

# **IT and Security Assessment Tools**

## **Jan 14, 2021**

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Phil Walter

Seven years with Adams County, currently Chief Information Officer.

My goal is to improve County public service delivery through relationship building, technological solutions, risk reduction, and appropriate portfolio management.

I am most proud of the fact that Adams County and its leadership have recognized the value IT brings to the organization and works closely with us to ensure we have the support necessary to be successful. Without this support, the County would not be able to modernize and provide better service to our citizens.

# IT and Security Assessment Tools

This year is like no prior year on record.





# Assessment Options

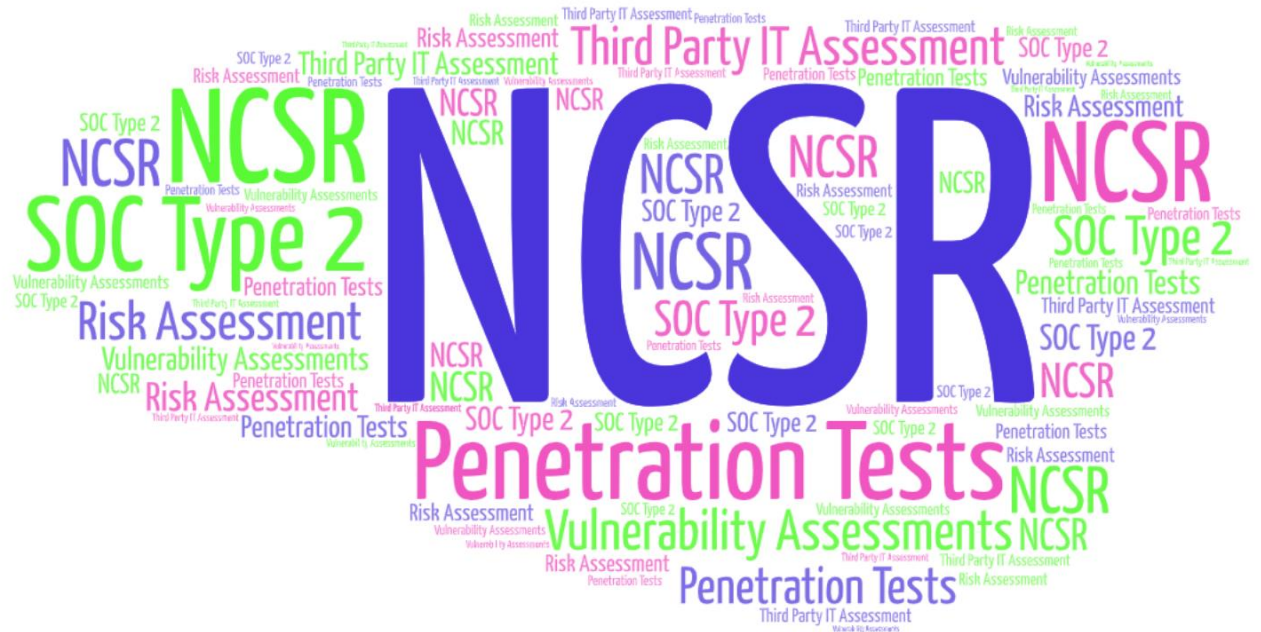
Characteristics:

Free (seldom)

Costly

Meets Audit Requirements

Focused on the IT Department





# Alternative Assessment Options

## IT Self-Assessment



### Sample

8. Software Used by your office:

| Application | Purpose | Need Upgrade? Support?<br>Does it meet your needs? |
|-------------|---------|--|
|             |         |  |
|             |         |  |

9. What is working well for you from a technology perspective?

10. What challenges are keeping you from working efficiently?

11. If you could change something, what would you change?

12. What technology security concerns do you have?

13. Do you encounter data consistency difficulties from one department to another?

14. What would you like to be able to do that you cannot do now? Is there a process that if automated would mitigate risk or financial burden?

15. Do you have the right technology to run the county department? If a county wants to be open 24/7, how do you handle that now?

### Characteristics:

- Free
- Can be done at your pace
- Focus on Other Departments
- Includes Elected Official Input
- Generally, one day of Interviews, but can be two
- Sixteen Questions (sample to the left)
  - Separate interview tool for the IT Department with additional questions
- Best if done in one central location (like an interview)
- Provide Snack and Drink!



