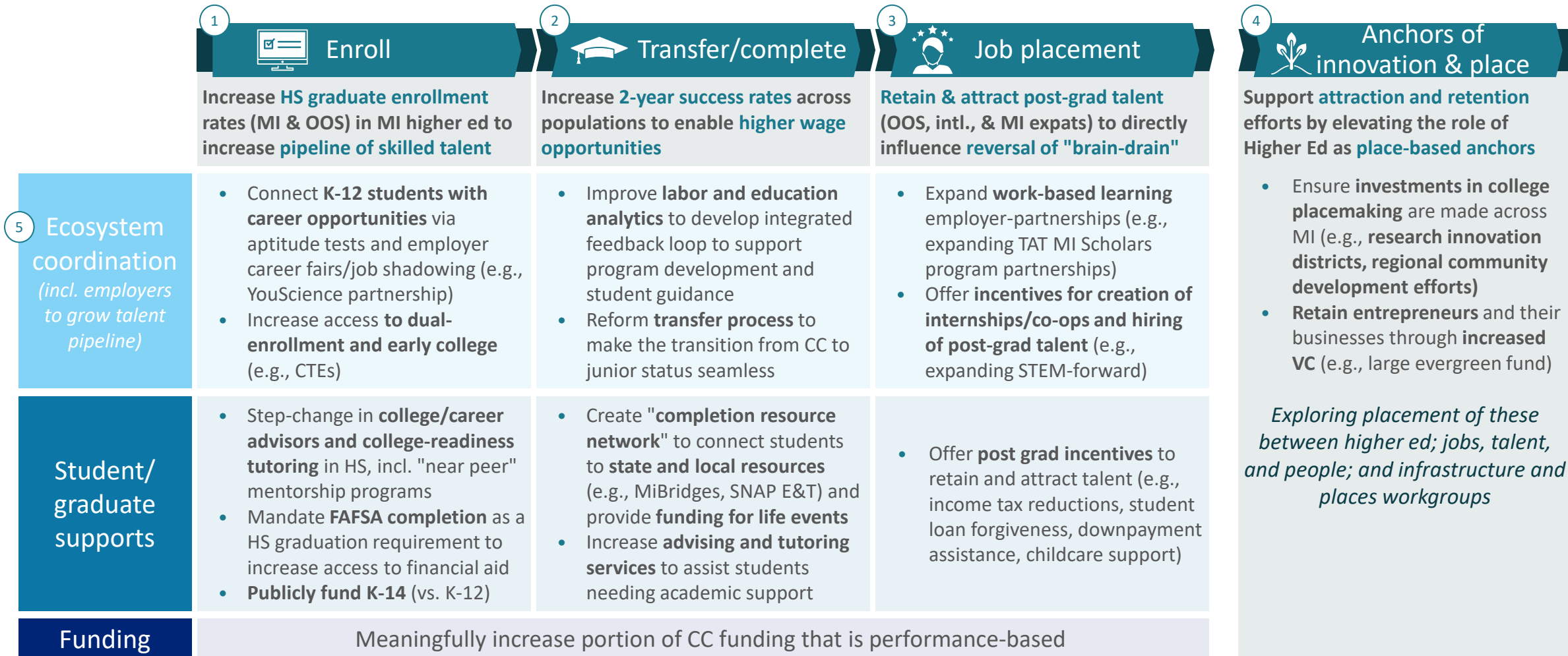


Portfolio across steps of student journey provides integrated, long-term, sustainable impacts on population growth



Impacts compound when solutions are executed across entire student journey

Connect K-12 students with career exploration

Pathfinder



Uses current labor market, wage, and institutional data and metrics to create individualized career roadmaps

- Provides information on jobs, fields, & estimated earnings and on schools, including estimated costs and duration of study
- Enables comparison of potential pathways
- Aimed at students, their parents, and guidance staff
- Created and supported by Department of LEO's Office of Employment and Training

Pure Michigan Talent Connect



Provides skills profiler through CareerOneStop (funded by US Department of Labor)

- Allows for exploration of career paths based on self-classification across 40 item questionnaire
- Also enables exploration of training options by geography and career type, but does not integrate with skills profiler

Georgia Department of Ed statewide K-12 aptitude tests



Provides YouScience, career path assessment that measures interest and aptitude, free to all 180 school districts

- Assessment customized to match district's available career pathways (e.g., health care, computer science, business and finance)
- Shortened test administered in 7th grade
- Full assessment administered in 10th grade, utilized by guidance counselors to provide individualized advice on coursework & journey pathway
- Job opportunities and salaries included in report
- "Tool in the toolbox" compounds impact of guidance counselors, internships / job shadowing, & job fairs

