# SB18-086 Cyber Coding Cryptology for State Records
Joint Business Committee Presentation
January 27, 2021

**University of Colorado Colorado Springs:**
- UCCS gives $1M to NCC in spirit of HB16-1453 establishing NCC and forming UCCS partnership; in April 2019, the White House designated the NCC home to the national Space Information Sharing and Analysis Center (ISAC).
- UCCS met FY19 scholarship requirements and is currently exceeding the increased 20% requirement for scholarships out years.
- UCCS met and will add even more in FY20 because of a 3-year, $3.08M National Science Foundation (NSF) Scholarship for Service (SFS) grant award; we are the first State institution to receive this grant.
- UCCS committed to cybersecurity workforce development, hiring tenure professors in both the College of Engineering and College of Business, building more programs, expanding the number of degrees, and creating more pathways for students coming from community colleges.
- We are working collaboratively to improve cybersecurity for election systems and have gained a grant to work not only in Colorado, but nationally with all state legislatures across the U.S.
- NCC has been a key partner in developing a $5.5M grant with the US Economic Development Agency to furnish classrooms, laboratories, and offices in UCCS Cybersecurity Facility, and build the Space ISAC Watch Center and Cyber Vulnerability Lab.
- The NCC has served Colorado K-12 schools with cyber education curriculum, with now over 30 high schools and over 1,000 students participating. We are an epicenter for cyber workforce development in K12 in 3 States now.

**Pikes Peak Community College:**
- PPCC spent the full $300,000 allocation.
- Spending (in major categories) is as follows:
  - Scholarships – $30,000 – Awarded 24 $1,250.00 scholarships. The legislation required us to spend 10% of our total allocation on scholarships. Met our obligation.
  - Faculty Cost – $46,000 – April Frost, Cyber Instructor, was hired in January 2019. Expense represents 6 months (January thru June).
  - Travel – $14,000 – Travel and training cost for cyber faculty and students in the cyber club.
  - Operating – $210,000 – Operating expenses for infrastructure investments to Room E204 at Rampart. Expenses include costs for audio visual equipment and networking nodes and related software. Also included a small amount for administrative cost in administering the funds.

**Colorado Mesa University:**

- Cybersecurity minor has been approved and is now available to students in both computer science and business
- On the last step of becoming an NSA-Center of Academic Excellence
- Will offer our first GenCyber High School camp in the summer of 2021
- Searching for a new faculty member currently.
- One of our Cybersecurity students graduated with a job waiting for them at Lockheed in cybersecurity.
- Students competed for the first time in the Rocky Mountain College Cyber Defense Competition

**Metropolitan State University of Denver:**
- Interdisciplinary cybersecurity degrees and Master's certificates integrate Computer Science, Computer Information Systems and Business Analytics, and Criminal Justice and Criminology.
- 214 students currently enrolled in the B.S. Cybersecurity major, significant growth from the 47 enrolled when the major launched in Fall 2018
- Hired Director of The Cyber Range, a cybersecurity training ground for students and industry professionals
- Awarded $50,000 in scholarships in Fall 2020 and $30,000 awarded in the 2019-20 school year, supporting a total of 60 students to-date
- Student success: 13 student educators earned graduate certificates in Cybersecurity; 100% will be teaching cybersecurity to K-12 students in local public school districts this year
- $25,000 in matching scholarship funds have been secured from industry partners and additional funds are on tracked to be raised for The Cyber Range

**Western Colorado University:**

- Western is in the third year of offering a computer science major with an information security emphasis. This program is distinctive in Colorado as a technically focused cyber security bachelor's degree.
    - 26 students in the program served by use of funds for 0.9 FTE faculty
    - Already has become the largest emphasis in Western's fastest growing major
    - 5 graduates, though a complete 4-year cohort has not yet developed
- Western faculty pursuing NSA CAE-CDE designation for Information Security
- Western will host an NSA/NSF sponsored GenCyber camp for middle-schoolers
- 4 student scholarships totaling $23,000
    - 1 is for Dr. Marc Rubin (Ph.D. in Computer Science from Colorado Schools of Mines) to achieve a Master of Science Degree in Cyber Security from Georgia Tech in order to make our cyber program sustainable
- Western cancelled its Computer/Cyber camps and campus presentations due to COVID. Both are planned to resume beginning summer 2021.

**Colorado State University System**:

- More than forty (40) IT Security faculty hired/supported by the grant to date
- Student enrollments in IT Security Courses in FY 19, FY 20, and FY 21 (to date) = 28, 303, and 471, respectively
- Number of internships in IT Security in FY 19, FY 20, and FY 21 (to date) = 71, 129, and 118, respectively
- 436 students who have participated in the courses/internships have graduated to date, virtually all in IT fields
- No IT security courses were cancelled in FY 21, despite reduced funding
- $9.9 million in matching funds raised to date
- Exceeding objectives of the legislation, in proportion to reduced funding, in FY 21

***Request:* We look forward to working with you to reauthorize the funding during the next legislative session.**