# Alternative Assessment Options

## IT Self-Assessment



### IT Assessment – [COUNTY NAME]

- **Kickoff meeting with board of commissioners for about ½ hour (8:15-9:00)**
  - Overview and purpose
  - General Information and Questions (may be provided ahead of time)
    - Do you have a county wide IT committee?
    - Do you have any county wide IT Goals?
    - Do you have an executive summary of the county?
    - Do you have a historical summary of the county?
    - What are the programs and services provided by the County?
    - What is your mission statement for your IT department?
    - What is your county mission statement (i.e. mission, vision, value statements)?
  - What are you hoping to gain from the assessment?

|                    |                    |
|--------------------|--------------------|
| A. Department Name | Contact Name/Phone |
| B. 9:00-10:00:     |                    |
| C. 10:00-11:00:    |                    |
| D. 11:00-12:00:    |                    |
| E. 1:00 – 2:00:    |                    |
| F. 2:00 – 3:00:    |                    |
| G. 3:00 – 4:00:    | IT Department      |



# Alternative Assessment Options

## IT Self-Assessment Outcome



### Written Executive Summary

- Summary
- Strengths
- Challenges
- Recommendations

**It is recommended that Adams County:**

- Consider rejoining the CCAP SharePoint program. While there are other content management systems available, the CCAP program is more cost effective and provides additional training, design and branding services that are specific to government entities.
- The focus of the redesign should address individual departmental content management of updates and separate subsites for county entities like the court system (both of which Sharepoint is capable of providing).

The Adams County website should be upgraded to a content management system where county departments can maintain their own content

# Alternative Assessment Options

## Security Assessment



### Sample

#### 2. Identity Management and Access Controls

Identity Management is the procedure surrounding the establishment (provisioning) and maintenance of user IDs, and authentication and monitoring processes to provide assurance that only authorized users have access to the business applications and the operating environments that support the applications. Essential to the process is accurate and timely identification of each user on the system, to attain assurance that the individual assigned to the user ID can be held accountable for the activity performed by the user ID.

##### Access Control Procedure – Pass/Fail

There should be written procedures in place for granting, changing, and terminating access rights to the overall networked computer system and to specific software applications. These procedures should establish who has the authority to grant or change access (e.g., department manager approval) and allow users to access only what is necessary to complete their job duties.

##### Response:

##### Access Rights – Pass/Fail

Access rights should be updated as necessary; inactive, retired, or terminated accounts should be disabled or removed from the network in a timely manner. Periodically compare the employee master list (as maintained by the personnel or payroll department) to the list of network user accounts to determine if user accounts belong to current employees.

##### Response:

##### Account Review – Pass/Fail

A review of all system accounts should be periodically conducted and any account that cannot be associated with an authorized user or application should be disabled. Password complexity rules should be established to make them more difficult to crack or guess.

##### Response:

### Characteristics:

- Free
- Can be done at your pace
- Focus on IT Department
- Similar to NCSR (but more layman's terms)
- Symbols used to show priority







# Alternative Assessment Options

## Security Assessment Outcome



Sample

### Assessment Summary

| Sections                                     | Effective | Improvement Possible | Improvement Needed |
|--|-----------|----------------------|--------------------|
| 1. Baseline Security Policies                |           |                      |                    |
| 2. Identity Management and Access Controls   |           |                      |                    |
| 3. Provisioning Servers                      |           |                      |                    |
| 4. Deploying Workstations and Laptop         |           |                      |                    |
| 5. Network Infrastructure Management         |           |                      |                    |
| 6. Firewalls and Intrusion Detection         |           |                      |                    |
| 7. Vulnerability Scanning                    |           |                      |                    |
| 8. Backup and Recovery                       |           |                      |                    |
| 9. Remote Access                             |           |                      |                    |
| 10. Wireless                                 |           |                      |                    |
| 11. Email                                    |           |                      |                    |
| 12. Internet Access                          |           |                      |                    |
| 13. File Shares                              |           |                      |                    |
| 14. SIEM / Log Correlation                   |           |                      |                    |
| 15. Physical Security                        |           |                      |                    |
| 16. Hardware, Software, and Data Inventories |           |                      |                    |
| 17. Change Management                        |           |                      |                    |
| 18. IT Security Training and Awareness       |           |                      |                    |
| 19. Vendor Management                        |           |                      |                    |
| 20. Mobile Device Management                 |           |                      |                    |
| 21. Disaster Recovery Planning               |           |                      |                    |



# Alternative Assessment Options

## IT Follow-Up Self-Assessment



### Sample

- e. IT culture
  - i. What is the average tenure of IT staff?
  - ii. What is the average work hours for IT staff? Is there overtime or weekend work and how is the IT staff compensated?
  - iii. What types of training and education are provided currently for IT staff?
  - iv. Describe any levels of mobility for IT staff to move up?
- f. Process
  - i. Is there a governance IT committee in place?
  - ii. Do you use project management methodologies?
  - iii. Do you have Succession planning in place? (Documented critical roles, identified second tier staff that are being trained to move into higher level positions?)