Sample impacts

- "It's not just our kids who are going to work straight from school, it's also our college-bound students who may not have any idea what they want to do with the education that they're going to get."
– CTAE Director
- "It levels the playing field on our students. You see those with the high aptitude and low interest, and it's not because I'm really not interested, I just don't know anything about that career."
– Counselor

Applications to MI

Today MI offers tools to understand the current labor market and explore potential careers

However, these tools are self-service on an ad-hoc basis; they are not formalized or forward-looking

MI can build upon these items by formally offering aptitude tests and customized guidance in secondary schools, including

- Initial exposure in 7th grade and full testing in 10th grade
- Pathways matched to district-specific offering
- Local employer and CC partnerships to provide real-world experiences and credit opportunities aligned with test outputs

Increase access to dual-enrollment and early college

Postsecondary Enrollment Options Act & Career and Technical Preparation Act



Modifies and expands on State School Aid Act provisions for students earning college credits while in high school

- Refunds high schools for eligible charges (e.g., tuition, mandatory course or material fees, registration fees) incurred by eligible students pursuing dual enrollment
- Ensures all students in eighth grade and higher are given information on college course-taking opportunities
- Up to 10 units per semester for 9th & 10th grade students
- Student application requirements & frequency determined by CC
- No requirement for coordination with labor organizations

Early middle college (EMC)



Department of Education

Blends HS and college into 5 year program, compressing time taken to achieve HS diploma and college credential

- Resulting outcome includes one or more of
 - 60 transferable college credits
 - Associate degree
 - Professional certification
 - Michigan Early Middle College Association technical certificate
 - Participation in registered apprenticeship
- Early colleges establish partnerships with postsecondary institutions to enable outcomes
- HS and college curricula are combined, resulting in specific degree pathways

California College and Career Access (CCAP)



California
Community
Colleges

Provides seamless dual enrollment pathways from HS to >50 CCs across California for CTE & preparation for transfer; aids higher ed & career readiness

- Incentivized CCs with apportionment for providing courses on HS campuses
- Increased dual enrollment units available to students per semester from 11 to 15
- Streamlined student application & HS district agreement adoption
- Made units earned eligible for priority registration and enrollment across participating CCs
- Broadened access to continuation students
- Mandated consultation between CCs & local workforce investment boards to align CTE pathways & labor markets

Sample impacts

- Dual enrollment in CA increased 49% from 2017-2020, with CCAP driving 92% of the increase
- Over the same period, portion of socioeconomically disadvantaged dual enrolled increased 6pp

Applications to MI

Today MI offers many pathways for students to attain college credit prior to HS graduation, with **86% of MI districts have students enrolled** in dual enrollment or EMC...

However, **only 6.6% of HS students** in MI participate

MI has an opportunity to improve student uptake of these programs through **minimizing existing barriers**

- Incentivize **CCs to provide courses on HS campuses** and streamline district adoption
- Standardize student applications and **eliminate reapplications**
- Offer dual enrollment and EMC **curricula aligned with district labor opportunities**

Strengthen labor and education analytics

MI Labor Market Information



Enhances and promotes evidence-based decision making through advanced research and analytics

- Offers regional data across MI labor opportunities
 - Apprenticeship dashboard (historical view, data as of 2021)
 - Online Job Snapshots (updated monthly)
 - 2030 outlook of high-demand, high-paying occupations

Pathfinder



Uses current labor market, wage, and institutional data and metrics to create individualized career roadmaps

- Provides information on jobs, fields, & estimated earnings and on schools, including estimated costs and duration of study
- Enables comparison of potential pathways
- Aimed at students, their parents, and guidance staff

Pure Michigan Talent Connect



Provides career matches through partnership with MySkills MyFuture (funded by US Department of Labor)

- Allows for exploration of potential careers based on previous experiences, including links to training programs for credentials
- Provides job listings and potential employers; filtering by distance available

Virginia Office of Education and Economics



Virginia
Economic
Development
Partnership

Provides data on talent availability and job opportunities to inform educational programming and policy, enabling workforce partnerships

- Integrated data and perspectives across VA ed, talent, & jobs
- Creating on-line tool to connect OOS & in-state recent graduate applicants with high-demand, upskilled VA job opportunities
- Further tool enables quality of life and economic prospects assessment

