), an online career exploration and readiness platform, not all students across Berrien County are utilizing this tool. Interviewees also noted that counselor caseloads are high, limiting the amount of time counselors are able to spend on career development activities with students. Indeed, data from 2018-2019 show that the student to counselor ratio in Michigan is 691 to 1, the second highest in the nation, and activity in the legislature as recently as 2021 has attempted to address this capacity constraint.⁶⁵

Within Berrien County, many organizations and programs external to school districts provide college and career advising and mentoring as a key component of their model. For example, Junior Achievement offers programming related to financial literacy, career readiness, and entrepreneurship, teaching the curriculum, partnering with businesses, and providing mentorship through community partners such as the Boys and Girls Club and in schools. During interviews, the Boys and Girls Club was often named as a strong and important partner for districts and other CBOs, as well as a safe and vibrant space for youth and youth development. Through its teen center, the Boys and Girls Club delivers curricula related to workforce and career readiness and runs two mentoring programs, serving about 400 students a day across both its teen and youth centers.

One of the main external programs focused on supporting students to explore pathways to college and careers is Jobs for Michigan's Graduates, operated by Youth Solutions. The program offers a for-credit, yearlong course, repeatable each year of high school. Jobs for Michigan's Graduates (JMG) specialists mentor and advise students on possible careers and teach a curriculum aligned to 88 target competencies. Students engage in career exposure and exploration, as well as professional skills-building, with a goal of attaining a workplace experience by graduation. Specialists connect with local businesses to provide career activities. The program also supports students for up to 12 months after graduation in transitioning into postsecondary education or employment. JMG programming is delivered to disconnected youth working to complete a GED or high school diploma through MI Works! Berrien, Cass, Van Buren. JMG's national affiliate, Jobs for America's Graduates, was recently the recipient of a \$5 million Workforce Pathways for Youth grant that will provide JMG with funds to expand workforce-focused programming for youth such as career exploration services and career counseling within the Benton Harbor community.⁶⁶ It will also allow for intentional co-location between JMG programming and youth-serving, out-of-school time organizations such as the Boys and Girls Club.

While many external efforts to provide more robust career information exist in the region, they could be better coordinated and strategically aligned to state requirements and districts' priorities and activities. During interviews, some stakeholders noted this misalignment and a desire to strategically support districts. Michigan's EDP provisions and the MI CDM are useful scaffolds onto which districts and service providers in Berrien County could build out and align their career advising activities. Since many of these districts and providers deliver work-based learning experiences, alignment to the MI CDM by grade level and/or a continuum of career exploration and work-based learning experiences could help organize and coordinate actors in these spaces. One national example of this comes from Illinois, whose framework for postsecondary and career expectations lays out what students should know and do at each grade level to prepare for college and careers.⁶⁷

At the postsecondary level, LMC has many career advising elements in place. Bolstered by a federal Department of Education Title III grant to support its guided pathways reforms, LMC has invested in intentional advising and pathway exploration and planning functions, including faculty advising and professional advising. For example, all students, with minor exceptions, are required to take a cost-free Guided Education Pathways Planning (GEPP) course that aligns with their initial choice between seven career clusters, or "pathways." The course is taught by subject matter experts who help students explore possible careers and set goals. At the end of the course, students may switch career clusters and are assigned a faculty advisor who is a subject matter expert in the field. For career exploration, students also have access to Awato, an online tool that helps students match their interests to careers. Advising and the use of Awato, however, are not required.

LMC also offers specialized programs that provide career advising and secondary to postsecondary transitions supports. The Start to Finish program, for example, provides extra supports to students from the Benton Harbor Promise Zone (*see College and Career Pathways*), as well as students currently and formerly in foster care. The program offers students one-on-one life coaching, tutoring services, success planning, academic advising and intervention, referrals to internships or job opportunities, and wraparound supports such as access to technology, transportation, and food.

The Early Middle College (EMC) program, which is managed by Berrien RESA, is also offered through LMC. As part of the program, students remain in high school for a fifth year and can earn a transfer or associate of applied science degree or a certificate, up to 60 college credits, from LMC upon graduation. EMC differs from dual enrollment in the supports and guidance students receive, in particular those they receive to help them choose a target degree or certificate aligned to the job market. Sophomore year, students participate in a college success

bootcamp and career exploration using Xello. Students also have a mentor and participate in monthly cohort meetings throughout the program.

High schools, LMC, and the EMC program through Berrien RESA each provide a set of core career advising services for their respective populations, with some crossover through early college options at LMC. However, these advising services are disconnected from each other, and there is little collaboration between secondary and postsecondary advisors to strategically align and coordinate their work. Such collaboration can also help support more seamless transitions from high school to college and career. A co-advising framework could help define collaboration between secondary and postsecondary educators, advisors, and staff and ensure postsecondary partners are engaged in delivering career advising services aligned to a continuum of career exploration activities for middle school and high school. One national example comes from Arizona, where the Center for the Future of Arizona is supporting the use of a co-advising framework for the development of computer science and cybersecurity pathways.⁶⁸

Across the country, we see leaders emphasize the importance of expanding career information and advising systems at both the middle and high school levels but note that a major obstacle to doing so is a lack of faculty and staff able to carry out this work. While college-and-career websites and other computer-based tools can have value for students, they cannot substitute for one-on-one career advising and counseling with trained school personnel. Given the relatively high counselor-to-student ratio in Michigan, the region may need to seek out and develop creative solutions for integrating pathways into their advising models. This could involve tapping into professional development opportunities such as the School Counselor Fellows Program through MCAN.⁶⁹ At the regional level, Berrien RESA offers resources and opportunities for counselors, which could be expanded and further explored. Other options include creating new pipelines for school counselors, including upskilling and reskilling paraprofessionals and community-based advisors that serve in adjacent roles.

Generating enthusiasm about career pathways options among students and families may involve overcoming some stigmas around career pathways programs and demonstrating that pathways approaches help to create options for students rather than limiting what young people can do. Many families do not know which careers have good salaries and advancement opportunities and what credentials are needed to enter those careers. As the Inspiring Futures work moves forward, the region could consider providing resources tailored to students and their families to help them gain a more complete picture of possible careers and associated salaries, as well as the ways in which college and career pathways can support them in entering desired careers.

In addition, teachers need information about the labor market and workplace demands and culture in sectors outside of education; they would benefit from opportunities to visit a variety of

workplaces so they can bring examples into their classes, irrespective of the subject matter they teach. The region might consider ways to provide teachers and counselors with opportunities to learn more about a range of careers, such as externships. This would provide them with new information about the world of work to share with their students, as well as help their students understand how what they are learning in classrooms is connected to possible future careers.

