

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Marc Elrich
County Executive

Raymond L. Crowel Psy D. *Director*

INFORMAL SOLICITATION #1152560 AMENDMENT #1

Medical Claims Billing Clearinghouse Services January 25, 2023

The following change has been made:

Change#1
The due date has been extended from January 27, 2023 to February 10, 2023 at 4 PM.

There are no other changes.

ISSUED BY Thanikan Fales
Thanikan Fales, Contract Management Team, DHHS

December 14, 2022

If you are interested in responding to this Informal Solicitation, your proposal must be submitted no later than January 27, 2023, at 4:00 P.M. The complete proposal must be submitted to:

Thanikan Fales, Program Manager II

Via e-mail:

Thanikan.Fales@montgomerycountymd.gov

By appointment only:

Montgomery County Department of Health and Human Services 401 Hungerford Drive, 6th Floor Rockville, Maryland 20850

Electronic proposals will be accepted via e-mail and must be submitted by the date and time noted above.

If submitting a hard copy proposal, please submit one (1) original and three (3) copies. For hard copy submissions, please contact Thanikan Fales at the e-mail address noted above to schedule an appointment to drop off your proposal. Hard copy proposals must be submitted by the date and time noted above.

For questions regarding the scope of services, required experience or for general program related questions about this Informal Solicitation, please contact Li Song, Accountant Auditor, Montgomery County Department of Health and Human Services by e-mail at li.song@montgomerycountymd.gov

For administrative questions such as the procurement process or the resulting contract related to this Informal Solicitation, please contact Thanikan Fales or Philip Royston, Program Manager II, Montgomery County Department of Health and Human Services, at (240) 777-1251, or e-mail at Thanikan.Fales@montgomerycountymd.gov or at (240) 777-1333, or e-mail at Philip.Royston@montgomerycountymd.gov respectively.

This Solicitation is intended to result in one contract.

The County reserves the right to cancel this solicitation at any time.

BACKGROUND

The Montgomery County, Maryland Department of Health and Human Services (DHHS) provides a variety of public health, behavioral health, and social services to eligible Montgomery County residents. In addition, DHHS provides access to services through a network of community, nonprofit, and private sector providers. DHHS has a \$364 million budget funded by the County, categorical State and federal grants, and State and federal intergovernmental reimbursements.

DHHS has been utilizing an Electronic Health Records (EHR) system from NextGen Healthcare Information Systems, LLC, which includes both Electronic Practice Management (EPM) and Electronic Medical Record (EMR) components. The County currently has about 200 full-time and part-time rendering providers with about 1,500 billable encounters each month.

The County intends to contract with one vendor who can provide Medical Claims Billing Clearinghouse Services to support the filling of Electronic Medical Claims to and receive Electronic Remittance Advice (ERA) from insurance payers. Filling Electronic Medical Claims is defined as submission of the electronic versions of the industry standard medical and dental claims forms to insurance payers in an industry standard format, or any other format used for the submission of health care data, whether or not a payer accepts or favorably adjudicates such claims. ERA is defined as retrieving and storing the electronic version of Remittance Advice in the industry standard format, which provides breakdowns, reason codes and other details about the allowed amounts, payments, adjustments, and denials of the claims. An insurance payer means any Medicare or Medicaid agencies, fiscal intermediary or fiscal agent, or commercial insurance carrier or its intermediary.

DHHS is seeking proposals from qualified firms to provide Medical Claims Billing Clearinghouse Services. DHHS expects to have up to 10 named users/logins for the service. The DHHS Fiscal Team – Revenue Unit is responsible for managing the list of users.

CONTRACTOR'S MINIMUM QUALIFICATIONS

- 1. The Contractor must have established capability and experience in processing and transmitting industry standard electronic claim files to Medicaid (Maryland), Medicare, and major medical insurance payers.
- 2. The Contractor must have established capability and experience to retrieve and store industry standard ERA files from Medicaid (Maryland), Medicare, and major medical insurance payers.
- 3. The Contractor's service must be compatible with NextGen EHR/EPM.
- 4. The Contractor's service must be HIPAA compliant and meet Montgomery County's security requirements.

TERMS AND CONDITIONS

I. SCOPE OF SERVICES

The services provided under a contract resulting from this Solicitation must include, at a minimum the following:

- 1. Ensuring a smooth and successful transition from the current clearinghouse to the new service.
- 2. Enrollment of insurance payers, and online storage of all enrollment forms.

- 3. Maintenance of a secure system and sites which are HIPAA compliant.
- 4. Processing and submission to insurance payers of primary, secondary, and tertiary claims generated by DHHS' EHR/EPM system, Retrieving and storing ERAs coming back from the insurance payers. This includes but not limit to:
 - a. Having agreements and keeping good working relationship with Medicaid (Maryland), Medicare, and major insurance payers.
 - b. Screening claim files prior to submission to detect issues basing on industry standard criteria and sending feedback to DHHS for corrections.
 - c. Maintaining a user-friendly web portal for DHHS to upload claim files, track claim status, download ERAs, and running reports.
 - d. Transmitting electronic claims files to insurance payers on behalf of the DHHS on a timely manner.
 - e. Retrieving and storing ERAs from the insurance payers on behalf of the DHHS on a timely manner.
 - f. Capacity to track the status of the uploaded claims at the contractor's web portal.
 - g. Capacity to make changes online to the rejected claims and re-submit at the contractor's web portal.
 - h. Option to download the ERAs and print the Remittance Advice.
- 5. A wide range of Payers to include at a minimum:
 - a. AARP
 - b. Aetna
 - c. Arizona Physicians IPA
 - d. Cigna
 - e. DHMH Maryland Department of Health and Mental
 - f. Johns Hopkins Advantage MD
 - g. Johns Hopkins Healthcare
 - h. Maryland Medicaid Managed Care organization (MCO) Aetna Better Health
 - i. MCO AmeriGroup
 - j. MCO CareFirst BCBS Comm. Hlth Plan MD
 - k. MCO Jai Medical Systems
 - 1. MCO Kaiser
 - m. MCO Maryland Physicians Care
 - n. MCO Medstar Family Choice
 - o. MCO Priority Partners
 - p. MCO Riverside Health of Maryland Inc
 - q. MCO United Healthcare
 - r. MCO University of Maryland Health Partners
 - s. Novitas Solutions Inc
 - t. Optimum Choice
 - u. OPTUM
 - v. United Behavioral Health
 - w. United Healthcare
 - x. SkyGen USA
- 6. Storage and Retrieval Fully integrated and secure storage of all insurance payer enrollment documents, DHHS submitted claim files, ERAs from the insurance payers, and all other documents as requested by DHHS for up to 7 years.

- 7. The clearinghouse portal must operate at least between 8:00 AM to 6:00 PM Eastern Standard Time, Monday through Friday except Federal Holidays.
- 8. Contractor shall develop and maintain a disaster recovery and/or contingency plans during the term of this Contract to cover a disruption in provision of the services and shall provide copies of its most recent plans upon request by the County.
 - The disaster recovery and/or contingency plans shall describe the key recovery steps to be performed by Contractor during and after a disruption in services, to enable the system to return to normal operations as soon as possible. Upon occurrence of a disruption, Contractor shall promptly notify the County of the event, its effect on performance, and how long Contractor expects it to last. Thereafter Contractor shall update that information as reasonably necessary. During the event, Contractor shall use reasonable efforts to limit damages to the County and to resume its performance under this Contract.
- 9. The Contractor may be afforded remote access privileges to County Information Resources, or otherwise work on, or interface with, County Information Resources, and must ensure that the County's Information Resources, including electronic data assets, are protected from theft, unauthorized destruction, use, modification, or disclosure as deemed necessary under the County's Information Resources Security Procedure (AP 6-7). The Contractor must adhere to any and all policies and procedures under, or related to, the County's Information Resources Security Procedure (AP 6-7) references the County Computer Security Guideline and the County's Administrative Procedure 6-1, Administrative Procedure 6-7 and 6-1 are incorporated by reference and made a part of this Contract as Attachment D.
- 10. The Contractor's clearinghouse portal shall screen, process and send industry standard Electronic Data Interchange claim files DHHS uploads to its clearinghouse portal to payers in industry standard format. The clearinghouse portal will also retrieve from payers and store for DHHS to download the industry standard ERA.
- 11. The Contractor must comply with all federal, state and local laws and regulations governing privacy and the protection of health information, including but not limited to, the Health Insurance Portability and Accountability Act. The Contractor must also sign a Business Associate Agreement with the County prior to execution of this Contract (Attachment C) and must comply with the provisions in the attached Business Associate Agreement.

