Building the Future Workforce
A LOOK INSIDE OUR SCHOOL SYSTEM
2017-2018

- 36 Schools
  - 21 Elementary Schools
  - 8 Middle Schools
  - 7 High Schools
  - 4 Educational Centers

- 26,900 students

- 3,644 employees; the largest employer in the county

- Our Students:
  - 54.8% African-American
  - 28.7% White
  - 7.7% Hispanic
  - 7% Multi-Racial
  - 3.2% Asian
  - 0.5% Native American

- Graduation Rate: 94.74%
  - State Average: 87.67%
CTE IN CCPS

12 Three-Year Programs include:
- Electrical Construction
- Welding Technologies
- Cosmetology
- Culinary Arts
- Teacher Academy of Maryland (TAM)

6 Two-Year Programs include:
- Career Research and Development (CRD)
- Maryland Fire and Rescue Institute (MFRI)
- Interactive Media
- Academy of Health Professions: Pharmacy Technician

10 Four-Year Programs include:
- Construction Design and Management (CDM)
- Graphic Communications
- CISCO: IT Networking and Cyber

28 High School Completer Programs

9 out of the 10 Career Clusters are represented:
- Environmental, Agricultural and Natural Resources will be represented in 2019-2020; Apprenticeship Maryland in 2019-2020

10 Four-Year Programs include:
- Construction Design and Management (CDM)
- Graphic Communications
- CISCO: IT Networking and Cyber
DATA!
2017-2018

- Enrollment in CTE Courses: 3,824 students
- Completers: 847 out of 1,965 students (52%)
- Dual Completers: 66.58% of CTE completers
- More Jobs for Marylanders Act: CCPS is at 42% with the goal of 45% in 2020
ACCESS AND EQUITY IN CTE

• North Point High School (17 programs)
  • Application in 8th Grade

• Comprehensive High Schools (7 programs)
  • No Application Necessary for CTE

• Robert D. Stethem Educational Center (5 programs)
  • Application in 10th Grade

• Global CTE: Not by location, but by area of interest
• Focus Groups
• 8th Grade presentation
• School Counselor follow-up lesson
• Parent Nights at each Middle School
• Resources sent home to parents
• Every 8th student makes a plan!
OPPORTUNITIES AND PROJECT BASED LEARNING K-12

- Project Lead the Way: Launch
  - Computer Science and Engineering Modules: Kindergarten, 1st and 2nd grade classes
  - Collaborative Exploration
  - Teachers as facilitators

- K-12 Computer Science
  - PLTW Launch (K-2)
  - Computer Class in Elementary (K-5)
  - Middle School Computer Science (6-8)
  - Gateway to Technology - Middle School (6-8)
  - High School Computer Science Pathway (9-12)
  - College of Southern Maryland Transcribed Credit Agreement

- Engineering
  - PLTW Launch (K-2)
  - VEX Robotics Teams (3-12)
  - MESA (3-12)
  - Destination Imagination (2-12)
  - PLTW: Gateway to Technology (6-8)
  - PLTW: Pathway to Engineering (9-12)
  - University of Maryland Baltimore County Transcribed Credit Agreement

- Career Cruising starts in 3rd Grade; implemented through School Counselors

- ALL CTE PATHWAYS UTILIZE PROJECT BASED LEARNING
• Approximately $215,000 a year from Carl D. Perkins Grant

• Approximately $550,000 a year from local funds to support Career and Technology Education
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<tr>
<th><strong>COMMUNITY SUPPORT</strong></th>
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<th><strong>Program Advisory Committees</strong></th>
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<tr>
<td>Meet 3 times a year for every program</td>
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<td>Curriculum reviews</td>
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<td>Supply resources</td>
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<td>Identify instructional needs</td>
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<tr>
<td>Identify industry needs</td>
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<td>Mentorships</td>
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<td>Guest Speakers</td>
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<td>Guest Judges</td>
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<td>Student Interviews</td>
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<td>Work-Based Learning Opportunities</td>
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<th><strong>Local Advisory Council</strong></th>
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<td>Meet 3 times a year to oversee CTE as a whole</td>
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<td>Marketing</td>
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<td>Parents</td>
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<td>Students</td>
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<td>Workforce and Industry</td>
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<td>Workforce Needs</td>
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<td>Programs to be updated</td>
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<td>Programs to be eliminated</td>
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<td>Programs to be developed</td>
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<td>Ways to support Program Advisory Committees</td>
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STUDENT OUTCOMES: 
WHY CHOOSE CTE?

Industry-Related Certifications
- NATEF: Brakes, Engine Performance, Engine Repair, Electrical Systems, Automotive HVAC, Transmissions (Automotive)
- NCCER Core, NCCER Level I (HVAC, Carpentry, Electrical Construction)
- CFC Certification (HVAC)
- ADDA Apprenticeship (Drafting)
- Maryland Board of Nursing Certified Nursing Assistant (Academy of Health Professions)
- ParaPro (Teacher Academy of Maryland)
- National Board Cosmetologist (Cosmetology)
- American Welding Society: up to 12 certifications

Transcripted Credits and Articulation Agreements
- Local and State agreements

Student Organizations
- SkillsUSA, Future Business Leaders of America (FBLA), Educators Rising
- Leadership Opportunities
- Mentorship Opportunities
- Job Offers and Connections
- Direct Feedback from Industry
A CLOSER LOOK: AUTOMOTIVE TECHNOLOGY

- **Program Certification**
  - Recertification every 5 years
  - NATEF
  - Program Advisory Council support

- **Teacher Certification**
  - Teacher Credentials
  - Industry Credentials

- **Student Certification**
  - Possibly 8 Industry Certifications!
  - Reimbursement if the student passes
  - Active participants in SkillsUSA

- **Program Advisory Council**
  - Automotive Career Exploration: Ford
  - Snap-On Tools
  - Local Dealerships
  - Mentorships, Internships and Work-Based Learning, Advisory
A CLOSER LOOK: COMPUTER SCIENCE  
NEW PATHWAY SY 2017-2018

Step 1:  
Program Advisory Committee  
• College of Southern Maryland  
• University of Maryland Baltimore County  
• Local Workforce: Peaknet, OutsourceIT  
• Indian Head Naval Surface Warfare Center  
• CISCO!

Step 2:  
Pathway Approval  
• Introduction to Computer Programming  
• AP Computer Science Principles  
• AP Computer Science- A  
• CISCO Networking Academy: Linux and Cyber Security

Step 3:  
Concrete Connections to College, Career and Community  
• 1st Course: Transcripted Credits  
• 2nd Course: Transcripted Credit through College Board  
• 3rd Course: Transcripted Credit through College Board  
• 4th Course: possible CCENT, Security +, Linux certifications through CISCO

Step 4:  
Keep Current, Keep Updating, Keep Training