While there are efforts to provide career advising and information to in-school youth, there are limited advising supports dedicated to out-of-school youth, and the region has a limited number of CBOs that specifically serve out-of-school young people. For example, MI Works! Berrien, Cass, Van Buren runs a suite of WIOA youth programs, including one-on-one career coaching, but has experienced several challenges in engaging youth that have completely disconnected. These programs are not at capacity, despite the recognized level of unmet need in the community. Other career advising efforts through MI Works! include PATH, a program for families receiving cash assistance that connects participants to resources to eliminate barriers to employment.⁷⁰

Engaging the Private Sector: Work-Based Learning and Employer Engagement

Completing degrees, certificates, and other credentials is an essential part of career preparation, but employers often require that candidates have some work experience, even for entry-level jobs. More affluent young people often have access to a range of paid and unpaid internships and service-learning opportunities that can help them obtain their first job. Many youth and young adults also lack the “right” kind of social capital and access to professional networks that can help them get a good job.⁷¹ It is up to schools, workforce systems, and communities to help young people with fewer networks and connections prepare to enter the labor market. Initiatives like Inspiring Futures can help coordinate and align these efforts. In Berrien County, there are currently some opportunities for work-based learning and employers are engaging in many ways, but there are areas for growth, including; defining the work-based learning experiences all young people in the region should have and at what level of education; scaling work-based learning opportunities and providing equitable access to them; developing intermediary functions around work-based learning to coordinate and broker these opportunities; and creating options for employer engagement that are streamlined and clear.

Growing work-based learning opportunities will also help schools and districts meet state requirements for EDPs and school improvement plans.⁷² Under state legislation, school improvement plans must: include how opportunities for on-the-job learning such as apprenticeships and internships will be made available to students; provide students in grades 6-12 the opportunity to participate in work-based learning activities that connect them with

professionals in a variety of fields; and ensure all students begin developing a talent portfolio in grade 7 and by grade 12 develop a resume, letter of reference, and talent portfolio. The talent portfolio is meant to include evidence such as a record of experiences, credentials, and accomplishments that demonstrate the student's talent or marketable skills, making it a potentially useful tool for documenting activities completed, credentials earned, and competencies acquired through participation in college and career pathways.

Providing young people with opportunities to gain workplace experience through work-based learning can also help employers address their talent pipeline needs. Partnerships with educational institutions and training providers give industry leaders an opportunity to shape the curriculum and ensure that students are learning skills aligned with labor market needs. Employers that work directly with young people play an active role in preparing youth and young adults to become productive employees. By contributing to the pathways work—including collaborating with educators, providing work-based learning opportunities to students, and supporting young people's transitions into the labor market—business and industry leaders can develop the talent pipeline essential to the region's business community and economic growth.

In Berrien County and beyond, many employers are currently struggling to find qualified workers for open positions and feel a sense of urgency about the need to develop strategies to meet their workforce needs. However, greater coordination of efforts may be needed for the development of effective solutions to this problem, and it will also be critical to find ways of overcoming the challenges in providing young people with work-based learning opportunities.

One strength is that employers in the region are open to developing deeper partnerships with educational institutions, though they often do not have clear entry points, asks, and expectations set for them from education partners. It will be important to develop approaches to work-based learning that are clear and easy for employers, that benefit both employers and students, and that are fully integrated into college and career pathways.

Some employers in the region already provide youth with work-based learning experiences, but many more could be engaged, as work-based learning is not yet provided at scale for students. Several employers are engaging in strategies such as apprenticeships, internships, and clinicals. For example, Whirlpool, one of the top employers in Berrien County, offers internship programs that serve high school students and juniors and seniors in college, with a plan to expand to freshmen and sophomores this summer. Spectrum Lakeland, another top employer, offers a 16-week internship program for Benton Harbor youth, most recently serving 16 young people. Some employers also provide pre-apprenticeship opportunities. For example, through the YouthBuild program and with support from MI Works!, Eagle Technologies provides pre-apprenticeships in CNC machining, and the company recently hosted 21 pre-apprenticeships.

Through the Michigan Economic Development Corporation, a tax credit is available to employers who train young people as registered apprentices, specifically those under age 20 who are enrolled in a high school or GED program.⁷³

Employers go through a variety of intermediaries to deliver work-based learning. MI Works!, for example, offers apprenticeships in the healthcare field and supports businesses, particularly manufacturers, in developing their own apprenticeships. MI Works! also refers interested job seekers to local union apprenticeship programs. Employers also deliver work-based learning experiences via postsecondary institutions such as Andrews University and LMC, which provides opportunities for clinicals in health science programs and co-ops and school-based enterprises in a few other programs. At the secondary level, some school districts work directly with employers to coordinate internships for a few of their students, and many districts participate in the annual Manufacturing Day organized by MI Works!. Berrien RESA also coordinates internships, in particular through project SEARCH hosted by Lakeland Health St. Joseph. CBOs and programs such as Junior Achievement and JMG also work with employers to provide work-based learning experiences to their program participants. This work is positioned to grow for JMG under its new Workforce Pathways for Youth grant, which requires employer engagement and delivery of work experiences.⁷⁴

In addition to offering work-based learning opportunities, employers engage with a variety of organizations and programs in the region to provide feedback and advice on career-related services and strategies. For example, employers engage in regional strategy discussions through forums such as the Career Education & Advisory Council (CEAC) organized and convened by MI Works! and the Strategic Leadership Council (*see Intermediaries*). Employers also sit on advisory committees for secondary and postsecondary CTE programs. LMC, for example, consults employers on its advisory committees to better understand the labor market and inform the revision of existing programs and the development of new ones. Effectively, employers in the region are sitting on various councils and committees with overlapping aims and priorities. Consolidating and streamlining these tables could limit demands on employers' time and bring efficiencies to engaging employers in the region. Alternative avenues to engage with the business community also exist and could be further developed. LMC, for example, engages with local chambers and participates in events to better understand the skills employers are demanding. LMC also sits on employer boards, such as the safety protocol board for local hospitals.

Employers of all sizes have valuable contributions to make to work-based learning, including the small employers that constitute a large percentage of Berrien County's businesses. In addition to serving as mentors or as sites for internships and job shadowing—strategies many organizations and programs such as Junior Achievement and JMG are deploying—smaller employers can

invest time in participating in the design of the curriculum within career pathways. By taking on an advisory role, employers can help ensure that the curriculum includes skills aligned with current workforce needs. Employer advisory boards, with broader scope than individual Perkins advisory committees for secondary and postsecondary CTE programs, would ideally work with educators at both the secondary and postsecondary levels. This would aid in the development of seamless pathways aligned with labor-market demand.