II. RECORDS & REPORTS

- 1. The Contractor must submit a monthly report to the County's Contract Monitor, no later than fifteen (15) days following the end of each month. The report should enable DHHS to recalculate or verify the monthly service invoiced amount. The report must include, but not be limited to:
 - a. A list of claims submitted by DHHS for the month.
 - b. A list of ERAs received through the clearinghouse for the month.
- 2. The Contractor shall have the capacity to make available or generate the following reports on its web portal. Such reports should include but not limit to:

- a. Listing of claims submitted with various filtering options.
- b. Listing of ERAs received with various filtering options.
- c. Listing of payments, denials, and adjustments with various filtering options.

III. COMPENSATION

- 1. The County will reimburse the Contractor per number of claims processed at the established rate to be negotiated with the successful offeror. No minimum number of claims processed is guaranteed to any Contractor under the contract resulting from this solicitation.
- 2. No services will be performed or compensated under a contract resulting from this solicitation prior to the execution of a County Purchase Order and the Contractor's receipt of said County Purchase Order containing a maximum compensation amount.
- 2. There is no minimum amount of work or dollars guaranteed under this Contract.
- 3. Compensation must not exceed funds appropriated by the County and encumbered in the County Purchase Order issued to the Contractor. The total compensation under this Contract must fall within the informal threshold, which is less than \$100,000 for the entirety of the contract term including optional renewal terms, if any.

IV. PRICE ADJUSTMENTS

Prices quoted are firm for the first term of the resulting contract. Any request for a price adjustment after the first term is subject to the following:

- 1. Approval or rejection by the Director, Office of Procurement, or designee.
- 2. The request for a price adjustment must be submitted in writing to the Monitor designated by DHHS and accompanied by supporting documentation justifying the Contractor's request. A request for any price adjustment may not be approved unless the Contractor submits to the County sufficient justification to support that the Contractor's request is based on its net increase in costs in delivering the goods or services under this Contract.
- 3. Submission within sixty (60) days prior to contract expiration date, if the contract is being amended.
- 4. The request may not be approved which exceeds the amount of the annual percentage change of the Consumer Price Index (CPI) for the twelve-month period immediately prior to the date of the request. The request shall be based upon the CPI for all urban consumers issued for the Washington-Arlington-Alexandria, DC-MD-VA-WV Metropolitan area by the United States Department of Labor, Bureau of Labor Statistics for ALL ITEMS.
- 5. The County will approve only one price adjustment for each contract term, if a price adjustment is approved.
- 6. The price adjustment must be executed by written contract amendment.

V. INVOICES

The County will pay the Contractor on a monthly basis upon submission of an approved and correct invoice, in a format approved by the County, based upon the agreed-upon compensation calculation method. All reports and invoices will be verified for accuracy. All invoices are to be sent to the County's designated Contract Monitor. Invoices must be submitted by the 15th day of the following month.

VI. CONFIDENTIALITY OF INFORMATION AND DATA SECURITY

Protection of Personal Information by Government Agencies

Consistent with Maryland State Government Article, Title 10, Subtitle 13, entitled "Protection of Personal Information by Government Agencies," in any contract under which Contractor is to perform services and the County may disclose to Contractor personal information about an individual, Contractor must implement and maintain reasonable security procedures and practices that:(a) are appropriate to the nature of the personal information disclosed to the Contractor; and (b) are reasonably designed to help protect the personal information from unauthorized access, use, modification, disclosure, or destruction.

Contractor's requirement to implement and maintain reasonable security practices and procedures must include requiring any third-party to whom it discloses personal information originally disclosed to Contractor by the County to also implement and maintain reasonable security practices and procedures related to protecting the personal information.

Contractor must notify the County of a breach of the security of a system if the unauthorized acquisition of an individual's personal information has occurred or is reasonably likely to occur, and also must share with the County all information related to the breach. Contractor must provide the above notification to the County as soon as reasonably practicable after Contractor discovers or is notified of the breach of the security of a system.

VII. TERM

The Contract resulting from this Solicitation will be effective on the date of signature by the Director, Office of Procurement, and will be effective for one (1) year from the date of execution. Contractor must perform all work in accordance with the Scope of Services. Before the Contract term ends, the Director at his/her sole option may (but is not required to) renew the term. Contractor's satisfactory performance does not guarantee a renewal of the term. The Director may exercise this option to renew this term four (4) time(s) for up to one (1) year(s) each. Compensation under the Contract resulting from this Solicitation must fall within the informal threshold, which is less than \$100,000 for the entirety of the contract term including optional renewal terms, if any. The Contract will end once the threshold is reached, with no further cost, liability, or obligation on the part of the County.

VIII. SUBMITTAL REQUIREMENTS

Proposals submitted in response to this solicitation are to be a maximum of 20 page (not including any relevant attachments) and follow the format below:

- A. A one-page letter of introduction which includes the following:
 - 1. the date of the proposal submission.

- 2. name and address of the organization/offeror.
- 3. contact person, phone and fax numbers.
- 4. the date on which the Offeror is prepared to begin work.
- B. Description of the Offeror's ability to meet the requirements listed in Article I. Scope of Services, including:
 - 1. experience and skills with clearinghouse processes and practices.
 - 2. experience and skills working with NextGen EPM or similar systems.
 - 3. proof of detailed agreements with Medicaid (Maryland), Medicare and major insurance companies.
 - 4. specific details of system or platform you are proposing such as capabilities, functions, tools, reports and features of the system or platform to demonstrate the capacity to provide the service listed in Article I. Scope of Services.
 - 5. provide a list of other support services and Claims Management Tools offered while being the third party.
- C. Three (3) Professional Letters of Reference
- D. The following completed attachments:
 - 1. Wage Requirements Form (PMMD-177) www.montgomerycountymd.gov/PRO/Resources/Files/SolForm/PMMD-177.pdf
 - 2. Minority Business Program & Offeror's Representation (PMMD-90) www.montgomerycountymd.gov/PRO/Resources/Files/SolForm/PMMD-90.pdf
 - 3. Minority-Owned Business Form (PMMD-65) www.montgomerycountymd.gov/PRO/Resources/Files/SolForm/PMMD-65.pdf
 - 4. Attachment A: Rate Schedule (1 page)
- E. Proof of Offeror's legal name, tax ID number. The following documents are required:
 - 1. If your entity is a corporate entity, you must submit Articles of Incorporation and/or Articles of Amendment showing the legal entity name.
 - 2. IRS Form W-9

IX. EVALUATION CRITERIA AND METHOD OF AWARD

Proposals will be evaluated using the following criteria:

#	Description	Possible Points
1	Experience of Offeror with clearinghouse processes and practices	20
2	Experience of Offeror working with NextGen EPM or similar systems	10
3	Offeror's capacity to provide Medical Claims Billing Clearinghouse	25
	Services in the Scope of Services	
4	Offeror's range of Claims Management Tools, such as online editing tools,	20
	tracking, error detection and correction prior to submission, etc.	

5	Reasonable costs and pricing	25
	Total Points	100

As per evaluation of proposals, a contract will be awarded to the highest scoring Offeror if DHHS determines such award of a contract.

X. GENERAL CONDITIONS AND INSURANCE REQUIREMENTS

The attached General Conditions of Contract Between County and Contractor ("General Conditions") are incorporated by reference into and made a part of this Contract as Attachment B. The following insurance requirements supersede those outlined in Provision 21 of the General Conditions:

Prior to the execution of the contract by the County, the proposed awardee/contractor and their contractors (if requested by County) must obtain, at their own cost and expense, the following *minimum* (not maximum) insurance coverage with an insurance company/companies licensed to conduct business in the State of Maryland and acceptable to the Division of Risk Management. This insurance must be kept in full force and effect during the term of this contract, including all extensions. The insurance must be evidenced by a certificate of insurance, and if requested by the County, the proposed awardee/contractor shall provide a copy of the insurance policies and additional insured endorsements. The minimum limits of coverage listed below shall not be construed as the maximum as required by contract or as a limitation of any potential liability on the part of the proposed awardee/contractor to the County nor shall failure to request evidence of this insurance in any way be construed as a waiver of proposed awardee / contractor's obligation to provide the insurance coverage specified. The Contractor's insurance shall be primary. Coverage pursuant to this Section shall not include any provision that would bar, restrict, or preclude coverage for claims by Montgomery County against Contractor, including but not limited to "cross-liability" or "insured vs insured" exclusion provisions.