Sample impacts

- Released 4 data-driven reports on education-workforce alignment, out-of-state talent attraction, apprenticeships, and the STEM workforce

Alabama Talent Triad



Creating statewide skills-based hiring ecosystem targeting jobseekers, employers, and education providers

- Optimizing partnership employers, higher ed, and job seekers through competency-based learning and skill-based hiring
- Creating credential registry system, employer portal for posting opportunities, & digital credential wallet for students applying

Sample impacts

- Launching Sept 2023; aiming to enroll 10K+ candidates by EoY

Applications to MI

MI recently stood-up Michigan Center for Data and Analytics (MCDA) within DTMB to provide **analysis of MI job opportunities and labor market trajectories**

However, key outlooks utilized **dated information** and there is a **lack of connection** between **employers**, the **credentials** required to apply for their job opportunities, and **job-seekers**

MI has opportunity to **further invest in**

- **Real-time signals** on upcoming labor needs
- **Continually updated** 6-12 month & long-term (2-5 yr) **projection dashboards**
- **Platforms to connect employers and students** digitally according to skills attained / required

Reform 2-year to 4-year transfer process

MiTransfer Network



Facilitates Michigan Transfer Agreement, enabling students to transfer 30 credit hours of general ed coursework from MI CCs to 4-year institutions

- Establishes Transfer Steering Committee to oversee and support students transferring with associate degree toward earning a bachelor's
- Provides searchable database of course equivalencies, but does not mandate equivalencies across partnering institutions
- Provides list of articulation agreements and transfer guides by participating institution and by specific academic program, but does not guarantee pathways outside of 10 academic and 4 applied programs
- Covers ~70 CCs, public universities, and independent colleges and universities

Nevada System of Higher Education



NEVADA SYSTEM OF
HIGHER EDUCATION

Provides uniform, statewide transfer best practices through Transfer and Articulation Agreement

- Nationwide, 8 states (CO, FL, KS, LA, MO, NV, OR, & TN) action all 4 transfer process best practices: common-course numbers, completion of Associate degree fulfilling gen ed requirements, participation of higher ed institutions within the state, & reverse transfer pathways
- All undergraduate offerings across NSHE must be common-course numbered
- Completion of associate degree automatically fulfills lower-division gen ed requirements at any NSHE institution
- Reverse transfer of credits pathway available across NSHE system
- Transfer and Articulation agreement clearly communicated to all stakeholders

Sample impacts

- Portion of transfer agreements resulting in little or no loss of college credits improved 19pp, from 76% to 95%

Applications to MI

MiTransfer Network currently offers **comprehensive information on articulation and transfer agreements** by institution, covering all public CCs and 4-year institutions

However, **course equivalencies are not required** & articulation and transfer agreements are restrictive in their pathways offered

MI has opportunity to **enhance Michigan Transfer agreement by mandating**

- All applicable undergrad offerings must be **common-course numbered**
- **Broadened set of courses** receiving colleges or universities are **required to accept**
- **Guaranteed junior status** with any MI associate degree

Expand employer partnerships via work-based learning and FT offers

Talent Action Teams MI EV Scholars Program



**MICHIGAN ECONOMIC
DEVELOPMENT CORPORATION**

Aims to recruit EV and mobility higher ed student talent through public-private partnership and scholarships

- One-year pilot program partners 8 major Michigan employers within EV industry with 4 public universities and 2 community colleges
- Employers volunteer to network with and consider offers for students within the EV Scholars program
- Funds scholarships of up to \$10K to as many as 350 top tech students who sign a letter of internship or FT employment with an approved company and commit to staying in MI for 12 months
- Scholarship is provided to the participating university and is credited toward the awarded student's tuition
- Talent Action Teams arranges additional networking opportunities throughout academic year with partnering company leaders
- Aim to help fill participating employers' annual demand for 500-600 electrical engineers and software developers

Employment Aid Readiness Network (EARN) Indiana



Connects and incentivizes employers with experiential learning internship programs and college, university, and HS students that are Indiana residents

- Partnership of Indiana Commission for Higher Education (CHE) and Work and Learn Indiana
- Qualified employers offering experiential learning internships receive state matching funds when hiring students who are eligible to receive state financial aid of up to \$3K per student
- Employers are limited to a total of \$30K per fiscal year
- Working activities may be no more than 25% administrative in nature and must last at least 8 weeks
- Program was expanded in 2019 to high school students, who are required to work within specific industries, e.g., advanced manufacturing, building and construction, health and life sciences, IT, transportation, education, & agriculture