Building out a continuum of pathways-aligned work-based learning opportunities is essential to the development of a talent pipeline that meets industry needs. As employers consider ways to expand their involvement in work-based learning, it will be critical to ensure that all stakeholders share a common definition of work-based learning and activities (e.g., internships and apprenticeships). Work-based learning opportunities should be designed as a sequenced, coordinated, and flexible set of activities through which students gain increasing exposure to the world of work. Students should have opportunities to be exposed to and engage with a variety of sectors and potential careers, so they are best able to figure out their skills, interests, and options. Effective work-based learning is also aligned with the industry focus of a student's pathway and clearly linked to classroom education, creating an environment in which learning in the classroom and in the workplace reinforce one another. Clear programs of study by pathway—as are found in Illinois's Model Programs of Study, for example—can help demonstrate and promote this kind of alignment.⁷⁵

The JFF framework for work-based learning includes four stages: career exploration, career exposure, career engagement, and career experience (*see Visual 4*). It is not structured as a linear sequence of activities because it allows for the possibility that, as students participate in work-based learning experiences of increasing intensity, they may learn that they are no longer enthusiastic about the initial field of interest. In such cases, students should be given the opportunity to participate in additional career exploration and exposure activities rather than continuing in a path that is no longer a good match for them.

Visual 4. JFF's Work-Based Learning Framework



Source: Center for Apprenticeship and Work-Based Learning, JFF.

In order to expand work-based opportunities for in-school youth, schools and businesses will have to clearly communicate their goals and expectations to one another. In some models, high schools employ “work-based learning coordinators” who play a critical role in building employer relationships and serve as a single point of contact for industry partners. In Berrien County, Berrien RESA may have an intermediary role to play given its management and coordination function for all CTE programming in the county. The region will need to decide what the responsibilities of the schools, potential work-based learning coordinators, and possibly Berrien RESA might be, and this will also depend on the capacity of the work-based learning intermediary (*see Intermediaries and Ecosystem*). Some examples of coordinator work include student-facing supports, such as resume writing, interview prep, student contracts, transportation planning, and creating a structure for reflection and feedback about the work experience. Coordinators can also provide some employer-facing supports, such as providing information about liability and insurance, developing a performance feedback system, and developing clear goals for the students. There will also be a need to work with teachers to fully integrate work-based learning into pathways and bolster curricula.

One challenge for employers is how to manage the volume of requests for work-based learning placements and engagement from both educational institutions and service providers such as CBOs and MI Works!. Some employers, in particular small businesses, do not have the capacity to handle incoming requests from multiple institutions and individuals, while others have reached capacity in the number of experiences they can coordinate and provide. A structure with nodes of contact in each school, district, and/or Berrien RESA working in collaboration with a work-based learning intermediary would facilitate the management of education-industry partnerships and streamline processes so that employers can engage effectively and efficiently in the pathways work.

Another challenge cited by employers is concern about liability issues surrounding students under 18 in workplaces, especially in fields such as manufacturing and healthcare. This is a challenge that work-based learning intermediary organizations in other parts of the country have taken on with some success. In order to scale work-based learning, the region will need to develop strategies for addressing the concerns raised by employers and educating employers about existing strategies for handling legal and liability concerns.

While businesses could use support in building capacity to host more young people, strategies for preparing and allowing young people to add value to the business must also be developed. Bringing more students into workplaces through an expansion of work-based learning would provide employers with opportunities to take an active role in helping young people develop employability skills, such as communication skills and punctuality. As employers become more engaged in this work, it will be important for them to work closely with educators to identify

skills, including soft skills, with value in the labor market and to develop strategies to be rolled out both inside the workplace and in the classroom. These collaborative efforts will also be important avenues through which employers can provide feedback on students' academic preparedness for the workplace.

The biggest challenge overall is scaling the number of young people that engage in work-based learning, and doing so equitably. While there are instances of strong connections between industry and education, deeper engagement from a much larger number of industry partners will be needed to implement a comprehensive career readiness and development agenda. The region could strategically select a few businesspeople who can support initial initiative planning. Once pathways are defined, a larger group of employers and community partners could be brought in to execute the plan (e.g., provide work-based learning opportunities, align curriculum with industry standards and needs, etc.). A strong infrastructure of intermediary organizations will be needed to address these challenges, as well as challenges such as transportation and childcare that limit access to work-based learning opportunities for youth and young adults.

Breaking Down Barriers: Intermediaries and Ecosystem

Within the Pathways to Prosperity framework, an intermediary organization connects key stakeholders—including employers, educational institutions, and community-based organizations—and creates a body of knowledge and skills to serve the collective goals of the partners. The work of intermediaries includes two broad sets of functions, which may be distributed across multiple organizations or housed within a single designated intermediary organization. First, intermediaries hold the vision for the pathways work and convene key stakeholders. Second, intermediaries support the development of work-based learning opportunities using a two-pronged approach: establishing a role for employers that ensures they see a return on their investment in the education of young people; and supporting high schools, colleges, and training providers in securing, developing, and sustaining sequenced, systemic work-based learning opportunities. Berrien County is home to a rich ecosystem of intermediaries and community-based organizations that frequently collaborate with one another, though this collaboration is sometimes ad hoc. Systematizing this collaboration will help ensure that all organizations are able to make effective use of their time and resources and provide critical supports to youth and young adults in Berrien County. A joint effort by stakeholders to determine how best to systematize collaboration and ensure that all intermediary functions are fulfilled should be a key priority in the short term.

For context, JFF highlights six essential functions of intermediaries among their many roles:

- **Organize a cross-sectoral top leadership group** to hold the pathways vision and to provide the glue between employers, education partners, and other key stakeholders
- **Oversee appropriate analyses** including current and forward-looking labor supply-demand gap analyses, as preparation for conducting other functions
- With support of top regional leadership, **recruit and enlist key employers** to provide youth and young adults with workplace experiences
- **Assess needs for support** from schools, employers, and community organizations and broker agreements to provide assistance. Support functions can include:
 - Developing workplace experiences (e.g., job shadows, virtual projects, internships, apprenticeships)
 - Executing agreements between employers and schools
 - Providing training in the basics of a career area, including work-readiness certifications
 - Developing curricula and assessments in partnership with educators
- **Establish metrics for success** in consultation with employers and schools, report publicly on progress, and hold participants accountable through an MOU or other formal agreement
- **Assure sustainability**

An additional function of intermediaries in communities that seek to address racial and economic disparities is to **embed structures that build equity**. During interviews, many stakeholders raised equity as a concern and priority—and access and outcomes data show stark equity gaps in the region (*see Regional Overview*)—which suggests fulfilling this function will be a high priority to the region.