Commercial General Liability

A minimum limit of liability of *two million dollars* (\$2,000,000), *per claim and five million dollars* (\$5,000,000) aggregate, for bodily injury and property damage coverage per occurrence and aggregate including the following coverages:

Contractual Liability
Premises and Operations
Property Damage
Independent Contractors
Products and Completed Operations

Professional Liability (Errors and Omissions Liability)

The policy shall cover professional errors and omissions, negligent acts, misconduct or lack of ordinary skill during the period of contractual relationship and services rendered with the County with a limit of liability of at least:

Each Claim \$10,000,000

In the event that the professional liability insurance required by this Contract is written on a claims-made basis, Contractor warrants that any retroactive date under the policy shall precede the effective date of this Contract; and that either continuous coverage will be maintained, or an extended discovery period will be exercised for a period of three (3) years beginning at the time work under this Contract is completed.

Cyber Liability Insurance

Policy in an amount not less than *five million dollars (\$5,000,000) per claim, and ten million dollars (\$10,000,000) aggregate,* covering all acts, errors, omissions, negligence, infringement of intellectual property, network / cyber and privacy risks (including coverage for unauthorized access,) failure to protect confidential information (personal and commercial information) from disclosure; failure of security, virus transmission, data damage/destruction/corruption, breach of privacy perils, unintentional or wrongful disclosure of information, the unauthorized use/access of a computer system; the defense of any regulatory action involving a breach of privacy; failure to protect confidential information (personal and commercial information) from disclosure; notification costs, whether or not required by statute; network security liability; defense costs; and, privacy liability; as well as notification costs and regulatory defense) in the performance of services hereby contracted for with Montgomery County, Maryland or on behalf of Montgomery County, Maryland hereunder. The policy shall contain affirmative coverage for contingent bodily injury and property damage emanating from the failure of the technology services or an error or omission in the content/information provided. Such insurance shall be maintained in force at all times during the term of the agreement and for a period of 3 years thereafter for services completed during the term of the agreement.

Workers' Compensation/Employer's Liability

Meeting all statutory requirements of the State of Maryland Law and with the following minimum Employers' Liability limits:

Bodily Injury by Accident - \$100,000 each accident Bodily Injury by Disease - \$500,000 policy limits Bodily Injury by Disease - \$100,000 each employee

Additional Insured

Montgomery County, Maryland, its elected and appointed officials, officers, consultants, agents and employees, must be included as an additional insured on an endorsement to Contractor's commercial general, automobile insurance, and contractor's excess/umbrella insurance policies if used to satisfy the Contractor's minimum insurance requirements under this contract, for liability arising out of contractor's products, goods and services provided under this contract. The stipulated limits of coverage above shall not be construed as a limitation of any potential liability of the contractor.

Policy Cancellation

Should any of the above policies be cancelled before the expiration date thereof, written notice must be delivered to the County in accordance with the policy provisions.

Certificate Holder

Montgomery County, Maryland DHHS / CMT / Thanikan Fales 401 Hungerford Drive, 6th floor Rockville, Maryland 20850

ATTACHMENT A **Rate Schedule**

Proposed Rates for all services listed in Article I, Scope of Services.

Rate(s)	Unit of	Description	
(\$)	Measurement		
Natas.			
Notes: 1 Please provide rate	e(s) with clear descri	ntions	
 Please provide rate(s) with clear descriptions. Minimum monthly charges must be specified, if any. 			
2. Infilition monding visited of opposition, it mily.			

Contractor Name:	
Signature:	
Printed Name:	
Title:	
Date:	

ATTACHMENT B

GENERAL CONDITIONS OF CONTRACT BETWEEN COUNTY & CONTRACTOR

1. ACCOUNTING SYSTEM AND AUDIT, ACCURATE INFORMATION

The contractor certifies that all information the contractor has provided or will provide to the County is true and correct and can be relied upon by the County in awarding, modifying, making payments, or taking any other action with respect to this contract including resolving claims and disputes. Any false or misleading information is a ground for the County to terminate this contract for cause and to pursue any other appropriate remedy. The contractor certifies that the contractor's accounting system conforms with generally accepted accounting principles, is sufficient to comply with the contract's budgetary and financial obligations, and is sufficient to produce reliable financial information.

The County may examine the contractor's and any first tier subcontractor's records to determine and verify compliance with the contract and to resolve or decide any claim or dispute arising under this contract. The contractor and any first tier subcontractor must grant the County access to these records at all reasonable times during the contract term and for 3 years after final payment. If the contract is supported to any extent with federal or state funds, the appropriate federal or state authorities may also examine these records. The contractor must include the preceding language of this paragraph in all first tier subcontracts.

2. AMERICANS WITH DISABILITIES ACT

The contractor agrees to comply with the nondiscrimination requirements of Titles II and III, and other provisions, of the Americans with Disabilities Act of 1990, Pub. Law 101-336, and ADA Amendments Act of 2008, Pub. Law 110-325, as amended, currently found at 42 U.S.C., § 12101, et seq., and 47 U.S.C., ch. 5.

APPLICABLE LAWS

This contract must be construed in accordance with the laws and regulations of Maryland and Montgomery County. The Montgomery County Procurement Regulations are incorporated by reference into, and made a part of, this contract. In the case of any inconsistency between this contract and the Procurement Regulations, the Procurement Regulations govern. The contractor must, without additional cost to the County, pay any necessary fees and charges, obtain any necessary licenses and permits, and comply with applicable federal, state and local laws, codes and regulations. For purposes of litigation involving this contract, except for contract Disputes discussed in paragraph 8 below, exclusive venue and jurisdiction must be in the Circuit Court for Montgomery County, Maryland or in the District Court of Maryland for Montgomery County.

The County's prevailing wage law, as found at §11B-33C of the County Code, applies to certain construction contracts. To the extent applicable, the County's prevailing wage requirements are enumerated within this solicitation/contract in the "Prevailing Wage Requirements for Construction Contract Addendum to the General Conditions of Contract between County and Contractor." If applicable to this contract, the Addendum will be attached to the contract, and will be incorporated herein by reference, and made a part thereof.

Furthermore, certain non-profit and governmental entities may purchase supplies and services, similar in scope of work and compensation amounts provided for in a County contract, using their own contract and procurement laws and regulations, pursuant to the Md. State Finance and Procurement Article, Section 13-101, et. seq.

Contractor and all of its subcontractors must comply with the provisions of County Code §11B-35A and must not retaliate against a covered employee who discloses an illegal or improper action described in §11B-35A. Furthermore, an aggrieved covered employee under §11B-35A is a third-party beneficiary under this Contract, who may by civil action recover compensatory damages including interest and reasonable attorney's fees, against the contractor or one of its subcontractors for retaliation in violation of that Section.

The contractor agrees to comply with the requirements of the Displaced Service Workers Protection Act, which appears in County Code, Chapter 27, Human Rights and Civil Liberties, Article X, Displaced Service Workers Protection Act, §§ 27-64 through 27-66.

Montgomery County's Earned Sick and Safe Leave Law, found at Sections 27-76 through 27-82 of the County Code, became effective October 1, 2016. An employer doing business in the County, as defined under the statute, must comply with this law. This includes an employer vendor awarded a County contract. A vendor may obtain information regarding this law at http://www.montgomerycountymd.gov/humanrights/

4. ASSIGNMENTS AND SUBCONTRACTS

The contractor must not assign or transfer this contract, any interest herein or any claim hereunder, except as expressly authorized in writing by the Director, Office of Procurement. Unless performance is separately and expressly waived in writing by the Director, Office of Procurement, an assignment does not release the contractor from responsibility for performance of this contract. Unless otherwise provided in the contract, the contractor may not contract with any other party for furnishing any of the materials or services herein contracted for without the written approval of the Director, Office of Procurement. Any subcontract for any work hereunder must comport with the terms of this Contract and County law, and must include any other terms and conditions that the County deems necessary to protect its interests. The contractor must not employ any subcontractor that is a debarred or suspended person under County Code §11B-37. The contractor is fully responsible to the County for the acts and omissions of itself, its subcontractors and any persons either directly or indirectly employed by them. Nothing contained in the contract documents shall create any contractual relation between any subcontractor and the County, and nothing in the contract documents is intended to make any subcontractor a beneficiary of the contract between the County and the contractor.