Sample impacts

- Work and Learn Indiana has placed more than 11,000 college interns around the state since 2001

Applications to MI

Talent Action Team Michigan Scholars Program is crafting **employer-educator partnerships in targeted industries**, with high-demand employers (e.g., EVs)

Opportunity to deepen these employer partnerships to **require a work-based learning component** (e.g., internship, co-op) and **co-create relevant learning curriculum**

In addition, MI can **expand Program scope and eligibility to**

- Other **high-demand industries**
- A wider variety of **high-paying employers**
- **Additional students** at institutions beyond the initial pilot

Incentivize creation of internships/co-ops

STEM-Forward



Matches MI college and university students with STEM -focused internship opportunities at innovative, MI-based companies

- STEM-focused internship must be with a Michigan company that provides a minimum hourly wage of \$15, at least one week (5 workdays) of on-site work experience, and a direct supervisor
- Companies must be Michigan-based or have a strong operational presence in Michigan
- All size companies are eligible so long as they are a legal entity and have experience working with interns
- Technology-focused businesses are preferred
- Company contributions are matched up to \$3K for full-time interns and \$1.5K for part-time interns, or up until 12 weeks of the internship passes
- If STEM Forward's contribution limit is reached before the internship concludes, the company's contribution shifts to 100% for the remainder of the internship
- Currently STEM Forward is targeted at short-term (10-12 weeks), paid internships; long-term apprenticeships leading to credentials are not incentivized

Florida Internship Tax Credit Program



Incentivizes businesses to hire student interns from Florida public universities and colleges

- Provides \$2K per student intern (up to 5 interns / \$10K per business) to qualifying businesses
- Businesses must have been operating for 3+ years, 20%+ of full-time employees must have been previously employed as interns, and total full-time headcount must be fewer than 10
- Students must be employed for a minimum of 30 hours / week for 9 weeks and have at least 60 credit hours at Florida public university or college
- \$2.5M allocated on first-come, first-serve basis

Sample impacts

- Initiative was launched in 2022
- In 2023, program was expanded to include businesses hiring apprentices and pre-apprentices

Applications to Michigan

Current incentives for MI companies to create meaningful internships are **limited to STEM-based experiences**

While a high portion of STEM pathways lead to high-demand, high-wage jobs, internship programs could attract a **larger pool** of employers and students by **expanding beyond a STEM** focus, e.g., healthcare, education, high-demand apprenticeships

To further encourage internship and full-time job pathway creation, businesses with **higher portions of FT employees** that were **former interns** should be **prioritized**, with **administrative tasks** constituting **no more than 25%** of working activities

Fund step-change in HS college/career advisors and tutoring

College Bound Michigan



Fosters connections between HS students and postsecondary pathways, and funds improvements in guidance programs

- Funds grants to assess current systems and practices, determine challenge areas, develop action plans, and establish a postsecondary action and success team
- Provides resources to support students with college and financial applications, placing special focus on first-generation students and those less likely to apply for college
- Aids students with FAFSA application submission and understanding their FAFSA award upon receiving it

School Counselor Fellows Program



Fellowship aims to develop leadership and awareness of the counseling landscape within MI and nationwide

- Cohort of school counselors is trained in advanced leadership and advocacy, specifically focused on postsecondary practices e.g.,
 - Understand impacts of mental health and wellness in relation to postsecondary education plans
 - Receive training in diversity, equity, and inclusion to embrace equity-driven leadership
 - Use data-supported, evidence-based research to enhance college-going culture in local community

Golden State Teacher Grant Program



SB 1229 incentivizes larger pool of HS guidance counselors, social workers, and psychologists

- Increases \$20k tuition grant to \$25k and extends to school counselors, social workers, & psychologists
- Grants are conditional on working in CA school system for 4 years

Sample impacts

- Similar campaigns in California under earlier administration reduced students to counselor ratio from ~1000 to 500:1

12th Year Campaign



Utilizes support of "near peers" to navigate & apply for higher ed and financial aid

- Provides both a financial aid advising day and notification of financial aid opportunities at the beginning of each school year to parents and guardians of any student entering the 12th grade
- Other accessible modules cover academic readiness, scholarships, finances, applications, and enrollment, provided through virtual lessons, recorded trainings, workbooks, & award letter worksheets
- Offers 24/7 "Otterbox" text-based support, >5M texts sent

Sample impacts

- Schools participating in the 12th Year Campaign reported FAFSA completion rates 11pp higher than non-participants