Berrien County is host to a range of intermediary organizations, including an economic development organization, a workforce board, and many community-based organizations and service providers. In addition, agencies and regional tables such as Berrien RESA and the Strategic Leadership Council also serve various intermediary functions throughout the region. While each organization has a vision, a mission, and services of its own, all representatives of these intermediary organizations described during interviews a strong willingness to collaborate—and most already do so in various configurations—but also noted a lack of coordination of efforts across the region. Stakeholders also expressed a common desire for connecting programming with community needs. They placed value on community engagement and the ability to effectively articulate community concerns and needs to inform decision-making as it relates to college and career pathways development.

One organization whose work aligns key elements of a college and career pathways system in the region is the United Way of Southwest Michigan (hereafter, United Way). Four focus areas for impact—education, health, financial stability, and basic needs—drive the work of United Way, and the organization has several goals related to education and labor market outcomes for the region’s young people. By 2024, it seeks to increase the graduation rate by 10 percent, and its goal is to ensure that, by 2025, 60 percent of adults will have a post-secondary credential in Berrien, Cass, and Van Buren counties.⁷⁶ To meet these goals, United Way funds or has funded several programs across the region that target specific populations, including the Bridge Academy, which until July of this year provided GED and high school diploma opportunities for out-of-school young people; Mosaic Jobs for Life, which provides training and support primarily to formerly incarcerated persons seeking employment; and Start to Finish at LMC, which provides extra supports to current and former foster youth and students from the Benton Harbor Promise Zone (see *College and Career Pathways*) enrolled at the college.

UW also serves as a “backbone” organization for the Berrien College Access Network (BCAN), which convenes many of the cross-sector stakeholders critical to advancing pathways work. BCAN is one of 23 Local College Access Networks (LCAN) associated with the Michigan College Access Network (MCAN).⁷⁷ LCANs are community-based coalitions that seek to build a college-going culture and increase college readiness, participation, and completion rates.⁷⁸ They do this by lowering barriers to accessing postsecondary education through the coordination and expansion of programs, services, and resources. These coalitions often have representation from K-12 and higher education, nonprofits, government, business, and philanthropy. In Berrien County, the BCAN leadership includes admissions directors from postsecondary education, secondary superintendents, Berrien RESA, Kinexus, and other stakeholders. MCAN aligned its primary goal to Sixty by 30 in 2019, and this goal is shared by BCAN.

The work of the BCAN is divided into three action teams: CTE, pathways to postsecondary success, and financial readiness. BCAN has been actively working to support CTE in the region, in alignment with its focus on working across grades 8-12 to increase college certificate and degree attainment. Berrien RESA participates in the CTE action team and provides insight to the team on CTE programming and student needs in the region. For example, Berrien RESA conducted a student survey that revealed many students do not access CTE programming because they are not fully aware of the options available to them. BCAN is also supporting counselors in the region to promote awareness among students about specialized programming like CTE and Early Middle College (EMC). In the southern portion of Berrien County, BCAN is working with the local chamber of commerce to build out certifications for students in secondary CTE programs and increase awareness that these programs exist in local colleges.

The Strategic Leadership Council (SLC) is a regional convener that takes a collective impact approach to addressing major issues that limit prosperity in southwest Michigan.⁷⁹ The SLC is composed of about 25 stakeholders from across the region and is led by a 17-member board composed primarily of CEOs from the largest entities in the region. About 85 individuals participate in SLC initiatives and workstreams, and these individuals represent a wide range of organizations in the region, including city governments, education partners such as Berrien RESA and LMC, non-profits, non-governmental organizations, and for-profits. The council's four current priorities are transportation, housing, Harbor Shores development, and leadership acceleration through its Leadership Academy. In the past, education has also been a priority in the SLC. The SLC also hosts a best practices committee that brings 17 of the 39 municipalities in Berrien County together to tackle common challenges. The council uses clearly defined metrics and data to understand problems and move toward solutions. For example, it helped create a housing development tool to support municipalities in making decisions. The SLC has also helped push the region toward solutions in the area of transportation and harbor development by promoting partnerships and collaboration between municipalities, as well as between municipalities and the county.

Several non-profit service providers are also serving intermediary functions. Junior Achievement, for example, brokers career exploration and career experiences directly with employers, in particular small businesses. Youth Solutions, a subsidiary of Kinexus Group, also works directly with employers to develop and implement career activities related to its Jobs for Michigan's Graduates programming. The Boys and Girls Club has developed partnerships with organizations such as the Berrien County Sheriff's Department and the Berrien County Health Department to advise on programming and help youth build relationships with service providers in their area. Smaller service providers such as The OutCenter and First Tee, as well as faith-based organizations, also help link regional services to the community and are part of the larger ecosystem of intermediaries and service providers.

Among education partners in the region, Berrien RESA plays a unique role as an intermediary. For school districts across the county, it plays a key role in coordination, management, and, through its PA56 sub-committee of superintendents, decision-making with respect to CTE programming. It provides resources and support to counselors and CTE instructors, engages CTE directors to inform CTE programming and provide support, and coordinates between school districts and LMC to recruit and support students in the EMC program (*see College and Career Pathways*). Berrien RESA has also cultivated relationships with employers, in particular to provide work experiences through specialized programming (*see Work-Based Learning and Employer Engagement*).

Cornerstone Alliance, the lead economic development organization for Berrien County, is also an important convener. It is a “non-profit, investor-governed entity primarily focused on increasing employment opportunities, private sector capital investments and the local tax base in Michigan’s Great Southwest with specialized business services offered in economically distressed areas.”⁸⁰ Specialized services include supporting entrepreneurs and small businesses, in particular through its Women’s Business Center. Cornerstone Alliance’s most recent strategic plan (2017-2021) is centered around four areas, each with its own set of goals: changing our economic future, enhancing our assets, sharing our secret with the world, and investing in Berrien County’s next chapter.⁸¹ The plan identifies five industries that Berrien County is well-positioned to target, two of which align with the recommended target areas in this report: Health Care and Advanced Manufacturing.

Cornerstone Alliance also seeks to build a more equitable, inclusive community, and is taking steps to “support more opportunities for minority entrepreneurship, minority hiring and improved minority education opportunities.”⁸² Strategies include recruiting companies with an articulated commitment to racial equality and inclusion and recruiting diverse staff and board members. Within Berrien County, many cities turn to Cornerstone Alliance for their economic development needs, and the organization is focused on creating quality jobs and attracting businesses and highly educated workers. For example, it is in the process of developing a community profile guide highlighting the assets in 14 of their municipalities. Cornerstone Alliance also works with local chambers of commerce, LMC, and MI Works! Berrien, Cass, Van Buren to understand each other’s efforts and coordinate where possible. Beyond the county, the organization engages in discussions with economic development agencies in the broader region, as well as with organizations such as Southwest Michigan First in Kalamazoo, and the focus of these conversations is currently on workforce issues.