5. CHANGES

The Director, Office of Procurement, may unilaterally change the work, materials and services to be performed. The change must be in writing and within the general scope of the contract. The contract will be modified to reflect any time or money adjustment the contractor is entitled to receive. Contractor must bring to the Contract Administrator, in writing, any claim about an adjustment in time or money resulting from a change, within 30 days from the date the Director, Office of Procurement, issued the change in work, or the claim is waived. Any failure to agree upon a time or money adjustment must be resolved under the "Disputes" clause of this contract. The contractor must proceed with the prosecution of the work as changed, even if there is an unresolved claim. No charge for any extra work, time or material will be allowed, except as provided in this section.

6. CONTRACT ADMINISTRATION

- A. The contract administrator, subject to paragraph B below, is the Department representative designated by the Director, Office of Procurement, in writing and is authorized to:
 - (1) serve as liaison between the County and the contractor;
 - (2) give direction to the contractor to ensure satisfactory and complete performance;
 - (3) monitor and inspect the contractor's performance to ensure acceptable timeliness and quality;
 - (4) serve as records custodian for this contract, including wage and prevailing wage requirements;
 - (5) accept or reject the contractor's performance;
 - (6) furnish timely written notice of the contractor's performance failures to the Director, Office of Procurement, and to the County Attorney, as appropriate;
 - (7) prepare required reports;

- (8) approve or reject invoices for payment;
- (9) recommend contract modifications or terminations to the Director, Office of Procurement;
- (10) issue notices to proceed; and
- (11) monitor and verify compliance with any MFD Performance Plan.
- B. The contract administrator is NOT authorized to make determinations (as opposed to recommendations) that alter, modify, terminate or cancel the contract, interpret ambiguities in contract language, or waive the County's contractual rights.

COST & PRICING DATA

Chapter 11B of the County Code and the Montgomery County Procurement Regulations require that cost & pricing data be obtained from proposed awardees/contractors in certain situations. The contractor guarantees that any cost & pricing data provided to the County will be accurate and complete. The contractor grants the Director, Office of Procurement, access to all books, records, documents, and other supporting data in order to permit adequate evaluation of the contractor's proposed price(s). The contractor also agrees that the price to the County, including profit or fee, may, at the option of the County, be reduced to the extent that the price was based on inaccurate, incomplete, or noncurrent data supplied by the contractor.

8. DISPUTES

Any dispute arising under this contract that is not disposed of by agreement must be decided under the Montgomery County Code and the Montgomery County Procurement Regulations. Pending final resolution of a dispute, the Contractor must proceed diligently with contract performance. Subject to subsequent revocation or alteration by the Director, Office of Procurement, the head of the County department, office or agency ("Department Head") of the contract administrator is the designee of the Director, Office of Procurement, for the purpose of dispute resolution. The Department Head, or his/her designee, must forward to the Director, Office of Procurement, a copy of any written resolution of a dispute. The Department Head may delegate this responsibility to another person (other than the contract administrator). A contractor must notify the contract administrator of a claim in writing, and must attempt to resolve a claim with the contract administrator prior to filling a dispute with the Director, Office of Procurement or designee. The contractor waives any dispute or claim not made in writing and received by the Director, Office of Procurement, within 30 days of the event giving rise to the dispute or claim, whether or not the contract administrator has responded to a written notice of claim or resolved the claim. The Director, Office of Procurement, must dismiss a dispute that is not timely filed. A dispute must be in writing, for specific relief, and any requested relief must be fully supported by affidavit of all relevant calculations, including cost and pricing information, records, and other information. At the County's option, the contractor agrees to be made a party to any related dispute involving another contractor.

9. DOCUMENTS, MATERIALS, AND DATA

All documents materials or data developed as a result of this contract are the County's property. The County has the right to use and reproduce any documents, materials, and data, including confidential information, used in the performance of, or developed as a result of, this contract. The County may use this information for its own purposes, including reporting to state and federal agencies. The contractor warrants that it has title to or right of use of all documents, materials or data used or developed in connection with this contract. The contractor must keep confidential all documents, materials, and data prepared or developed by the contractor or supplied by the County.

10. DURATION OF OBLIGATION

The contractor agrees that all of contractor's obligations and warranties, including all requirements imposed by the Minority Owned Business Addendum to these General Conditions, if any, which directly or indirectly are intended by their nature or by implication to survive contractor performance, do survive the completion of performance, termination for default, termination for convenience, or termination by mutual consent of the contract.

11. ENTIRE AGREEMENT

There are no promises, terms, conditions, or obligations other than those contained in this contract. This contract supersedes all communications, representations, or agreements, either verbal or written, between the parties hereto, with the exception of express warranties given to induce the County to enter into the contract.

12. ETHICS REQUIREMENTS/POLITICAL CONTRIBUTIONS

The contractor must comply with the ethics provisions contained in Chapters 11B and 19A, Montgomery County Code, which include the following:

- (a) a prohibition against making or offering to make certain gifts. Section 11B-51(a).
- (b) a prohibition against kickbacks. Section 11B-51(b).
- (c) a prohibition against a person engaged in a procurement from employing or offering to employ a public employee. Section 11B-52 (a).
- (d) a prohibition against a contractor that is providing a recommendation to the County from assisting another party or seeking to obtain an economic benefit beyond payment under the contract. Section 11B-52 (b).
- (e) a restriction on the use of confidential information obtained in performing a contract. Section 11B-52 (c).
- (f) a prohibition against contingent fees. Section 11B-53.

Furthermore, the contractor specifically agrees to comply with Sections 11B-51, 11B-52, 11B-53, 19A-12, and/or 19A-13 of the Montgomery County Code. In addition, the contractor must comply with the political contribution reporting requirements currently codified under the Election Law at Md. Code Ann., Title 14.

13. GUARANTEE

- A. Contractor guarantees for one year from acceptance, or for a longer period that is otherwise expressly stated in the County's written solicitation, all goods, services, and construction offered, including those used in the course of providing the goods, services, and/or construction. This includes a guarantee that all products offered (or used in the installation of those products) carry a guarantee against any and all defects for a minimum period of one year from acceptance, or for a longer period stated in the County's written solicitation. The contractor must correct any and all defects in material and/or workmanship that may appear during the guarantee period, or any defects that occur within one (1) year of acceptance even if discovered more than one (1) year after acceptance, by repairing, (or replacing with new items or new materials, if necessary) any such defect at no cost to the County and to the County's satisfaction.
- B. Should a manufacturer's or service provider's warranty or guarantee exceed the requirements stated above, that guarantee or warranty will be the primary one used in the case of defect. Copies of manufacturer's or service provider's warranties must be provided upon request.
- C. All warranties and guarantees must be in effect from the date of acceptance by the County of the goods, services, or construction.
- D. The contractor guarantees that all work shall be accomplished in a workmanlike manner, and the contractor must observe and comply with all Federal, State, County and local laws, ordinances and regulations in providing the goods, and performing the services or construction.
- E. Goods and materials provided under this contract must be of first quality, latest model and of current manufacture, and must not be of such age or so deteriorated as to impair their usefulness or safety. Items that are used, rebuilt, or demonstrator models are unacceptable, unless specifically requested by the County in the Specifications.

14. <u>HAZARDOUS AND TOXIC SUBSTANCES</u>

Manufacturers and distributors are required by federal "Hazard Communication" provisions (29 CFR 1910.1200), and the Maryland "Access to Information About Hazardous and Toxic Substances" Law, to label each hazardous material or chemical container, and to provide Material Safety Data Sheets to the purchaser. The contractor must comply with these laws and must provide the County with copies of all relevant documents, including Material Safety Data Sheets, prior to performance of work or contemporaneous with delivery of goods.

15. HEALTH INSURANCE PORTABILITY AND ACCOUNTABILITY ACT (HIPAA) COMPLIANCE
In addition to the provisions stated above in Section 3. "Applicable Laws," contractor must comply with all requirements in the federal Health Insurance Portability and Accountability Act (HIPAA), to the extent that HIPAA is applicable to this contract. Furthermore, contractor must enter into the County's standard Business Associate Agreement or Qualified Service Organization Agreement when contractor or the County, as part of this contract, may use or disclose to one another, to the individual whose health information is at issue, or to a third-party, any protected health information that is obtained from, provided to, made available to, or created by, or for, the contractor or the County.