### Characteristics:

- Free
- Can be done at your pace
- Focus on IT Department
  - Strategy
  - Staffing
  - Documentation
  - IT Culture
  - Governance



# Alternative Assessment Options

## IT Follow-Up Self-Assessment

### Outcome



Report to Commissioners contains

- **Comparison to first IT assessment**
- SWOT Analysis
- Recommendations

#### C. Comparison to 2012 Assessment

Adams County implemented quite a few of the 2012 recommendations

- Website switched to CCAP program and responsive design update in 2016
- Connectivity
- Policies updated and new technology policies created
- Equipment Modernization followed
- Phone system upgraded to CISCO VoIP
- IT Department staffing – grew from 5 to 10 plus intern
- Backups – improvements made



\*Please note that not all 2012 recommendations are reviewed here.



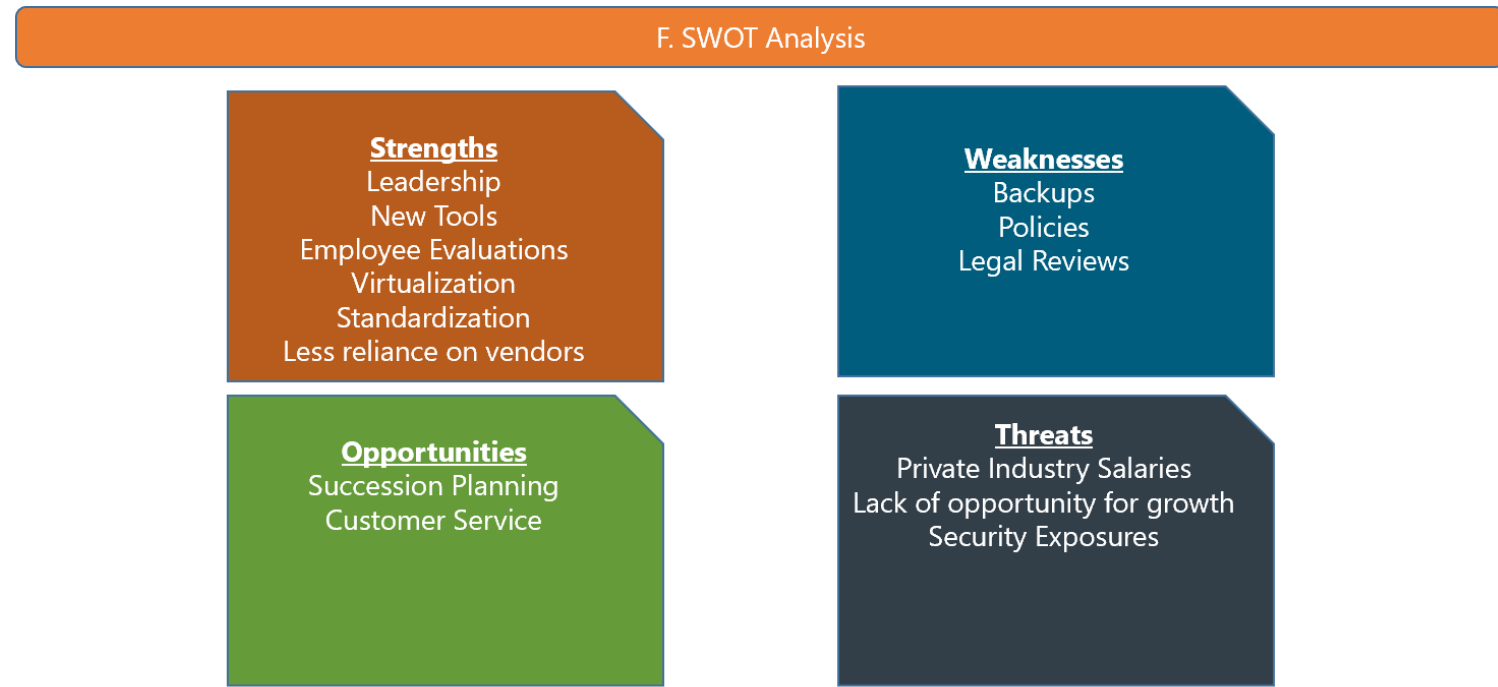
# Alternative Assessment Options

## IT Follow-Up Self-Assessment Outcome



Report to Commissioners contained

- Comparison to first IT assessment
- **SWOT Analysis**
- Recommendations





# Alternative Assessment Options

## IT Follow-Up Self-Assessment Outcome

Report to Commissioners contained

- Comparison to first IT assessment
- SWOT Analysis
- **Recommendations**

### E3. Recommendations – Policies

Description: While there are an impressive number of new technology policies since 2012, I did not see any evidence of a mobile device policy or a social media policy or a document retention policy. Further, the length of time for technology policy review and approval is extensive.