Applications to Michigan

Michigan currently supports high schools with innovative **grants** to enhance their **guidance and college readiness programs**

While grants attempt to target schools with most need, a step-change in **magnitude of advisors** is required to **reach most students**

Michigan can incentivize training of more guidance counselors and keep them working in-state by funding **tuition grants for guidance counselors** that commit to **servicing in MI HS**

Michigan can also **incentivize creation of "near peer" programs** that connect current HS students with recent graduates that can help advise on financial aid and application processes

Mandate FAFSA completion as a HS graduation requirement

Michigan FAFSA Tracker



Provides benchmarking FAFSA completion data for high school administrators

- Visualizes FAFSA completion data by MI HS
- Provides current FAFSA completion data, trends over time, and a comparison tool to previous FAFSA completion cycles
- Leaderboard inspires positive competitive spirit

Virtual Financial Aid Presentations



MI Student Aid

Department of Treasury's MI Student Aid team holds virtual sessions to educate students and their families

- Key areas covered include
 - FAFSA application information
 - Federal and state financial aid programs
 - Scholarship searching resources, including how to use MI Student Aid's scholarship search tool
 - Understanding award letters
- Families are allotted a single 1 hour virtual session, to be chosen from 4 offered time slots in October and November; sessions are not advertised widely
- MI Student Aid also operates call center M-F during working hours

Louisiana Handbook for School Administrators



Codifies FAFSA submission as conditional graduation requirement

- Graduation from HS across Louisiana is conditional on choosing one of three options
 - Submission of FAFSA
 - Submission of Taylor Opportunity Program for Students (TOPS), which does not require household financial information
 - Parent / custodian certifies in writing to their local education agency their refusal to complete FAFSA or TOPS
- Provides error checking services to prevent submissions from being rejected
- Holds virtual 1:1 meetings and events at high schools to aid submission and enhance awareness

Sample impacts

- FAFSA completion rates increased 26pp
- Closed 13pp completion rate gap between lowest and highest-income school districts

Applications to Michigan

FAFSA is currently encouraged, but not mandated, with mostly **individual efforts at HS level**

While accurate data on completion rates is easily accessible, **completions rates for FAFSA remain low**, with only 52% of MI HS graduates submitting

MI could increase the portion of FAFSA completions and close racial and socioeconomic equity gaps by **requiring submission of FAFSA** to graduate HS and launching a **campaign to assist families and inspire completion**

To counteract potential opposition to mandating a federal loan application, MI can provide the **option for parents to provide a signed refusal** in lieu

Publicly fund K-14

Michigan Reconnect



Last-dollar scholarship program covering in-district community college tuition-free, or large discount for out-of-district community college

- Eligibility currently covers Michigan residents of 1+ years, aged 25+
- Requires high school diploma or GED
- Must be first college degree (associate or bachelor's)
- Proposals to expand program include (not adopted in budget)
 - Reconnect BA pathway: targets re-enrollment of adults who stopped higher ed journey during the pandemic, or who completed high school during the pandemic and never enrolled in higher ed
 - Expansion of age eligibility to 21+

Kalamazoo Promise



Scholarship providing up to 100% of tuition for Kalamazoo Public School graduates' post-secondary education

- Recipients must have attended Kalamazoo Public Schools and resided in-district for entirety of HS
- Scholarship contingent on full-time enrollment, earning 2.0+ GPA
- Benefit %s are based on length of continuous attendance and residency in Kalamazoo Public School System, from 100% for K-12 to 65% for 9-12
- Success of Kalamazoo Promise inspired creation of 13 more promise zones throughout MI, providing a range of tuition-free paths, often pro-rated on length of attendance and residency in school district

New Mexico Opportunity Scholarship



Provides tuition and required fees for eligible NM residents pursuing career training certificates, associate's & bachelor's degrees at NM's public colleges and universities

- No application is filed; eligible students work with financial aid offices at their higher ed institution to receive scholarship
- All associate and bachelor's degree programs are eligible
- Applicants pursuing certificates must be enrolled in programs leading to high-need fields
- Applicants are required to have one year residency in NM

Sample impacts

- From Fall 2021-22, higher ed enrollment increased by 4%; community colleges led the pack with an increase of 5.5% to their annual enrollment – NM's first enrollment growth since 2010

NC Promise Tuition Program



Lowers tuition for in-state students to \$500 per semester (\$2500 for OOS)

- Covers 4 Promise institutions: Elizabeth City State, Fayetteville State, UNC at Pembroke, & Western Carolina University
- No means testing required