16. <u>IMMIGRATION REFORM AND CONTROL ACT</u>

The contractor warrants that both the contractor and its subcontractors do not, and shall not, hire, recruit or refer for a fee, for employment under this contract or any subcontract, an alien while knowing the alien is an unauthorized alien, or any individual without complying with the requirements of the federal Immigration and Nationality laws, including any verification and record keeping requirements. The contractor further assures the County that, in accordance with those laws, it does not, and will not, discriminate against an individual with respect to hiring, recruitment, or referral for a fee, of an individual for employment or the discharge of an individual from employment, because of the individual's national origin or, in the case of a citizen or prospective citizen, because of the individual's citizenship status.

17. INCONSISTENT PROVISIONS

Notwithstanding any provisions to the contrary in any contract terms or conditions supplied by the contractor, this General Conditions of Contract document supersedes the contractor's terms and conditions, in the event of any inconsistency.

18. INDEMNIFICATION

The contractor is responsible for any loss, personal injury, death and any other damage (including incidental and consequential) that may be done or suffered by reason of the contractor's negligence or failure to perform any contractual obligations. The contractor must indemnify and save the County harmless from any loss, cost, damage and other expenses, including attorney's fees and litigation expenses, suffered or incurred due to the contractor's negligence or failure to perform any of its contractual obligations. If requested by the County, the contractor must defend the County in any action or suit brought against the County arising out of the contractor's negligence, errors, acts or omissions under this contract. The negligence of any agent, subcontractor or employee of the contractor is deemed to be the negligence of the contractor. For the purposes of this paragraph, County includes its boards, agencies, agents, officials and employees.

19. INDEPENDENT CONTRACTOR

The contractor is an independent contractor. The contractor and the contractor's employees or agents are not agents of the County.

20. INSPECTIONS

The County has the right to monitor, inspect and evaluate or test all supplies, goods, services, or construction called for by the contract at all reasonable places (including the contractor's place of business) and times (including the period of preparation or manufacture).

Prior to contract execution by the County, the proposed awardee/contractor must obtain at its own cost and expense the minimum insurance specified in the applicable table (See Tables A and B) or attachment to these General Conditions, with one or more insurance company(s) licensed or qualified to do business in the State of Maryland and acceptable to the County's Division of Risk Management. The minimum limits of coverage listed shall not be construed as the maximum as required by contract or as a limitation of any potential liability on the part of the proposed awardee/contractor to the County, nor shall failure by the County to request evidence of this insurance in any way be construed as a waiver of proposed awardee/contractor's obligation to provide the insurance coverage specified. Contractor must keep this insurance in full force and effect during the term of this contract, including all extensions. Unless expressly provided otherwise, Table A is applicable to this contract. The insurance must be evidenced by one or more Certificate(s) of Insurance and, if requested by the County, the proposed awardee/contractor must provide a copy of any and all insurance policies to the County. At a minimum, the proposed awardee/contractor must submit to the Director, Office of Procurement, one or more Certificate(s) of Insurance prior to award of this contract, and prior to any contract modification extending the term of the contract, as evidence of compliance with this provision. The contractor's insurance must be primary. Montgomery County, MD, including its officials, employees, agents, boards, and agencies, must be named as an additional insured on all liability policies. Contractor must provide to the County at least 30 days written notice of a cancellation of, or a material change to, an insurance policy. In no event may the insurance coverage be less than that shown on the applicable table, attachment, or contract provision for required insurance. After consultation with the Department of Finance, Division of Risk Management, the Director, Office of Procurement, may waive the requirements of this section, in whole or in part.

Please disregard TABLE A. and TABLE B., if they are replaced by the insurance requirements as stated in an attachment to these General Conditions of Contract between County and Contractor.

> TABLE A. INSURANCE REQUIREMENTS (See Paragraph #21 under the General Conditions of Contract between County and Contractor)

> > CONTRACT DOLLAR VALUES (IN \$1,000's)

	<u>Up to 50</u>	<u>Up to 100</u>	<u>Up to 1,000</u>	Over <u>1,000</u>
Workers Compensation (for contractors with employees) Bodily Injury by				
Accident (each)	100	100	100	See
Disease (policy limits)	500	500	500	Attachment
Disease (each employee)	100	100	100	

Commercial General Liability for bodily injury and property damage per occurrence, including contractual liability, premises and operations, and independent contractors	300 Attachment	500	1,000	See
Minimum Automobile Liability (including owned, hired and non owned automobiles) Bodily Injury				
each person	100	250	500	See
each occurrence	300	500	1,000	Attachment
Property Damage each occurrence	300	300	300	
cuen securiones	300	300	300	
Professional Liability* for errors, omissions and negligent acts, per claim and aggregate, with one year discovery period and maximum deductible of \$25,000	250	500	1,000	See Attachment

Certificate Holder Montgomery County Maryland (Contract #) Office of Procurement 27 Courthouse Square, Ste 330 Rockville, Maryland 20850

(Remainder of Page Intentionally Left Blank)

^{*}Professional services contracts only

TABLE B. INSURANCE REQUIREMENTS

(See Paragraph #21 under the General Conditions of Contract between County and Contractor)

<u>Up to 50</u>	<u>Up to 100</u>	<u>Up to 1,000</u>	<u>1,000</u>
300	500	1,000	See Attachment

Commercial General Liability minimum combined single limit for bodily injury and property damage per occurrence, including contractual liability, premises and operations, independent contractors, and product liability

Certificate Holder Montgomery County Maryland (Contract #) Office of Procurement 27 Courthouse Square, Ste 330 Rockville, Maryland 20850

(Remainder of Page Intentionally Left Blank)

22. INTELLECTUAL PROPERTY APPROVAL AND INDEMNIFICATION - INFRINGEMENT

If contractor will be preparing, displaying, publicly performing, reproducing, or otherwise using, in any manner or form, any information, document, or material that is subject to a copyright, trademark, patent, or other property or privacy right, then contractor must: obtain all necessary licenses, authorizations, and approvals related to its use; include the County in any approval, authorization, or license related to its use; and indemnify and hold harmless the County related to contractor's alleged infringing or otherwise improper or unauthorized use. Accordingly, the contractor must protect, indemnify, and hold harmless the County from and against all liabilities, actions, damages, claims, demands, judgments, losses, costs, expenses, suits, or actions, and attorneys' fees and the costs of the defense of the County, in any suit, including appeals, based upon or arising out of any allegation of infringement, violation, unauthorized use, or conversion of any patent, copyright, trademark or trade name, license, proprietary right, or other related property or privacy interest in connection with, or as a result of, this contract or the performance by the contractor of any of its activities or obligations under this contract.

23. <u>INFORMATION SECURITY</u>

A. Protection of Personal Information by Government Agencies:

In any contract under which Contractor is to perform services and the County may disclose to Contractor personal information about an individual, as defined by State law, Contractor must implement and maintain reasonable security procedures and practices that: (a) are appropriate to the nature of the personal information disclosed to the Contractor; and (b) are reasonably designed to help protect the personal information from unauthorized access, use, modification, disclosure, or destruction. Contractor's requirement to implement and maintain reasonable security practices and procedures must include requiring any third-party to whom it discloses personal information that was originally disclosed to Contractor by the County to also implement and maintain reasonable security practices and procedures related to protecting the personal information. Contractor must notify the County of a breach of the security of a system if the unauthorized acquisition of an individual's personal information has occurred or is reasonably likely to occur, and also must share with the County all information related to the breach. Contractor must provide the above notification to the County as soon as reasonably practicable after Contractor discovers or is notified of the breach of the security of a system. Md. Code Ann., State Gov't. § 10-1301 through 10-1308 (2013).

B. Payment Card Industry Compliance:

In any contract where the Contractor provides a system or service that involves processing credit card payments (a "Payment Solution"), the Payment Solution must be Payment Card Industry Data Security Standard Compliant ("PCI-DSS Compliant"), as determined and verified by the Department of Finance, and must (1) process credit card payments through the use of a Merchant ID ("MID") obtained by the County's Department of Finance by and in the name of the County as merchant of record, or (2) use a MID obtained by and in the name of the Contractor as merchant of record.

24. NON-CONVICTION OF BRIBERY

The contractor hereby declares and affirms that, to its best knowledge, none of its officers, directors, or partners or employees directly involved in obtaining contracts has been convicted of bribery, attempted bribery, or conspiracy to bribe under any federal, state, or local law.

25. NON-DISCRIMINATION IN EMPLOYMENT

The contractor agrees to comply with the non-discrimination in employment policies and/ or provisions prohibiting unlawful employment practices in County contracts as required by Section 11B 33 and Section 27 19 of the Montgomery County Code, as well as all other applicable state and federal laws and regulations regarding employment discrimination.