In the workforce development space, MI Works! Berrien, Cass, Van Buren, a subsidiary of Kinexus Group, serves as the workforce development board across the three counties in its name. Its mission is “to provide sustainable & systemic solutions for the most pressing employer workforce challenges,” and it seeks to make southwest Michigan the most competitive regional economy in the state.⁸³ MI Works! is a key intermediary in the education and training ecosystem, in particular for developing and provisioning specific work-based learning opportunities and career programming. As noted throughout this report, MI Works! works in partnership with a myriad of organizations in the region to implement education, training, and career services, in many cases through state and federal funding programs (e.g., WIOA), and it supports many education and training providers in developing and delivering their own programs, such as apprenticeships. MI Works! also serves intermediary functions through an advisory group it convenes and organizes known as the Career Education & Advisory Council (CEAC), which works with MI Works! to develop education and training programs.⁸⁴ The CEAC

includes secondary and postsecondary educators, employers, parents, union representatives, and workforce development stakeholders. Included in this group are CTE providers in Berrien County. CEACs can help build and maintain collaborative partnerships among these stakeholders, and during interviews stakeholders shared that CEAC is a regional table where discussions around CTE programming, coordinating employers, and other topics relevant to career education take place.⁸⁵

With so many community members and organizations ready to support the region, the convening function of intermediaries becomes more critical. There are numerous overlapping and intersecting programs and initiatives, and many organizations and stakeholders have set tables to discuss and act on challenges the region is facing. The development of a sustainable intermediary infrastructure that clearly identifies and designates convening functions and coordinates work-based learning opportunities will be important to the success of the pathways work in the region. Inspiring Futures initiative planning should include efforts to identify or build a trusted entity capable of taking on the convening role over the long term. This entity could help coordinate the creation of a continuum of services, including academic and wraparound supports, and help ensure equitable access to these services and to work-based learning opportunities. The convening role is also critical for bringing together employer leaders in the region to help secure, develop, and sustain sequenced, systemic work-based learning opportunities.

Another challenge will be either for an existing intermediary or one built-for-purpose to take on the complex tasks of brokering and aggregating work-based learning opportunities, linking education organizations and businesses, and carrying out the many associated tasks in a coordinated way across the region. Such an intermediary could also help remove barriers to expanding work-based learning programming across the region, such as communication and coordination between employers and education partners. One essential first step in initiative planning will be for stakeholders in the region to work together to identify how intermediary functions will be fulfilled and by which organizations or committees.

Opportunities and Key Questions for Planning

The work of Inspiring Futures and the wide community support for improving outcomes for young people articulated by stakeholders during interviews indicates strong potential for successful college and career pathways implementation across Berrien County. While much work remains with respect to planning, design, and implementation of the Inspiring Futures pillars and elements of the Pathways to Prosperity key levers, it is achievable, given stakeholders' enthusiasm for the work. There is widespread recognition that a pathways system

will help ensure that young people, both in- and out-of-school, in the region are prepared for postsecondary education and careers, while also promoting economic development and strengthening business and industry. The region is therefore well-positioned to address important community challenges.

In order to make the most of this potential, JFF's asset mapping team has developed a series of key questions for leaders in the region to address as they develop an initiative plan.

Focus and Scale

- How can the pillars of the Inspiring Futures work be used to guide decisions about how to prioritize work and planning for this initiative? What implications do the challenges and opportunities outlined in this report have for the Inspiring Futures work?
- Healthcare, manufacturing, information technology, and business and finance are promising areas of focus. They offer many opportunities for programs of study aligned to postsecondary credentials with value in the labor market. How can stakeholders best ensure that the Inspiring Futures work is aligned with current and future economic development strategies at the state and regional levels?
 - What might be the role of education, workforce, economic development, and CBO partners in expanding and developing pathways in these areas?
 - Do any stakeholders not already engaged in the Inspiring Futures initiative need to be at the table?
- How can pathways best be structured in order to promote equity and increase opportunities, including opportunities to enroll in and access pathways aligned with labor-market demand, for students in every district in the region?
- Are there short-term opportunities to leverage and/or advocate for the use of ARP and ESSER dollars to implement pathways and address critical infrastructure needs (e.g., childcare and transportation) that fall under allowable spending for each of the aid packages?
- How will schools, employers, CBOs, and other actors work together to identify data gaps, such as data on off-track and out-of-school youth, and collect, analyze, and act on this data? What performance measures will be used to monitor progress and hold stakeholders accountable?
- How will a communications plan be developed? How will that plan address key questions about the work and public perceptions of regional career and postsecondary opportunities?

College and Career Pathways Development

- How might pathways development contribute to or advance the work and goals of individual organizations participating in the Inspiring Futures initiative, as well as other organizations with a stake in the success of young people in the region?
- How can access to dual enrollment options, including Early Middle College, be made more equitable across districts in Berrien County? What strategies, from models such as Early Middle College, could be adopted more widely to increase access to and success in dual enrollment?
- High-quality Back on Track options incorporate preparation for college and career pathways, postsecondary bridging supported by navigation advisors, and first-year supports that boost persistence after transitions to postsecondary. How can Inspiring Futures support intermediaries and CBOs that serve out-of-school young people to work collaboratively and create an ecosystem that incorporates these services?
- How might Berrien RESA leverage its oversight and coordinating roles for CTE programming to ensure equity, quality, and alignment to high-demand, high-growth, and high-wage industries and occupations across the county? Can regional CTE Directors' meetings be used to engage all districts more deeply—and foster regional collaboration?
- What will the components of the college and career pathways curriculum look like at the secondary and postsecondary levels? What industry-recognized credentials will be embedded in these pathways, and when and where will students in the pathways participate in work-based learning?
- What resources are needed for the region to build or expand programs of study aligned with labor-market demand? What additional resources are needed to ensure that middle school, high school, and postsecondary curricula are vertically aligned and dual enrollment functions seamlessly? How might Inspiring Futures help stakeholders collaborate to address any resource needs?
- How will teachers be engaged in the Inspiring Futures work? How will they be engaged in the college and career pathway planning process? What supports for implementation will schools and districts offer to faculty?

Career Information and Advising

- How will students be recruited or selected? How can this process be managed in a way that ensures equitable access for all students? How can career exposure and exploration be continually pushed to reach students at an earlier age, in alignment with the MI Career Development Model? How can opportunities throughout the labor shed and beyond Berrien County be made clearer and more accessible to students, young people, and their families?

