



## 2022 State of Computer Science Education

The tremendous growth of computer science (CS) education has significantly slowed during the COVID-19 pandemic, with few schools able to add new classes to the curriculum. Now, in 2022, it is time for policymakers to reassess the knowledge, skills, and curricula that will engage students, support learning objectives, and prepare students for their post-school lives.

**Just over half (53%) of high schools in the U.S. offer a single computer science course.** Although this represents significant growth (from 35% in 2018), the number of schools offering CS—a foundational subject that is critical to the nation’s economy and security—has grown by just two percent in the past year. State and federal policy can accelerate growth in computer science education by reexamining the foundational needs for all our K-12 students. Policymakers and school decision-makers must answer this call to ensure all students have equitable access to computer science education.

### Michigan by the Numbers

# 21,062

In 2022, MI averaged 21,062 open computing jobs each month

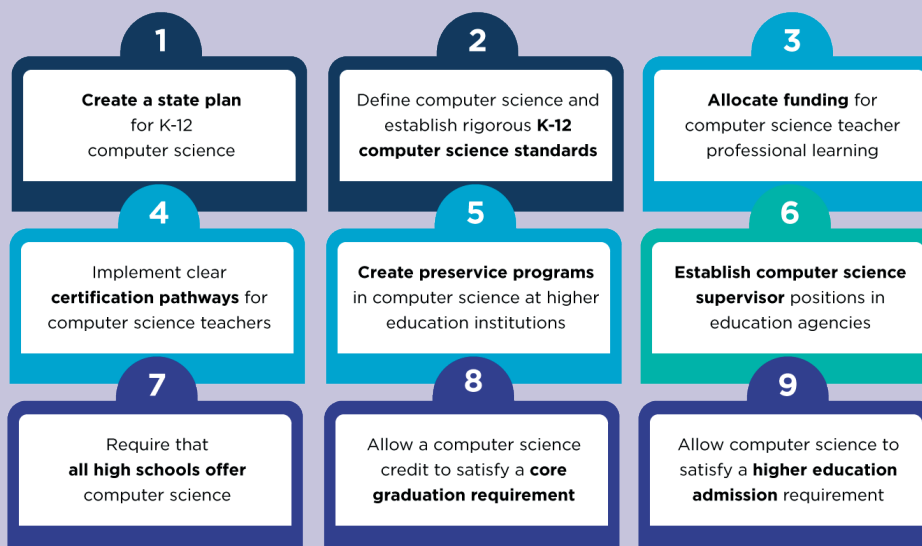
# \$82,386

These jobs have an average salary of \$82,386

# 2,639

Yet there were only 2,639 graduates in computer science in 2019

## Nine Policies to Make Computer Science Fundamental



### Policy Principles

- Clarity
- Capacity
- Leadership
- Sustainability
- Equity and Diversity\*

\*Equity and Diversity should be incorporated in each of the nine policies.

# Michigan

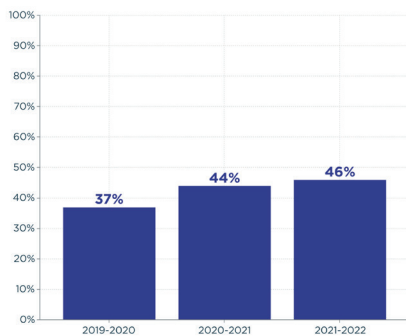
## Policies to Make CS Fundamental

State Plan ✗ NO	Standards ✓ YES	Funding ✓ YES
Certification ✗ NO	Preservice ✗ NO	State CS Position ✓ YES
Require HS to Offer ✗ NO	Can Count ✓ YES	Admissions ✗ NO

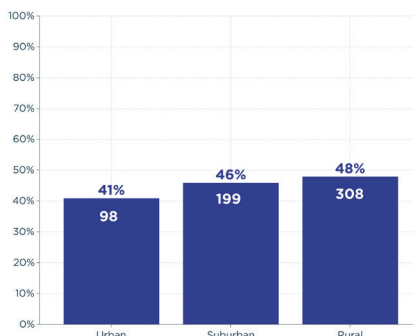
**74% of MI high school students** attend a school that offers foundational computer science. Of the 4,504 AP CS exams taken in Michigan in school year 2020-21, **30% were female**. Course enrollment data for all foundational computer science courses is not available from Michigan. Nationally, we know that participation in all foundational computer science courses is broader than AP participation.