The contractor assures the County that, in accordance with applicable law, it does not, and agrees that it will not, discriminate in any manner on the basis of race, color, religious creed, ancestry, national origin, age, sex, marital status, disability, or sexual orientation.

The contractor must bind its subcontractors to the provisions of this section.

26. PAYMENT AUTHORITY

No payment by the County may be made, or is due, under this contract, unless funds for the payment have been appropriated and encumbered by the County. Under no circumstances will the County pay the contractor for legal fees. The contractor must not proceed to perform any work (provide goods, services, or construction) prior to receiving written confirmation that the County has appropriated and encumbered funds for that work. If the contractor fails to obtain this verification from the Office of Procurement prior to performing work, the County has no obligation to pay the contractor for the work.

If this contract provides for an additional contract term for contractor performance beyond its initial term, continuation of contractor's performance under this contract beyond the initial term is contingent upon, and subject to, the appropriation of funds and encumbrance of those appropriated funds for payments under this contract. If funds are not appropriated and encumbered to support continued contractor performance in a subsequent fiscal period, contractor's performance must end without further notice from, or cost to, the County. The contractor acknowledges that the County Executive has no obligation to recommend, and the County Council has no obligation to appropriate, funds for this contract in subsequent fiscal years. Furthermore, the County has no obligation to encumber funds to this contract in subsequent fiscal years, even if appropriated funds may be available. Accordingly, for each subsequent contract term, the contractor must not undertake any performance under this contract until the contractor receives a purchase order or contract amendment from the County that authorizes the contractor to perform work for the next contract term.

27. P-CARD OR SUA PAYMENT METHODS

The County is expressly permitted to pay the vendor for any or all goods, services, or construction under the contract through either a procurement card ("p-card") or a Single Use Account("SUA") method of payment, if the contractor accepts the noted payment method from any other person. In that event, the County reserves the right to pay any or all amounts due under the contract by using either a p-card (except when a purchase order is required) or a SUA method of payment, and the contractor must accept the County's p-card or a SUA method of payment, as applicable. Under this paragraph, contractor is prohibited from charging or requiring the County to pay any fee, charge, price, or other obligation for any reason related to or associated with the County's use of either a p-card or a SUA method of payment.

28. PERSONAL PROPERTY

All furniture, office equipment, equipment, vehicles, and other similar types of personal property specified in the contract, and purchased with funds provided under the contract, become the property of the County upon the end of the contract term, or upon termination or expiration of this contract, unless expressly stated otherwise.

29. TERMINATION FOR DEFAULT

The Director, Office of Procurement, may terminate the contract in whole or in part, and from time to time, whenever the Director, Office of Procurement, determines that the contractor is:

- $(a) \ \ defaulting \ in \ performance \ or \ is \ not \ complying \ with \ any \ provision \ of \ this \ contract;$
- (b) failing to make satisfactory progress in the prosecution of the contract; or
- (c) endangering the performance of this contract.

The Director, Office of Procurement, will provide the contractor with a written notice to cure the default. The termination for default is effective on the date specified in the County's written notice. However, if the County determines that default contributes to the curtailment of an essential service or poses an immediate threat to life,

health, or property, the County may terminate the contract immediately upon issuing oral or written notice to the contractor without any prior notice or opportunity to cure. In addition to any other remedies provided by law or the contract, the contractor must compensate the County for additional costs that foreseeably would be incurred by the County, whether the costs are actually incurred or not, to obtain substitute performance. A termination for default is a termination for convenience if the termination for default is later found to be without justification.

30. TERMINATION FOR CONVENIENCE

This contract may be terminated by the County, in whole or in part, upon written notice to the contractor, when the County determines this to be in its best interest. The termination for convenience is effective on the date specified in the County's written notice. Termination for convenience may entitle the contractor to payment for reasonable costs allocable to the contract for work or costs incurred by the contractor up to the date of termination. The contractor must not be paid compensation as a result of a termination for convenience that exceeds the amount encumbered to pay for work to be performed under the contract.

TIME

Time is of the essence.

32. WORK UNDER THE CONTRACT

Contractor must not commence work under this contract until all conditions for commencement are met, including execution of the contract by both parties, compliance with insurance requirements, encumbrance of funds, and issuance of any required notice to proceed.

33. WORKPLACE SAFETY

The contractor must ensure adequate health and safety training and/or certification, and must comply with applicable federal, state and local Occupational Safety and Health laws and regulations.

THIS FORM MUST NOT BE MODIFIED WITHOUT THE PRIOR APPROVAL OF THE OFFICE OF THE COUNTY ATTORNEY.

BUSINESS ASSOCIATE AGREEMENT

This	Business	Associate	Agreement	(the "Agree	ement")	is made	e by	and	between
Montgomery	County,	Maryland	d (hereinaft	ter referred	to as	"Cover	ed	Entity'	'), and
				(herei	nafter	referred	to	as "I	Business
Associate").	Covered I	Entity and	Business As	sociate shall	collectiv	vely be k	nowr	ı herei	n as the
"Parties."									

I. GENERAL

- B. The performance of the Underlying Agreement may involve the creation, exchange, or maintenance of Protected Health Information ("PHI") as that term is defined under HIPAA; and
- C. For good and lawful consideration as set forth in the Underlying Agreement, Covered Entity and Business Associate enter into this Agreement for the purpose of ensuring compliance with the requirements of HIPAA; and
- D. This Agreement articulates the obligations of the Parties as to use and disclosure of PHI. It does not affect Business Associate's obligations to comply with the Maryland Confidentiality of Medical Records Act (Md. Code Ann., Health-General I §§4-301 *et seq.*) ("MCMRA") or other applicable law with respect to any information the County may disclose to Business Associate as part of Business Associate's performance of the Underlying Agreement; and
- E. This Agreement supersedes and replaces any and all Business Associate Agreements the Covered Entity and Business Associate may have entered into prior to the date hereof; and
- F. The above premises having been considered and incorporated by reference into the sections below, the Parties, intending to be legally bound, agree as follows:

II. **DEFINITIONS.**

A. The terms used in this Agreement have the same meaning as the definitions of those terms in HIPAA. In the absence of a definition in HIPAA, the terms have their commonly understood meaning.

- B. Consistent with HIPAA, and for ease of reference, the Parties expressly note the definitions of the following terms:
 - 1. "Breach" is defined at 45 CFR § 164.402.
 - 2. "Business Associate" is defined at 45 CFR § 160.103, and in reference to the party to this Agreement, shall mean ______.
 - 3. "Covered Entity" is defined at 45 CFR § 160.103, and in reference to the party to this Agreement, shall mean the County.
 - 4. "Designated Record Set" is defined at 45 CFR §164.501.
 - 5. "Individual" is defined at 45 CFR §§ 160.103, 164.501 and 164.502(g), and includes a person who qualifies as a personal representative.
 - 6. "Protected Health Information" or "PHI" is defined at 45 CFR § 160.103.
 - 7. "Required By Law" is defined at 45 CFR § 164.103.
 - 8. "Secretary" means the Secretary of the U.S. Department of Health and Human Services or designee.
 - 9. "Security Incident" is defined at 45 CFR § 164.304.
 - 10. "Unsecured Protected Health Information" or "Unsecured PHI" means PHI that is not rendered unusable, unreadable, or indecipherable to unauthorized persons through the use of a technology or methodology, as specified by the Secretary in the guidance as noted under the HITECH Act, section 13402(h)(1) and (2) of Public Law 111-5, codified at 42 U.S.C. § 17932(h)(1) and (2), and as specified by the Secretary in 45 CFR 164.402.

III. PERMISSIBLE USE AND DISCLOSURE OF PHI

- A. Except as otherwise limited in this Agreement, or by privilege, protection, or confidentiality under HIPAA, MCMRA, or other applicable law, Business Associate may use or disclose (including permitting acquisition or access to) PHI to perform applicable functions, activities, or services for, or on behalf of, Covered Entity as specified in the Underlying Agreement. Moreover, the provisions of HIPAA are expressly incorporated by reference into, and made a part of, this Agreement.
- B. Business Associate may use or disclose (including permitting acquisition or access to) PHI only as permitted or required by this Agreement or as Required By Law.
- C. Business Associate is directly responsible for full compliance with the relevant requirements of HIPAA.