- What might a continuum of career advising experiences from middle school through college look like? How can Inspiring Futures help programs and service providers align their career advising efforts to the MI Career Development Model, K-12 student Educational Development Plans, and career navigation platforms already in use by districts and colleges?
- How can LMC's GEPP course be aligned with the efforts of programs, service providers, and school districts in the area of career information and advising?
- Some programs and organizations are finding innovative ways to address shortages of advising specialists. What strategies could further support the placement of community and campus-based advisors? How can Inspiring Futures help identify and develop talent pipelines for advisors?
- How might Jobs for Michigan's Graduates leverage its new Workforce Pathways for Youth grant to strengthen career information and advising systems in the region?

Employer Engagement and Work-Based Learning

- How might the strong relationships already developed with employers be leveraged in order to strengthen employer engagement at the high school level and with disconnected youth? In what areas of the Inspiring Futures work is employer engagement most critical? What is needed from employers to create and strengthen high-value college and career pathways in the region? How can options for engagement be clarified for employers, and what strategies are needed to make the best possible use of their time? How can education and training providers offer supports to businesses that engage?
- What do businesses view as the best and most feasible ways they can engage with high school students? What do businesses perceive as their greatest challenges in taking on and managing interns? How can businesses be encouraged to engage at a more impactful level?
- What are potential funding pools for compensating students participating in on-site internships?
- How could Inspiring Futures help employers work with education and training providers to design competency-based assessments to support hiring?
- What are the career exploration and work-based learning experiences all students should have each year from middle school to college? How would this continuum align with the MI Career Development Model? How would equitable access to these experiences be ensured across Berrien County? How might Inspiring Futures help ensure alignment and equity?
- What resources or examples exist or could be developed to help employers think through challenges such as the requirement that workers be at least 18 years old? What state-

level resources or strategies could be brought to bear in efforts to address perceived barriers?

- What existing or built-for-purpose organization(s) could serve as a WBL intermediary for the region? How would this WBL intermediary be funded and operationalized?
- How might Jobs for Michigan's Graduates strategically expand employer engagement and work-based learning through its new Workforce Pathways for Youth grant in order to align with the pathways work?

Regional Leadership and Intermediaries

- How should intermediary functions be structured or distributed?
- With so many willing and able community members ready to support the region, the convening function of intermediaries becomes more critical. Would it make sense to designate a single regional convening intermediary or steering committee and multiple local work-based learning intermediaries? Who might play this convening role in the short term? In the long term? What resources will be needed to ensure the sustainability of an intermediary organization and/or structure?
- What organization has—or could build—the capacity to take on the logistics and operational work needed to support pathways? How might a common vision for equitable pathways help focus the work of key organizations in the community? What are some common goals these organizations could work toward? What are the key outcomes, and how will they be measured?
- What would it take to raise education, equity, and pathways as priorities in the Strategic Leadership Council?
- What would a continuum of services, including non-academic and wraparound supports, by age and need look like? In what ways might Inspiring Futures help CBOs and service providers collaborate and coordinate along this continuum? How might these services be made clear and accessible to young people and families?
- What organizations could be particularly effective at building public support for the Inspiring Futures vision? Who are regional champions of college and career pathways that can serve as ambassadors to promote this work throughout the community? How might the Inspiring Futures initiative use CBOs to build trust in the community and co-lead a campaign around pathways?

Endnotes

- ¹ Youth Solutions, “Inspiring Futures: Benton Harbor” <https://www.ouryouthsolutions.org/inspiring-futures>.
- ² What Works Clearinghouse, Institute of Education Sciences. 2017. Dual Enrollment Programs. U.S. Department of Education. https://ies.ed.gov/ncee/wwc/Docs/InterventionReports/wwc_dual_enrollment_022817.pdf
- ³ U.S. Census Bureau. *Decennial Census of Population and Housing*. Accessed May 25, 2021.
- ⁴ Patino, M., et al. (2021, April 28). *More Americans Are Leaving Cities, But Don’t Call It an Urban Exodus*. Bloomberg. Accessed May 25, 2021 from <https://www.bloomberg.com/graphics/2021-citylab-how-americans-moved/>.
- ⁵ Office of State Aid and School Finance, (2013, July 19). *Section 105/105C – Schools of Choice Definitions*. Michigan Department of Education. Accessed from https://www.michigan.gov/documents/mde/Schools_of_Choice_Definitions_Rev_427882_7.pdf
- ⁶ Michigan Alliance for Families “Charter Schools” <https://www.michiganallianceforfamilies.org/charter-schools/>.
- ⁷ Michigan School Data, “Student Enrollment Counts Report” <https://www.mischooldata.org/student-enrollment-counts-report/>.
- ⁸ Michigan School Data, “College Enrollment by High School” <https://www.mischooldata.org/college-enrollment-by-hs/>.
- ⁹ Jenkins, S., (2019, February 20). *Michigan Sets 60% Higher Ed Goal*. Lumina Foundation. Accessed from <https://www.luminafoundation.org/news-and-views/michigan-sets-2030-goal-for-post-high-school/>; Whitmer, G., (2019, February 12). *State of the State*. Accessed from https://content.govdelivery.com/attachments/MIEOG/2019/02/12/file_attachments/1154161/State%20of%20the%20State%20Full%20Address.pdf.
- ¹⁰ Michigan School Data, “Postsecondary: Progress Toward Sixty by 30” <https://www.mischooldata.org/progress-toward-sixty-by-30/>.
- ¹¹ Michigan School Data, “College Progression By Graduating Class” <https://www.mischooldata.org/college-progression-by-graduating-class/>.
- ¹² Measure of America, “Youth Disconnection in America” <http://measureofamerica.org/DYinteractive/#National>.
- ¹³ U.S. Census Bureau’s LEHD Origin-Destination Employment Statistics (2002-2018). Data Set 2018.
- ¹⁴ Missing from this list of promising pathways is Leisure and Hospitality, an important sector in Berrien County, especially along the Lake Michigan shoreline. While this sector is predicted to have the 5th largest growth and is the 5th largest sector in the target region in terms of the number of jobs, average earnings are below the living wage for a single adult. For youth and young adults at the early stages of their educational and career trajectories, pathways in other sectors and fields appear to be better bets. However, those working in the Leisure and Hospitality sector may benefit from upskilling strategies that help them transition into careers in fields that require a similar set of skills and similar levels of experience, such as office/administration, marketing, sales, and management. For an example of skills transferability from the tourism and hospitality sector in Hawai’i, see: <https://www.hec.org/wp-content/uploads/2020/09/HI-roadmap-Final-090220.pdf>.
- ¹⁵ According to EMSI’s methodology, openings are an estimate of growth—the change in the total number of workers employed in an occupation—and replacements—the number of workers permanently leaving an occupation and needing to be replaced—combined. The overall number of replacements for a given time frame is equal to the sum of replacements from each year in the given time frame. For further information, see: <https://kb.emsidata.com/methodology/how-does-ems calculate-job-openings/>.