Sample impacts

- Between 2017-19, undergraduate transfers increased by 40-57% at participating institutions

Applications to Michigan

Provision of tuition-free higher ed is **limited** today to **adult learners** and students residing continuously in **Promise Zones**

However, this system does not cover many MI HS graduates outside of Promise Zones; given the scattered areas of coverage, it also predominantly utilizes **local public-private partnerships** for funding

Other models for lowering college cost to increase access include **broad opportunity scholarships** and **subsidized tuition** at select universities

Create "completion resource network"

Michigan Center for Student Success



Provides state-level support to Michigan CCs by fostering connections between administrators, faculty, and staff to positively impact student outcomes

- Facilitates MiTransfer agreements to help students more easily transfer credits between institutions
- Connects students to food assistance benefits by facilitating partnerships between CCs and the MiBridges program
- Facilitates the MI-BEST initiative to research and understand non-academic barriers to student success
- Convenes Diversity, Equity, Inclusion, and Belonging CC affinity group

California Student Aid Commission



Proactively connects at-risk students to additional state benefits

- Provides information on accessing SNAP, Temporary Assistance for Needy Families, and CalFresh based on financial aid letter and expected family contribution
- Provides information on public benefits and alternate pathways of covering tuition for students with unmet financial need who qualify for Federal Work-Study Program
- Administers Cal Grant, a California-specific financial aid allocation that does not need to be paid back; applications for level of grant eligibility are automatically determined through FAFSA or CA Dream Act applications and are determined by family income, financial need, and maintenance of "Satisfactory Academic Progress"
- Staffs campus-level financial aid advisors with a roster of "near peers" who qualified for state benefits themselves, conducting outreach and aid with financial aid questions and form completion

Sample impacts

- The expansion of the Cal Grant program in the 2021-22 California State Budget expanded access to financial aid for 140,000 more community college students, a 38% overall increase

"Receiving a Cal Grant has been a tremendous help throughout my college career. It has primarily helped me pay for essential student needs and finances such as books and tuition. This is very helpful for a student because without paying tuition you can't go to school; it is as simple as that."
- Cal Grant recipient

Applications to Michigan

At-risk students in Michigan have **significant resources available** to them through federal and state organizations

However, most assistance **navigating complex funding** sources and applications is performed at an institutional level and is supplied **on-request through administrators**

Michigan can better serve at-risk student statewide by **streamlining access to relevant funding** through

- **Proactively providing information** on federal and state programs based on **financial aid eligibility**
- **Staffing "near peer" at-risk students to help** complete forms
- **Providing small-to-mid-size grants**, with eligibility & amount determined by FAFSA submission and student circumstances

Increase higher ed advising and tutoring services

College Completion Corps



Trains on-campus student advisors to serve first-generation, low-income, and / or students of color, with a focus on college persistence and completion

- Each trained AmeriCorps member serves as "Completion Coach" for community college students in MI, serving cohort of 100-150
- During the 2020-21 year, the program reached 2,500 students; 50% of participants continued to next year of coursework, completed successful transfers to 4-year institutions, or completed a college credential

Roadmap to Opportunity



Provides resources for students and career advisors outlining 10 distinct pathways for high-demand, high-wage jobs in MI

- Materials include short, on-line videos highlighting successful individuals from specific career pathways, with links to related CC programs, e.g., owner of carpentry business talking through day-to-day operations and how credential enabled his success, accompanied by links to all MI CCs offering carpentry pathway
- All pathways include annual projected job openings, estimated job growth and hourly pay, with additional roadmap of advanced degree wage growth
- Currently includes 146 academic programs with ties to ~16,000 job openings in related fields

National Institute for Student Success at Georgia State



Enables proactive advising through early-warning systems

- Built from 10 years of internal data; sample included 2.5M grades across records of 140K students
- Catalogued 700+ red flags requiring academic and financial aid interventions
- Hired 42 post-secondary academic advisors to reduce student to adviser ratio from ~700 to 300:1
- Proactively provided 12K+ "Panther Retention Grants" of \$300+ for emergency funding

Sample impacts

- 6-year completion rates for first-time, first-year freshmen rose 23pp for all students, 29pp for Black students, and 35pp for Latinx students
- Black and Latinx equity gaps were eliminated

Applications to Michigan

Current efforts utilize "near peers" and generate **meaningful impacts** (e.g., high transfer rates) for small portion of the student body across MI

Complementing these efforts with statewide analysis of academic and financial aid intervention "red flags" would create more **precise warning-system** and cover **larger portion** of student body