- D. Business Associate must not use or disclose (including permitting acquisition or access to) PHI other than as permitted or required by this Agreement or HIPAA, and must use or disclose PHI only in a manner consistent with HIPAA. As part of this, Business Associate must use appropriate safeguards to prevent use or disclosure of PHI that is not permitted by this Agreement or HIPAA. Furthermore, Business Associate must take reasonable precautions to protect PHI from loss, misuse, and unauthorized access, disclosure, alteration, and destruction.
- E. Business Associate must implement and comply with administrative, physical, and technical safeguards governing the PHI, in a manner consistent with HIPAA, that reasonably and appropriately protect the confidentiality, integrity, and availability of the PHI that it creates, receives, maintains, or transmits on behalf of Covered Entity.
- F. Business Associate must immediately notify Covered Entity, in a manner consistent with HIPAA, of: (i) any use or disclosure of PHI not provided for by this Agreement, including a Breach of PHI of which it knows or by exercise of reasonable diligence would have known, as required at 45 CFR §164.410; and, (ii) any Security Incident of which it becomes aware as required at 45 CFR §164.314(a)(2)(i)(C). Business Associate's notification to Covered Entity required by HIPAA and this Section III.F must:
 - 1. Be made to Covered Entity without unreasonable delay and in no case later than 14 calendar days after Business Associate: a) knows, or by exercising reasonable diligence would have known, of a Breach, b) becomes aware of a Security Incident, or c) becomes aware of any use or disclosure of PHI not provided for by this Agreement;
 - 2. Include the names and addresses of the Individual(s) whose PHI is the subject of a Breach, Security Incident, or use or disclosure of PHI not provided for by this Agreement. In addition, Business Associate must provide any additional information reasonably requested by Covered Entity for purposes of investigating the Breach, Security Incident, or use or disclosure of PHI not provided for by this Agreement;
 - 3. Be in substantially the same form as Exhibit A hereto;
 - 4. Include a brief description of what happened, including the date of the Breach, Security Incident, or use or disclosure of PHI not provided for by this Agreement, if known, and the date of the discovery of the Breach, Security Incident, or use or disclosure of PHI not provided for by this Agreement;
 - 5. Include a description of the type(s) of Unsecured PHI that was involved in the Breach, Security Incident, or use or disclosure of PHI not provided for by this Agreement (such as full name, Social Security number, date of birth, home address, account number, disability code, or other types of information that were involved);
 - 6. Identify the nature and extent of the PHI involved, including the type(s) of identifiers and the likelihood of re identification;

- 7. If known, identify the unauthorized person who used or accessed the PHI or to whom the disclosure was made;
- 8. Articulate any steps the affected Individual(s) should take to protect him or herself from potential harm resulting from the Breach, Security Incident, or use or disclosure of PHI not permitted by this Agreement;
 - 9. State whether the PHI was actually acquired or viewed;
- 10. Provide a brief description of what the Covered Entity and the Business Associate are doing to investigate the Breach, Security Incident, or use or disclosure of PHI not provided for by this Agreement, to mitigate losses, and to protect against any further Breach, Security Incident, or use or disclosure of PHI not provided for by this Agreement;
- 11. Note contact information and procedures for an Individual(s) to ask questions or learn additional information, which must include a toll-free telephone number of Business Associate, along with an e-mail address, Web site, or postal address;

and

- 12. Include a draft letter for the Covered Entity to utilize, in the event Covered Entity elects, in its sole discretion, to notify the Individual(s) that his or her PHI is the subject of a Breach, Security Incident, or use or disclosure of PHI not provided for by this Agreement that includes the information noted in Section III.F.4 III.F.11 above.
- G. Business Associate must, and is expected to, directly and independently fulfill all notification requirements under HIPAA.
- H. In the event of a Breach, Security Incident, or use or disclosure of PHI not provided for by this Agreement, Business Associate must mitigate, to the extent practicable, any harmful effects of said disclosure that are known to it.
- I. In accordance with 45 CFR §§ 164.502(e)(1)(ii) and 164.308(b)(2), Business Associate agrees to ensure that any agent, subcontractor, or employee to whom it provides PHI (received from, or created or received by, Business Associate on behalf of Covered Entity) agrees to the same restrictions, conditions, and requirements that apply through this Agreement to Business Associate with respect to such information.
- J. Business Associate must ensure that any contract or other arrangement with a subcontractor meets the requirements of paragraphs 45 CFR §164.314(a)(2)(i) and (a)(2)(ii) required by 45 CFR § 164.308(b)(3) between a Business Associate and a subcontractor, in the same manner as such requirements apply to contracts or other arrangements between a Covered Entity and Business Associate.
- K. Pursuant to 45 CFR § 164.502(a)(4)(ii), Business Associate must disclose PHI to the Covered Entity, Individual, or Individual's designee, as necessary to satisfy a Covered

Entity's obligations under § 164.524(c)(2)(ii) and (3)(ii) with respect to an individual's request for an electronic copy of PHI.

- L. To the extent applicable, Business Associate must provide access to PHI in a Designated Record Set at reasonable times, at the request of Covered Entity or as directed by Covered Entity, to an Individual specified by Covered Entity in order to meet the requirements under 45 CFR § 164.524.
- M. A Business Associate that is a health plan, excluding an issuer of a long-term care policy falling within paragraph (1)(viii) of the definition of health plan, must not use or disclose PHI that is genetic information for underwriting purposes, in accordance with the provisions of 45 CFR 164.502.
- N. To the extent applicable, Business Associate must make any amendment(s) to PHI in a Designated Record Set that Covered Entity directs or agrees to, pursuant to 45 CFR § 164.526, at the request of Covered Entity or an Individual.
- O. Business Associate must, upon request with reasonable notice, provide Covered Entity access to its premises for a review and demonstration of its internal practices and procedures for safeguarding PHI.
- P. Business Associate must, upon request and with reasonable notice, furnish to Covered Entity security and privacy audit results, risk analyses, security and privacy policies and procedures, details of previous Breaches and Security Incidents, and documentation of controls.
- Q. Business Associate must also maintain records indicating who has accessed PHI about an Individual in an electronic designated record set and information related to such access, in accordance with 45 C.F.R. § 164.528. Business Associate must document such disclosures of PHI and information related to such disclosures as would be required for a Covered Entity to respond to a request by an Individual for an accounting of disclosures of PHI in accordance with 45 C.F.R. § 164.528. Should an Individual make a request to Covered Entity for an accounting of disclosures of his or her PHI pursuant to 45 C.F.R. § 164.528, Business Associate must promptly provide Covered Entity with information in a format and manner sufficient to respond to the Individual's request.
- R. Business Associate must, upon request and with reasonable notice, provide Covered Entity with an accounting of uses and disclosures of PHI that was provided to it by Covered Entity.
- S. Business Associate must make its internal practices, books, records, and any other material requested by the Secretary relating to the use, disclosure, and safeguarding of PHI received from Covered Entity available to the Secretary for the purpose of determining compliance with HIPAA. Business Associate must make the aforementioned information available to the Secretary in the manner and place as designated by the Secretary or the Secretary's duly appointed delegate. Under this Agreement, Business Associate must comply and cooperate with any request for documents or other information from the Secretary directed to

Covered Entity that seeks documents or other information held or controlled by Business Associate.

- T. Business Associate may use PHI to report violations of law to appropriate Federal and State authorities, consistent with 42 C.F.R. § 164.502(j)(1).
- U. Except as otherwise limited in this Agreement, Business Associate may disclose PHI for the proper management and administration of Business Associate or the Underlying Agreement, provided that disclosures are Required By Law, or Business Associate obtains reasonable assurances from the person to whom the information is disclosed that it will remain confidential and be used or further disclosed only as Required By Law or for the limited purpose for which it was disclosed to the person, and the person must agree to notify Business Associate of any instance of any Breach, Security Incident, or use or disclosure of PHI not provided for by this Agreement of which it is aware in which the confidentiality of the information has been breached.
- V. Business Associate understands that, pursuant to 45 CFR § 160.402, the Business Associate is liable, in accordance with the Federal common law of agency, for a civil money penalty for a violation of the HIPAA rules based on the act or omission of any agent of the Business Associate, including a workforce member or subcontractor, acting within the scope of the agency.

IV. TERM AND TERMINATION.

- A. <u>Term.</u> The Term of this Agreement shall be effective as of the effective date of the Underlying Agreement, and shall terminate: (1) when all of the PHI provided by Covered Entity to Business Associate, or created or received by Business Associate on behalf of Covered Entity, is destroyed or returned to Covered Entity; or, (2) if it is infeasible to return or destroy PHI, in accordance with the termination provisions in this Article IV.
- B. <u>Termination for Cause</u>. Upon Covered Entity's knowledge of a material breach of this Agreement by Business Associate, Covered Entity shall:
 - 1. Provide an opportunity for Business Associate to cure the breach or end the violation and, if Business Associate does not cure the breach or end the violation within the time specified by Covered Entity, have the right to terminate this Agreement and to terminate the Underlying Agreement, and shall report the violation to the Secretary;
 - 2. Have the right to immediately terminate this Agreement and the Underlying Agreement if Business Associate has breached a material term of this Agreement and cure is not possible, and shall report the violation to the Secretary; or
 - 3. If neither termination nor cure is feasible, report the violation to the Secretary.