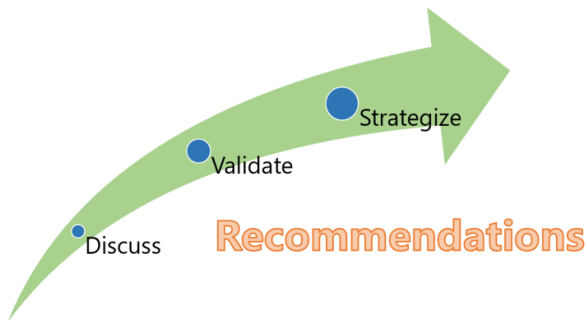
Risk: Medium

#### Evidence:

- Reviewed the list of policies provided by Phil Walters.
  - Updated since 2012: Email policy and security incident form
  - New since 2012: Guest Wireless Policy, PCI policy, Network Usage, Network Security, Email Retention and Computer Access
- Interview with IT Director
- Documented date/time stamp on new policies

#### High-Level Recommendations:

- Review the CCAP online repository of technology policies for templates
- Create a Document Retention Policy
- Create a Mobile Device Policy
- Create a Social Media Policy
- Create a Patch Management Policy
- Meet with legal to develop a companion document to help facilitate faster policy review

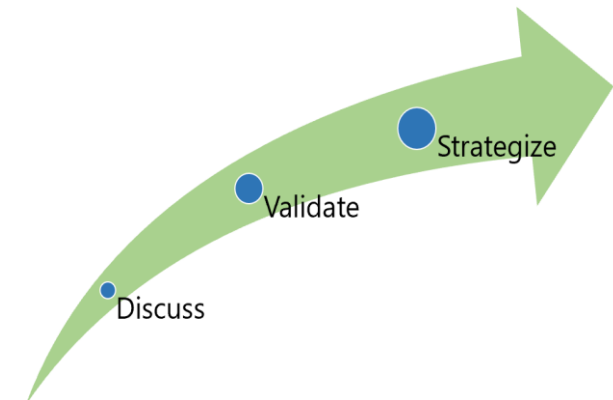




# Benefits of These Assessments



- ✓ County ready for CIO position
- ✓ Confirmation from trusted partner (CCAP) and established CIO (Rita) that the direction set by County CIO is sound and properly aligned
- ✓ Impact of turnover in IT significant
- ✓ In-house approach is ideal
- ✓ Budget funding critical
- ✓ Cyber risk is significant to County
- ✓ Legal review prioritization
- ✓ Policies continue to evolve and require compressed review strategy
- ✓ Project Governance
- ✓ Backups are everything





# How to Get Started

- Determine which assessment you want to start with
- Contact NACo staff for the tools and a brief training session of the templates
- For the IT Assessment
  - Schedule the date
  - Select up to five departments to include in the interviews (Director and one key knowledgeable staff person)
  - Reserve the space (it's easier to have the department staff come to one central location)
  - Make sure to have plenty of coffee, tea and snacks
  - Include a break for yourself
  - Interview the IT department at the end of the interviews
- Set expectations for when Executive Summary will be ready
  - Can take up to a month to finalize
- Determine if you want an outside facilitator to conduct
- Have follow-up meeting with elected executive stakeholders to present executive summary



# Attendee Feedback

- Where do you think you will need assistance in implementing these types of assessments?
  - Time?
  - Outside facilitator?
  - Money?
- How can NACo help
  - Regional trainings on these instruments
  - Separate Channel on the Tech Xchange for those using the instruments to share ideas and progress, successes, lessons learned, feedback to improve the instruments
  - Other ideas?
- Next Steps
  - Pilot
    - Five to eight volunteer counties to implement the instruments



A wide-angle aerial photograph of a mountain valley. A river winds through the center of the valley, surrounded by dense evergreen forests. The surrounding mountain peaks are rugged and partially covered in snow or light-colored rock. The sky is overcast with soft, grey clouds. A semi-transparent dark grey rectangular box is centered over the image, containing the text.

In the midst of every crisis, lies  
great opportunity.

#### Questions and Follow-Up

- Rita Reynolds, CTO ([rreynolds@naco.org](mailto:rreynolds@naco.org))
- Ashley Gallagher, Technology Programs Specialist ([agallagher@naco.org](mailto:agallagher@naco.org))