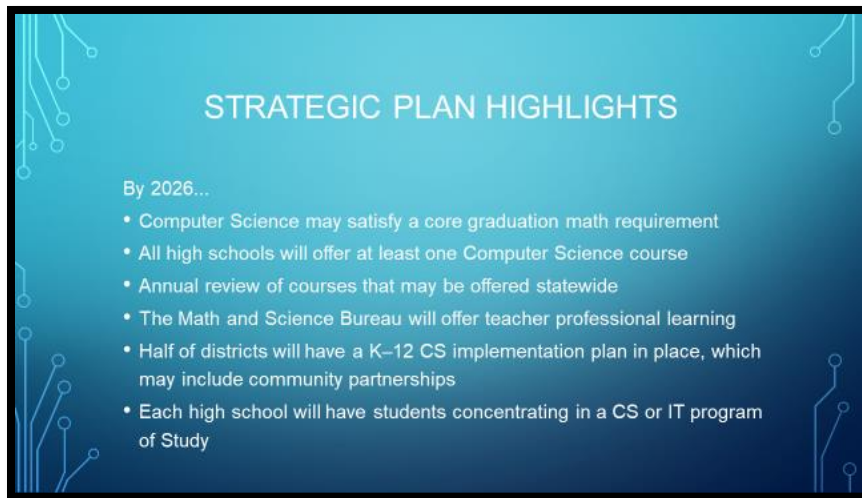


Summary: Computer Science-IT Industry Advisory for Career Technical Education January 6, 2022

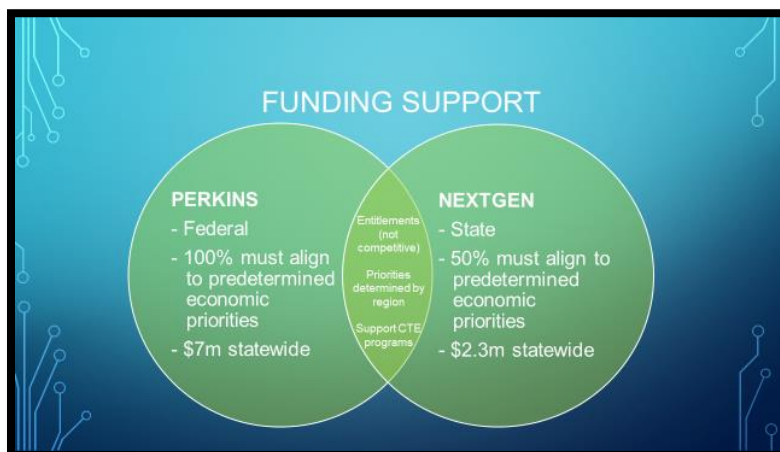
NMPED Overview

Computer Science and information technology are important to every student's ability to masterfully follow a successful education and career pathway. In addition, the occupational demands of nearly every career increasing require this skillset and the ability to navigate the ever-changing technology landscape. NMPED and the College and Career Readiness Bureau are committed to ensuring students are adequately prepared to meet these demands.

In the fall, 2019 the Computer Science Taskforce was made up of individuals from across New Mexico to develop a shared vision for Computer Science Education. In 2021 the group submitted recommendations to NMPED, leading to the completion of the [Computer Science Strategic Plan](#).



