# Project 4 Solving the Cybersecurity Workforce Crisis

For this project, you will research and report on the cybersecurity workforce crisis as it affects **state governments.** Your audience will be the members of an organization for state government officials such as the National Governor’s Association and the National Association of State Chief Information Officers. The results of your research project will help develop a one-day workshop on strategies for developing and growing the cybersecurity workforce at the state government level.

## Research:

1. Read / Review the Week 5 readings.
2. Research authoritative sources which discuss the reasons why the cybersecurity workforce crisis exists.
   1. *Hiring Cybersecurity Staff is Hard for States*   
      <https://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2015/5/11/hiring-cybersecurity-staff-is-hard-for-states>
   2. *Aligning State Systems for a Talent-Driven Economy* <https://www.nga.org/wp-content/uploads/2018/07/NGA_Talent-Driven-Economy_RoadMap.pdf>
   3. *Comparing Private Sector and Government Worker Salaries* <https://reason.org/news/show/public-sector-private-sector-salary> (This source argues both sides of the compensation / education arguments.)
   4. *IT Workforce hiring issues:*   
      <https://www.nascio.org/wp-content/uploads/2019/11/NASCIO_StateITWorkforceSurvey2015_WEB.pdf>
   5. *State vs Private Compensation (see “Conclusions” on p. 15)*   
      <https://www.aei.org/wp-content/uploads/2014/04/-biggs-overpaid-or-underpaid-a-statebystate-ranking-of-public-employee-compensation_112536583046.pdf>
   6. *Global talent gap*   
      <https://thehill.com/blogs/congress-blog/technology/239113-cybersecurity-talent-worse-than-a-skills-shortage-its-a>
3. Review the best practice recommendations from the NICE report. Select three to five best practices which state governments could benefit from implementing. <https://niccs.us-cert.gov/sites/default/files/documents/pdf/best_practices_for_planning_a_cybersecurity_workforce_white%20paper_0_0.pdf>
4. Review alternative recommendations for attracting and retaining qualified talent (workers) to a state or region. Select 3 or more recommendations that you believe would be beneficial for state government hiring efforts for cybersecurity personnel.
   1. *Attracting and retaining top talent: 5 ways to make them come to you* <https://www.bizjournals.com/triangle/news/2019/08/29/attracting-and-retaining-top-talent-5-ways-to-make.html>
   2. *Desperate for Cybersecurity Workers, States Help Build the Next Generation* <https://www.governing.com/topics/mgmt/sl-cybersecurity-women-veterans-students.html>
   3. *About Good Neighbor Next Door* (ask yourself if this program or something similar should be extended to cybersecurity personnel) <https://portal.hud.gov/hudportal/HUD?src=/program_offices/housing/sfh/reo/goodn/gnndabot>
5. A separate closing section in which you summarize your research and recommendations.

## Write:

Write a three- to four-page research report that includes a summary of your research, findings, and recommendations. At a minimum, your paper must include the following:

1. An introduction or overview of the cybersecurity workforce issues which impact State governments. This overview should address the political, economic, socio-cultural (including education), and technological factors that contribute to the perceived lack of qualified cybersecurity workers. This introduction should be suitable for an executive audience.
2. A separate section that addresses five specific reasons why states have difficulty hiring enough trained and qualified cybersecurity workers for positions in state agencies and offices.
3. A separate section that addresses five specific “non-cybersecurity” reasons why a *workforce shortage* affecting state governments may currently exist. Consider and discuss whether the workforce shortage arises out of state budget problems rather than training and education or salary.
4. A recommendations section which identifies and discusses at least five training, education, marketing, or hiring actions that state governments could take to attract cybersecurity talent and reduce or alleviate a cybersecurity workforce shortage for trained and qualified cybersecurity personnel. These recommendations should include several alternative practices which deemphasize salary.
5. A separate Summary section in which you present a summary of your research and recommendations.

## Submit for Grading

Submit your work in MS Word format (.docx or .doc file) using the Project 4 entry in your assignment folder. (Attach the file.)

## Additional Information

1. Consult the grading rubric for specific content and formatting requirements for this assignment.
2. Your 3- to 4-page paper should be professional in appearance with consistent use of fonts, font sizes, margins, etc. You should use headings and page breaks to organize your paper.
3. Your paper should use standard terms and definitions for cybersecurity.
4. The CSIA program recommends that you follow standard APA formatting since this will give you a document that meets the “professional appearance” requirements. APA formatting guidelines and examples are found under Course Resources. An APA template file (MS Word format) has also been provided for your use CSIA\_Paper\_Template(TOC+TOF,2021).docx.
5. You must include a cover page with the assignment title, your name, and the due date. Your reference list must be on a separate page at the end of your file. These pages do not count towards the assignment’s page count.
6. You should write grammatically correct English in every assignment that you submit for grading. Do not turn in any work without (a) using spell check, (b) using grammar check, (c) verifying that your punctuation is correct and (d) reviewing your work for correct word usage and correctly structured sentences and paragraphs.
7. You must credit your sources using in-text citations and reference list entries. Both your citations and your reference list entries must follow a consistent citation style (APA, MLA, etc.).