- ¹⁶ For more detail, see Economic Modeling Specialists, Inc., “Understanding Location Quotient.” http://www.economicmodeling.com/wp-content/uploads/2007/10/emsi_understandinglq.pdf
- ¹⁷ U.S. Census Bureau, Center for Economic Studies, LEHD. <https://onthemap.ces.census.gov/>
- ¹⁸ Economic Modeling Specialists, Inc. (Emsi). Data Set 2021.2. Accessed May 25, 2021.
- ¹⁹ Note that as age-related industry group staffing data is unavailable at the ZIP code level, the “Target Region” for the purposes of Table 8 consists of the nine counties with their geographic centroids located within a 50-mile radius of central Benton Harbor, Michigan.
- ²⁰ JFF, “When Is a Job Just a Job—and When Can It Launch a Career?” <https://www.jff.org/resources/when-job-just-joband-when-can-it-launch-career/>
- ²¹ Rice, M. & Ulbrich, C. (2020, October). Michigan’s Top 10 Strategic Education Plan. Michigan Department of Education. https://www.michigan.gov/documents/mde/Strategic_Education_Plan_Booklet_730055_7.pdf
- ²² Michigan School Data, “Postsecondary: Progress Toward Sixty by 30” <https://www.mischooldata.org/progress-toward-sixty-by-30/>.
- ²³ Michigan Department of Labor and Economic Opportunity, “Michigan Reconnect” https://www.michigan.gov/reconnect/0,9968,7-417-102946_102969---,00.html.
- ²⁴ Michigan Department of Labor and Economic Opportunity, “Skills to Work” https://www.michigan.gov/leo/0,5863,7-336-78421_99824---,00.html.
- ²⁵ Michigan College Access Network, “Sixty by 30”. <https://micollegeaccess.org/6030>
- ²⁶ Murray, M., (2020, June 25). Summer Young Professionals Employment Program Recipients Announced. Michigan.gov. Accessed from <https://www.michigan.gov/som/0,4669,7-192-47796-532996--00.html>.
- ²⁷ Murray, M., (2021, April 21). \$2 million investment will introduce underrepresented youth to employment, career and educational opportunities. Michigan Department of Labor and Economic Opportunity. Accessed from https://www.michigan.gov/leo/0,5863,7-336-78396_78398-556761--00.html.
- ²⁸ Murray, M., (2021, July 8). Governor Whitmer announces Investment to Support Customized Training Opportunities to Help Get Michigan Back to Work. Michigan.gov. Accessed from https://www.michigan.gov/som/0,4669,7-192-29701_74909_74922-563394--00.html.
- ²⁹ Michigan Department of Labor and Economic Opportunity, “Michigan Learning & Education Advancement Program (MiLEAP) Program Overview - Work-Based Learning” https://www.michigan.gov/documents/leo/WD_Program_Overview_2020_v1_MiLEAP_12.17.20_716159_7.pdf.
- ³⁰ Michigan Works! Berrien, Cass, Van Buren, “Need help finding training or education?” <https://www.miworks.org/mileap>.
- ³¹ Michigan Department of Education. (2018 December). *Michigan Career Development Model*. Accessed from https://www.michigan.gov/documents/mde/MI_Career_Development_Model_-_Dec_18_2018_641266_7.pdf.
- ³² Michigan Department of Education, “Michigan’s High School Career and Technical Education Standards and Expectations” https://www.michigan.gov/documents/mde/CTE_Content_Standards_556503_7.pdf.
- ³³ Office of Career and Technical Education. (2020). *EDP Fundamentals: Guidelines for the Use of Educational Development Plans*. Michigan Department of Education. Accessed from https://www.michigan.gov/documents/mde/EDP_Fundamentals_Guide_703180_7.pdf.
- ³⁴ Michigan Department of Education, “The Michigan Career Readiness Initiative and Cross-Sector Team” https://www.michigan.gov/mde/0,4615,7-140-2629_90449---,00.html.
- ³⁵ Michigan Department of Education, “Career Pathways Grant” https://www.michigan.gov/mde/0,4615,7-140-2629_82356_94990-512465--00.html.
- ³⁶ Michigan Department of Education, “Leveraging Career and Technical Education

(CTE) to Support Implementation of the Michigan Merit Curriculum”

https://www.michigan.gov/mde/0,4615,7-140-2629_82356_94990-512465--,00.html.

³⁷ Michigan Department of Education, “A Parent’s Guide to Personal Curriculum”

https://www.michigan.gov/documents/mde/Enrichment_482097_7.pdf.

³⁸ Michigan Department of Education, “Early Middle College” https://www.michigan.gov/mde/0,4615,7-140-81351_51178--,00.html.

³⁹ Michigan Department of Education, “Michigan Department of Education - Office of Career and Technical Education”

https://www.michigan.gov/documents/mde/3_OCTE_Operations_AtAGlance_723152_7.pdf

⁴⁰ Advance CTE, “Michigan” <https://careertech.org/michigan>.

⁴¹ Michigan Department of Education. (2021 March). *Postsecondary Dual Enrollment Options-Frequently Asked Questions*. Accessed from https://www.michigan.gov/documents/mde/9-12_Dual_Enrollment_FAQs_397781_7.pdf.

⁴² Michigan Department of Education, “Dual Enrollment” https://www.michigan.gov/mde/0,4615,7-140-81351_40085--,00.html.

⁴³ Lake Michigan College, “Dual Enrollment” <https://www.lakemichigancollege.edu/audience/early-college>.

⁴⁴ The State School Aid Act, 388.1661b, Act 94 of 1979.

[https://www.legislature.mi.gov/\(S\(wncslxkwcfxpluhatfol4om1\)\)/mileg.aspx?page=getObject&objectName=mcl-388-1661b&highlight=61b#top](https://www.legislature.mi.gov/(S(wncslxkwcfxpluhatfol4om1))/mileg.aspx?page=getObject&objectName=mcl-388-1661b&highlight=61b#top).

⁴⁵ Michigan Department of Education, “Dual Enrollment Brochure”

https://www.michigan.gov/documents/mde/EMC_Brochure_Digital_20180813_634740_7.pdf.

⁴⁶ Michigan Department of Education, “Work-Based Learning (Non-CTE Program)”

https://www.michigan.gov/documents/mde/WBL_Non-CTE_Program_Booklet_605674_7.pdf.

⁴⁷ Michigan Department of Labor and Economic Opportunity, “Request for Proposals Pre-Bid Webinar State Apprenticeship Expansion (SAE) 2020 Grant Program”

https://www.michigan.gov/documents/leo/RFP_SAE_2020_Grant_Program_Pre-Bid_Webinar_20200106_v_Digital.pptx_712327_7.pdf.