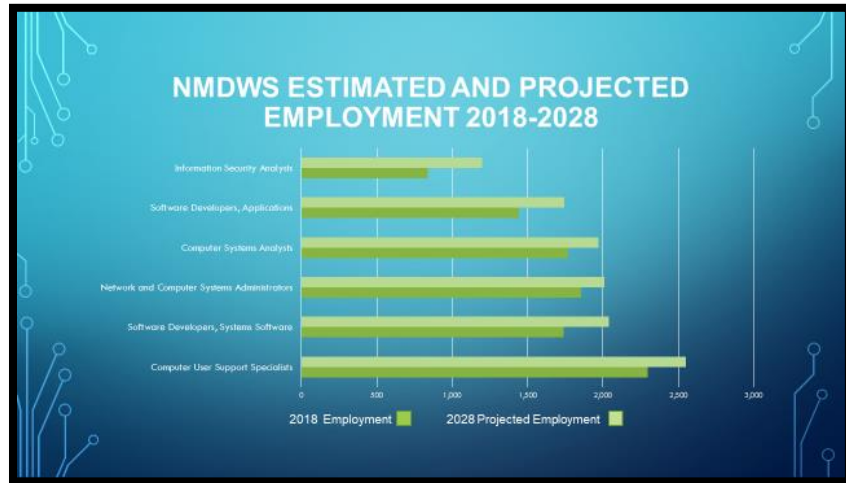
There are two major areas of funding that support Computer Science and IT initiatives. Both Federal and State funds and entitlement grants and the funding priorities must align to predetermined economic priorities in the 10 Career Technical Education (CTE) regions.



Computer Science and IT were identified in seven of ten CTE regions (not identified in regions C, G, and K). Computer Science and IT funding represents 7% (\$700,000) of available funding, and was received by 17 districts and two postsecondary institutions.

In addition to sharing data from the New Mexico Department of Workforce Solutions regarding current and 10-year projections for job growth, industry participants were polled with a question regarding their biggest skill needs. The top skill needs listed in the poll were:

- Cyber and software security
- Cloud computing, cloud architecture
- Network Administrators
- Career readiness, commitment and desire were also mentioned in their needs



Breakout Sessions

NMPED asked Computer Science and IT industry representatives two questions regarding ideas to support quality educational programs and opportunities to promote high quality CTE programs across the state:

1. *What is one thing that you would consider an essential piece of every Computer Science-Information Technology program?*

The participants overwhelmingly pointed to two main themes as essential pieces of every Computer Science-Information Technology program. First and foremost, employers indicated a strong need for students to learn basic principles to better prepare them for more complex ideas once they are hired. Many participants indicated that this may include employability concepts such as soft skills, teamwork, spatial reasoning, and the ability to critically think and problem solve. However, employers also voiced a strong desire for Computer Science-Information Technology skills such as systems integration, an understanding of cloud concepts, data cleaning, low code and no code solutions, programming fundamentals, and data science. A number of skill certifications were discussed.

The second theme was the need for strong connections between schools and the industry. Participants believe all students should have access to industry in some fashion. Employers want to help students gain a deeper understanding of the career while helping them answer the following question: Why does Computer Science and Information Technology matter? Many attendees asked for specific guidance from PED regarding how they could be more involved in classrooms.

2. *What is one thing your company can do to support programs in Computer Science-Information Technology?*

Stemming from the second theme that employers identified as a key piece of every Computer Science-Information Technology program, employers are more than willing to create substantial relationships with schools. Participants indicated they would like to communicate to students on what their careers are like, to explain opportunities, and to teach students that many of the fields are different than what they may experience in coursework. Specific interactions offered included classroom visits, support

with curriculum and professional development, and student internships. A number of employers expressed a desire to find partnerships for internships, especially during the summer season. Not only would this create a talent pipeline for the industry, but it would allow students to explore whether Computer Science-Information Technology is the career field for them. They highly encourage schools to reach out to employers immediately to create working relationships.

Next Steps

Comprehensive Local Needs Assessment meetings will take place regionally over the next several months, with an emphasis on reviewing existing programs, considering how well programming met the goals of the prior application, and identifying best uses of future CTE funding at both the secondary and postsecondary level. Funding applications will be submitted in late spring for funding awards in Summer 2022.

If you want more information about providing input at the program-level for how funds can improve CTE, or if you wish to partner with a teacher, principal, district leader or regional representative to help identify specific practices that will strengthen programs that meet local needs, please reach out to get more involved by contacting any of the PED CCRB staff.

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- Regional CTE coaches are on NMPED's website: [College and Career Readiness Staff – New Mexico Public Education Department \(state.nm.us\)](#)