Initiatives to increase the number of academic advisors, especially for institutions with lower completion rates and high equity gaps would enable **proactive, personalized outreach** based on **flagged warning signs**

Offer post-graduation incentives to retain and attract talent

Talent Action Teams



**MICHIGAN ECONOMIC
DEVELOPMENT CORPORATION**

Aims to recruit EV and mobility postgraduate talent through public-private partnership

- Matches OOS & in-state applicants with 15 employers hiring postgrads
- Media campaign advertises skill-training, quality of life in MI, and opportunity for advancement

Repayment Loan Programs

Non-exhaustive



Michigan State Loan Repayment

- Provides up to \$300k in tax-free funds to repay student loans for healthcare providers who accept jobs in Michigan's underserved communities which are designated as "Health Professional Shortage Areas"; requires minimum 2 year service term

MI Kids Now Loan Repayment Program

- Provides up to \$200k in tax-free funds to repay student loans for school or community-based behavioral healthcare providers agreeing to a minimum of 2 years of service, with priority given to providers serving child populations

Michigan Opioid Treatment Access Loan Repayment Program

- Offers up to \$30k in loan repayment assistance to medical service providers and substance use disorder counselors who provide opioid use disorder treatment; repayment amount is dependent on the number of patients under the provider's care

Minnesota Student Loan Forgiveness And Repayment Assistance Program



Disburses cash awards toward repayment of student loans in high-demand fields

- Covers health professionals, large animal veterinarians, teachers, agricultural education, and aviation
- Recipients must prove that they applied the full cash award they received towards their student loans
- Requires a "term of service" within area of study and specified geography to qualify for loan forgiveness or repayment assistance

Sample impacts

- Over 75% of graduates from Minnesota's universities stayed in the state after graduation; MN is one of 10 states & D.C. which saw an increase in the population of college graduates

Oklahoma HB 2138



Provides all new college and CareerTech graduates a two-year break from state income tax

- Exemption applies to first \$75K of income for up to 2 years, value of ~\$3K annually; conditional on new graduates working in their field of study and remaining in Oklahoma

Sample impacts

- 90% of Oklahoma residents who attended the state's universities stay in-state 1 year after graduation

Applications to Michigan

A **variety of incentives exist** to retain and attract high-demand postgraduates, but these efforts are **fragmented across programs and limited in scope**

Opportunity to **consolidate loan repayment programs under a single initiative** and expand to:

- Include additional **high-demand industries**
- Vary loan repayment amounts to **incentivize balance of workforce in key MI geographies**
- Target **recent graduates from MI and non-MI** higher ed institutions

Increase VC funding to retain Michigan entrepreneurs

Michigan Innovate Capital Fund

Supports early-stage commercialization of competitive tech companies within MI, providing comprehensive services & resources, and boosting investment

Smart Zones

Provides local spaces for mentorship, networking events, VC capital preparation & introductions, and incubation facilities with offices and wet lab spaces

Research commercialization support

MTRAC, T3N, ADVANCE, & First Capital Fund (FCF) collaborate with MEDC & angel / venture capital to provide research commercialization mentorship, guidance, and funding

Michigan Rise Pre-Seed Fund III

Invests in early stage Michigan tech startups in advanced manufacturing (auto, materials, agricultural processing, energy), defense, IT, & life sciences

Ohio Third Frontier



Supports applied research and commercialization, entrepreneurial assistance, early-state capital formation, and skilled talent pool expansion

- Technology-based economic development initiative working with startup and established technology companies across Ohio
- Provides \$75M in state funding for venture capital funds based in Ohio with 100% in-state employees
- Supports R&D development in high-demand industries, e.g., advanced energy & materials, biomedical, fuel cell, medical imaging, photovoltaic, and sensors
- Connects high school and college students to internship opportunities within startup network

Sample impacts

- In its first 7 years of existence, the Third Frontier Program generated \$6.6B in economic activity, \$2.4B in wages and benefits, and an additional 48,000 jobs in Ohio
- In 2021, Ohio startups and high-growth tech companies topped \$2B in venture capital investment for the first time
- The Third Frontier Research Incentive grants \$8M annually to the Ohio Department of Higher Education to support research activity in the state's universities
- Ohio's public higher education institutions currently rank 7th in the country for research and development spending
 - E.g., between 2020-2021, Ohio State University jumped 12 spots, from 24th to 12th nationally in terms of R&D expenditures

Applications to Michigan

Michigan currently performs well on both **higher ed research investments and commercialization support** following higher ed innovations