## Percentage of Public High Schools Offering Foundational Computer Science

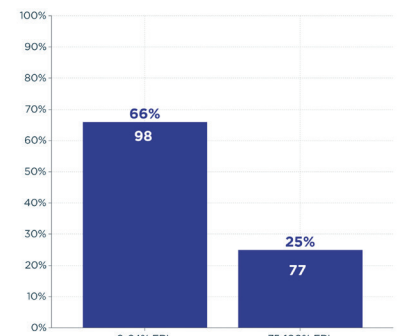
Access by School Year



Access by Geography



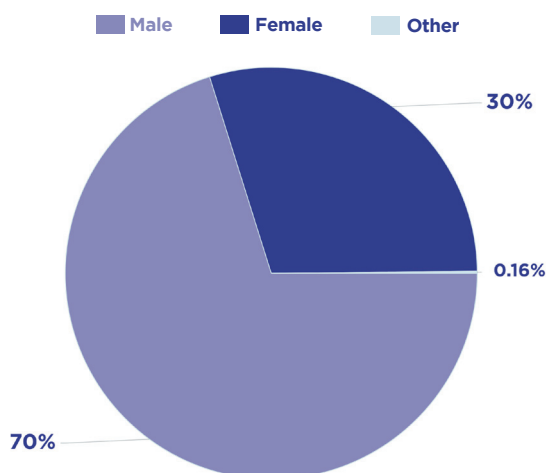
Access by % FRL in the School



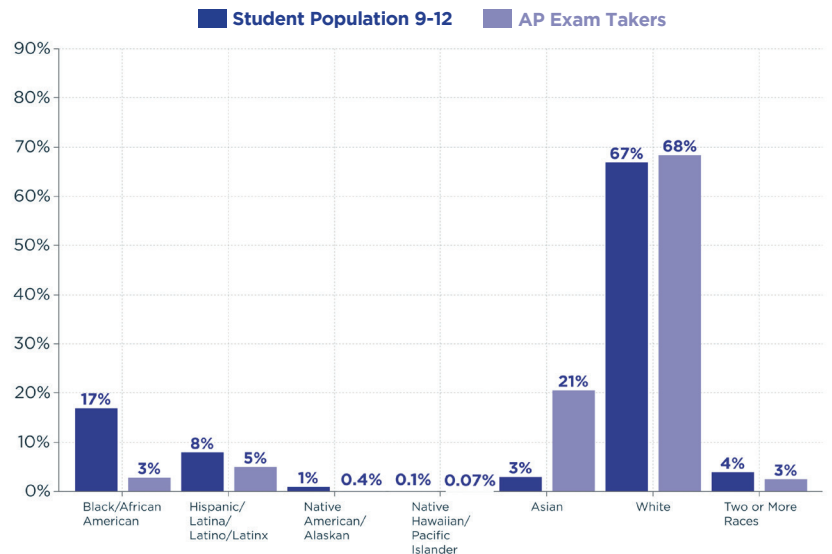
Data provided primarily by the school catalogs, based on 1,314 schools with high school grades. The state reports low-income students rather than students who qualify for free and reduced-price meals. Participation data was masked at low counts.