⁴⁸ JFF, “American Rescue Plan Funds Can Transform Education for Young Adults”

<https://www.jff.org/resources/american-rescue-plan-funds-can-transform-education-young-adults/>.

⁴⁹ The Office of Governor Gretchen Whitmer. (2021, July 7). *Gov. Whitmer Signs Bill to Put Michigan Students and Educators First*. Michigan.gov. Accessed from

https://www.michigan.gov/whitmer/0,9309,7-387-90499_90640-563297--,00.html.

⁵⁰ U.S. Department of Education, (2021, April 21). *State Plan for the American Rescue Plan Elementary and Secondary School Emergency Relief Fund*. Accessed from

https://www.michigan.gov/documents/mde/Michigan_ARP_ESSER_State_Plan_727674_7.pdf.

⁵¹ Michigan Associations of Counties, “County-by-County Aid Estimates - American Rescue Plan - March 2021” <https://micounties.org/wp-content/uploads/Federal-aid-to-counties-proposal-March-2021-V2.pdf>

⁵² Berrien County Career and Technical Education <https://www.berriencte.org/>.

⁵³ Ibid.

⁵⁴ https://www.michigan.gov/documents/mde/CTE_Facts_Brochure_2020-21_DRAFT3_729952_7.pdf

⁵⁵ PTD Technology, “CTEIS Perkins V Dashboards” <http://analytics.ptdtechnology.com/Perkins-CPIs-Race-and-Gender/Perkins-V/Performance-Race-and-Gender>.

⁵⁶ Berrien County Career and Technical Education, “PA56 Nondiscrimination Statement”

<https://www.berriencte.org/nondiscrimination-statement/>.

⁵⁷ Berrien County Career and Technical Education, “Berrien County Career and Technical Education Programs” <https://www.berriencte.org/pathways>.

⁵⁸ Berrien County Career and Technical Education, “Career Pathways Day”

<https://www.berriencte.org/resources/pathway-day/>.

- ⁵⁹ Dual Enrollment Programs, What Works Clearinghouse, Institute of Education Sciences, February 2017, accessed July 19, 2021 from: https://ies.ed.gov/ncee/wwc/Docs/InterventionReports/wwc_dual_enrollment_022817.pdf.
- ⁶⁰ Berrien County Career and Technical Education, "Programs of Study" <https://www.berriencte.org/5th-year-emc/programs-of-study/>.
- ⁶¹ Benton Harbor Promise <http://bentonharborpromise.com/>.
- ⁶² Delgado Community College, "Accelerated Career Education (ACE)" <https://www.dcc.edu/academics/adult-education/accelerated-career-education.aspx>
- ⁶³ Michigan Department of Education. (2018 December). *Michigan Career Development Model*. Accessed from https://www.michigan.gov/documents/mde/MI_Career_Development_Model_-_Dec._18_2018_641266_7.pdf.
- ⁶⁴ Pure Michigan Talent Connect <https://www.mitalent.org/> ; Roadmap to Opportunity <https://roadmap2opportunity.org/>.
- ⁶⁵ Michigan House Democrats, "Brabec Announces Legislation Requiring Schools to Employ at Least One School Counselor" <https://housedems.com/brabec-announces-legislation-requiring-schools-to-employ-at-least-one-school-counselor/>.
- ⁶⁶ US Department of Labor <https://www.dol.gov/newsroom/releases/eta/eta20210610-1>.
- ⁶⁷ Illinois PaCE, "Postsecondary and Career Expectations" <https://www.isac.org/pace/documents/pace-framework.pdf>.
- ⁶⁸ Center for the Future of Arizona, "Co-Advising Framework" <https://www.arizonafuture.org/programs/workforce-programs/career-connected-pathways/co-advising-framework/>.
- ⁶⁹ Michigan College Access Network, "School Counselor Fellows Program" <https://micollegeaccess.org/initiatives/counselor-fellows>.
- ⁷⁰ Michigan Department of Labor and Economic Opportunity, "Partnership, Accountability, Training, Hope" https://www.michigan.gov/leo/0,5863,7-336-94422_95539_64361_64535-299255--,00.html.
- ⁷¹ Hoffman, N., (2021 May 1), *Who You Know Matters More than Ever in the COVID-19 Job Market*. JFF. Accessed from <https://www.jff.org/points-of-view/who-you-know-matters-more-ever-covid-19-job-market/>.
- ⁷² Office of Career and Technical Education. (2020). *EDP Fundamentals: Guidelines for the Use of Educational Development Plans*. Michigan Department of Education. Accessed from https://www.michigan.gov/documents/mde/EDP_Fundamentals_Guide_703180_7.pdf.
- ⁷³ Berrien County Michigan, "Business Incentives & Resources" <http://www.berriencounty.org/308/Business-Incentives-Resources>.
- ⁷⁴ U.S. Department of Labor, Employment and Training Administration <https://www.dol.gov/sites/dolgov/files/ETA/grants/pdfs/FOA-ETA-21-01.pdf>.
- ⁷⁵ Education Systems Center & ICCB, (2020 October). *State of Illinois Model Programs of Study Guide: Health Sciences and Technology*. Accessed from <https://edsystemsniu.org/wp-content/uploads/2019/11/Model-Programs-of-Study-Guide-Health-Sciences-and-Technology-20201014.pdf>.
- ⁷⁶ United Way of Southwest Michigan, "Education local snapshot" <https://www.uwsm.org/education>
- ⁷⁷ Michigan College Access Network, "Find an LCAN" <https://impact.micollegeaccess.org/public/dashboard/mcan-impact-map/tab/public-mcan-find-lcan>.
- ⁷⁸ Michigan College Access Network, <https://micollegeaccess.org/initiatives/lcan>.
- ⁷⁹ United Way of Southwest Michigan, "Strategic Leadership Council" http://volunteer.uwsm.org/agency/detail/?agency_id=105016.
- ⁸⁰ Cornerstone Alliance, "Who We Are" <https://www.cstonealliance.org/index.php/about-us>.
- ⁸¹ Cornerstone Alliance, "2017-2021 Strategic Plan" https://www.cstonealliance.org/images/CA_Strategic_Plan_for_web.pdf.

⁸² Cornerstone Alliance, “Who We Are” <https://www.cstonealliance.org/index.php/about-us>.

⁸³ Michigan Works! Berrien, Cass, Van Buren, “About Us” <https://www.miworks.org/about>.

⁸⁴ Michigan Works! Berrien, Cass, Van Buren, “Industry Initiative” <https://www.miworks.org/industry-initiatives>.

⁸⁵ SEMCA Michigan Works! “About Us”, <https://www.semca.org/about-semca/career-educational-advisory-council/>.