Our VC ecosystem is **less well developed in supporting early-stage and pre-seed startups**, especially for **underrepresented founders**

Michigan has an opportunity to **close both investment and equity gaps** through the creation of a **Michigan Evergreen fund**, with funds distributed by nonprofit MI VC firms targeting early-stage and pre-seed tech startups

Additionally, a **Pitch Competition Fund with DEI metrics** would help serve **underrepresented founders**

Invest in higher ed placemaking efforts across institution types

Techtown Detroit



Nonprofit entrepreneurship hub located north of Wayne State, offering coworking, meeting, & event spaces, professional development training, access to experts, and networking events; Since 2007, supported 5000+ businesses raising \$385M in capital

UMCI Ann Arbor



Groundbreaking to commence late 2023 on \$250M, 200,000-square-foot research and education center, funded through public-private partnership of state and private donations

NMU Community



Community anchor in Marquette, in part via athletics (e.g., Olympic Education Center, Superior Dome stadium with 16k capacity, sponsor of Marquette Marathon) and art (e.g., DeVos Art Museum free and open to the public)

Delta President's Speaker Series



Renowned national and international speakers on issues of civic engagement; through public-private partnership, events are free and open to community

Hazelwood Green / Mill 19

Mill 19.

Provides venue for interdisciplinary research and development of robotics industry applications

- Originally the site of Jones & Laughlin Steel Company, the space fell vacant after the collapse of the steel industry in the mid-to-late 1900s
- In 2002, four Pittsburgh foundations teamed together to purchase the site and prepare a vision for its redevelopment
- Today, Carnegie Mellon University leases 63,000 sq. ft. of space within former steel mill to house Manufacturing Futures Initiative, bridging the gap between mfg. research and industrial use
- Site tenants also include ARM (Advanced Robotics for Manufacturing Institute), a \$250M public-private collaborated aimed at developing new robotics technologies for industry, Aptiv, an End-to-End autonomous mobility technology supplier, and Catalyst Connections, a private not-for-profit consulting and training service provide for small manufacturers within Pennsylvania

Sample impacts

- From 2016-2020, research enterprise at CMU has increased by 11%, and the school's economic impact has increased by 23% - an overall increase of \$600M
- In 2020, CMU received \$447M in sponsored research funding, the most in the university's history

Applications to Michigan

Placemaking initiatives across all types of higher ed institutions are **highlighting appeal of living in communities** statewide

Higher ed institutions, in partnership with private donations and development, **share unique strengths with their communities**, from robotics research to public sculpture walks

Michigan has opportunity to **further invest** in existing public-private funding partnerships and lead new initiatives, **building on placemaking strategies at research institutions, regional universities, and community colleges**

Raise portion of performance-based community college funding

School Aid SB 173



Allocates majority of increase in CC operations funding to performance based formula

- Bill allocates 5% increase in college operations, totaling \$17M
- Performance funding applied to 70% of increase in funding, or 3.5% of total college operations funding (~\$12M of ~\$350M total)
- Formula for distribution of increase included
 - 30% based on prior year funding (non-performance based)
 - 30% based on weight contact hours
 - 10% based on degree and certificate completions
 - 10% based on completion rate
 - 10% based on completion rate improvement
 - 5% based on administrative costs
 - 5% based on local strategic value

Texas HB 8



Shifts larger portion of total CC funding to outcomes-based approach focused on completions

- Incentivizes CCs to award degrees, certificates, and other "credentials of value" with funding tied to completion outcomes
- Additional funding is conferred for awards within high-demand fields, successful transfers from CC to 4-year institutions, and completion of a sequence of dual credit courses
- Legislation also creates Financial Aid for Swift Transfer (FAST) scholarship program for low-income students who enrolled in college courses during high school
- Allocation totals \$638M

Sample impacts

- HB8 will allocate 90% of state funding of CCs to performance-based metrics, compared to the previous model which tied 17% of funding to performance-based metrics
- Community colleges are set to receive an additional 25% in funding following the passage of HB8

Applications to Michigan

Recent legislation has begun allocating **portion of increased funding to performance based** metrics, with contact hours and completions highlighted

However, at **3.5% of total** operations budget (vs. 90% in TX), performance incentives have limited influence on decision-making

Opportunity for MI to **increase portion of performance-based funding** while also ensuring:

- Metrics directly **address equity**
- Performance is **measured relative to institutional improvement** (competition against themselves vs. each other)
- Lowest performing schools are offered **additional funding to help meet base performance levels**