## Participation in AP Computer Science Exams by Demographic

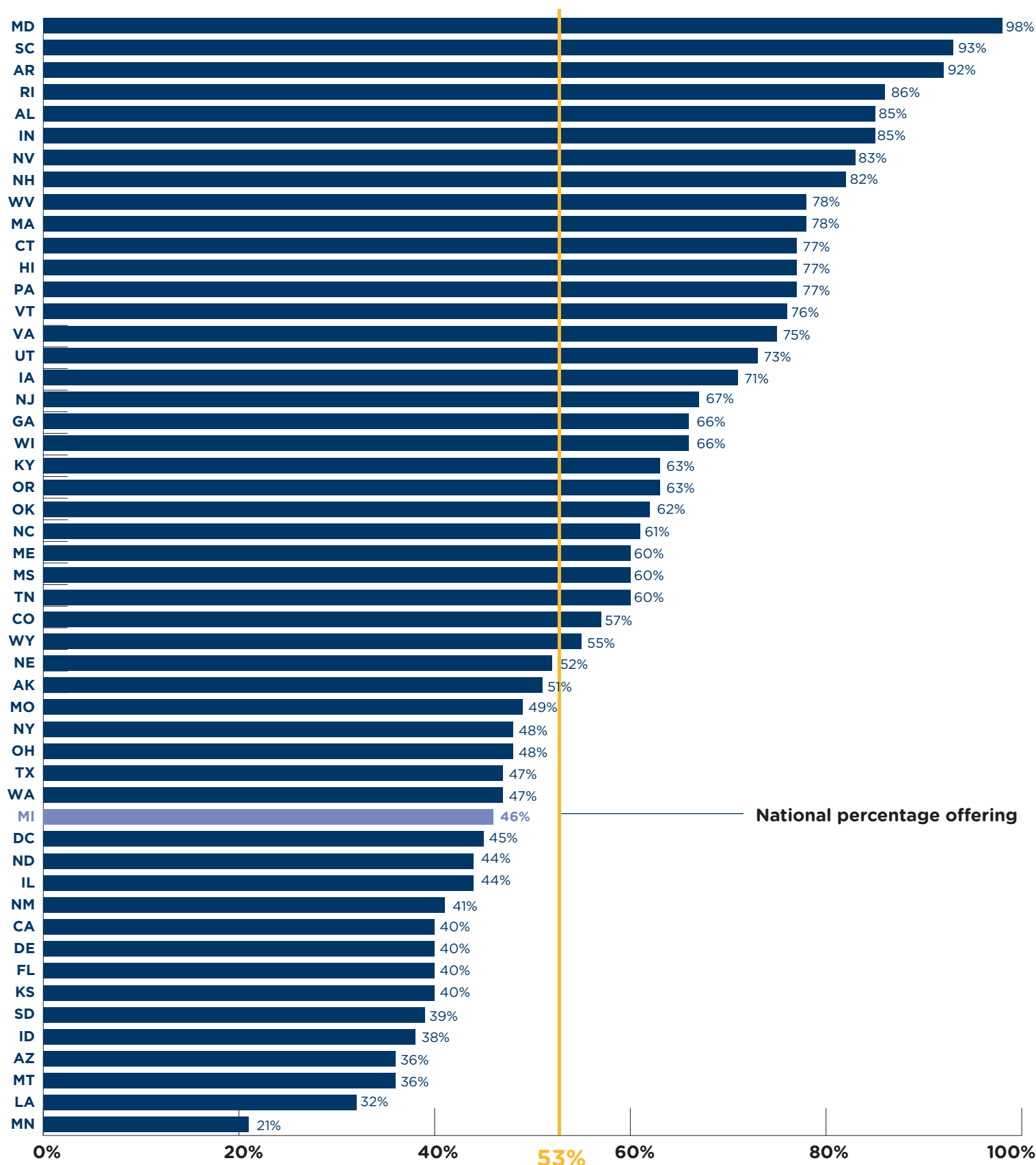
Gender



Race/Ethnicity



# Percentage of High Schools Offering Computer Science, by State\*



\*for the most recent school year reported by each state