4. This Article IV, Term and Termination, Paragraph B, is in addition to the provisions set forth in Paragraph 27, Termination for Default of the General Conditions of Contract Between County and Contractor, attached to the Underlying Agreement, in which "Business Associate" is "Contractor" and "Covered Entity" is "County" for purposes of this Agreement.

C. Effect of Termination.

- 1. Except as provided in Section IV.C.2, upon termination or cancellation of this Agreement, for any reason, Business Associate must return or destroy all PHI received from Covered Entity, or created or received by Business Associate on behalf of Covered Entity. This provision applies to PHI that is in the possession of a subcontractor(s), employee(s), or agent(s) of Business Associate. Business Associate must not retain any copies of the PHI.
- 2. In the event that Business Associate determines that returning or destroying the PHI is infeasible, Business Associate must provide to Covered Entity written notification of the nature of the PHI and the conditions that make return or destruction infeasible. After written notification that return or destruction of PHI is infeasible, Business Associate must extend the protections of this Agreement to such PHI and limit further use(s) and disclosure(s) of such PHI to those purposes that make the return or destruction infeasible, for so long as Business Associate maintains such PHI. Notwithstanding the foregoing, to the extent that it is not feasible to return or destroy such PHI, the terms and provisions of this Agreement survive termination of this Agreement with regard to such PHI.
- 3. Should Business Associate violate this Agreement, HIPAA, the Underlying Agreement, the MCMRA, or other applicable law, Covered Entity has the right to immediately terminate any contract then in force between the Parties, including the Underlying Agreement.
- V. CONSIDERATION. Business Associate recognizes that the promises it has made in this Agreement shall, henceforth, be reasonably, justifiably, and detrimentally relied upon by Covered Entity in choosing to continue or commence a business relationship with Business Associate.
- VI. CAUSES OF ACTION IN THE EVENT OF BREACH. As used in this paragraph, the term "breach" has the meaning normally ascribed to that term under the Maryland law related to contracts, as opposed to the specific definition under HIPAA related to PHI. Business Associate hereby recognizes that irreparable harm will result to Covered Entity in the event of breach by Business Associate of any of the covenants and assurances contained in this Agreement. As such, in the event of breach of any of the covenants and assurances contained in this Agreement, Covered Entity shall be entitled to enjoin and restrain Business Associate from any continued violation of this Agreement. Furthermore, in the event of breach of this Agreement by Business Associate, Covered Entity is entitled to reimbursement and indemnification from Business Associate for Covered Entity's reasonable attorneys' fees and expenses and costs that were reasonably incurred as a proximate result of Business Associate's breach. The causes of action

contained in this Article VI are in addition to (and do not supersede) any action for damages and/or any other cause of action Covered Entity may have for breach of any part of this Agreement. Furthermore, these provisions are in addition to the provisions set forth in Paragraph 18, "Indemnification", of the General Conditions of Contract Between County and Contractor, attached to the Underlying Agreement in which "Business Associate" is "Contractor" and "Covered Entity" is "County", for purposes of this Agreement.

- VII. MODIFICATION; AMENDMENT. This Agreement may be modified or amended only through a writing signed by the Parties and, thus, no oral modification or amendment hereof shall be permitted. The Parties agree to take such action as is necessary to amend this Agreement, from time to time, as is necessary for Covered Entity to comply with the requirements of HIPAA, including its Privacy, Security, and Notice Rules.
- VIII. INTERPRETATION OF THIS AGREEMENT IN RELATION TO OTHER AGREEMENTS BETWEEN THE PARTIES. Should there be any conflict between the language of this Agreement and any other contract entered into between the Parties (either previous or subsequent to the date of this Agreement), the language and provisions of this Agreement, along with the Underlying Agreement, shall control and prevail unless the Parties specifically refer in a subsequent written agreement to this Agreement, by its title, date, and substance and specifically state that the provisions of the later written agreement shall control over this Agreement and Underlying Agreement. In any event, any agreement between the Parties, including this Agreement and Underlying Agreement, must be in full compliance with HIPAA, and any provision in an agreement that fails to comply with HIPAA will be deemed separable from the document, unenforceable, and of no effect.
- IX. COMPLIANCE WITH STATE LAW. The Business Associate acknowledges that by accepting the PHI from Covered Entity, it becomes a holder of medical records information under the MCMRA and is subject to the provisions of that law. If HIPAA conflicts with another applicable law regarding the degree of protection provided for Protected Health Information, Business Associate must comply with the more restrictive protection requirement.

X. MISCELLANEOUS.

- A. <u>Ambiguity</u>. Any ambiguity in this Agreement shall be resolved to permit Covered Entity to comply with HIPAA.
- B. <u>Regulatory References</u>. A reference in this Agreement to a section in HIPAA means the section in effect, or as amended.
- C. <u>Notice to Covered Entity</u>. Any notice required under this Agreement to be given Covered Entity shall be made in writing to:

Joy J. Royes, Esq. Chief of Governance, Risk and Compliance Division Montgomery County, Maryland 401 Hungerford Drive, 7th Floor Rockville, Maryland 20850

(240) 777-3247 (Voice) (240) 777-3099 (Fax)

Notice to Business Associate. Any notice required under this Agreement to be given Business Associate shall be made in writing to:

Address:	 	
Attention:		
Phone:		

- D. <u>Maryland Law</u>. This Agreement is governed by, and shall be construed in accordance with, applicable federal law and the laws of the State of Maryland, without regard to choice of law principles.
- E. <u>Incorporation of Future Amendments</u>. Other requirements applicable to Business Associates under HIPAA are incorporated by reference into this Agreement.
- F. <u>Penalties for HIPAA Violation</u>. In addition to that stated in this Agreement, Business Associate may be subject to civil and criminal penalties noted under HIPAA, including the same HIPAA civil and criminal penalties applicable to a Covered Entity.

SIGNATURE PAGE FOLLOWS

IN WITNESS WHEREOF and acknowledge foregoing, the Parties affix their signatures here	owledging acceptance and agreement of the to.
CONTRACTOR NAME	MONTGOMERY COUNTY, MARYLAND
By:	Ву:
Name:	Name: Raymond L. Crowel, Psy. D.
Title:	Title: <u>Director, Department of Health</u>
Date:	and Human Services
	Date:

EXHIBIT A

FORM OF NOTIFICATION

This notification is made pursuant to Section III.F of the Business Associate Agreement between:

 Montgomery County, Maryland, (the "County") and 	
•(Busine	ess Associate).
Business Associate hereby notifies the County that there has been a Breach, Sec use or disclosure of PHI not provided for by the Business Associate Agreementhat Business Associate has used or has had access to under the terms of the Buagreement.	t (an "Incident")
Description of the Incident:	
Date of the Incident:	
Date of discovery of the Incident:	
Does the Incident involve 500 or more individuals? Yes/No	
If yes, do the people live in multiple states? Yes/No	
Number of individuals affected by the Incident:	
Names and addresses of individuals affected by the Incident:	
(Attach additional pages as necessary)	
The types of unsecured PHI that were involved in the Incident (such as full name, number, date of birth, home address, account number, or disability code):	Social Security
Description of what Business Associate is doing to investigate the Incident, to mitig protect against any further Incidents:	ate losses, and to

Contact information to ask questions or learn additional information:			
N	ame:		
	itle:		
	ddress:		
E	mail Address:		
Pl	hone Number:		

ATTACHMENT D



OFFICE OF THE COUNTY EXECUTIVE

Marc Elrich
County Executive

Andrew W. Kleine
Chief Administrative Officer

MEMORANDUM

December 20, 2019

TO:

Executive Branch Department and Office Directors,

MLS and Public Safety Managers

Administrative Services Coordinators and Functional Equivalents

FROM:

Fariba Kassiri, Deputy Chief Administrative Officer

SUBJECT:

Administrative Procedure 6-7, Information Security

The attached Administrative Procedure (AP) 6-7 establishes final policies and procedures for compliance with Information Security policy in the use of the County's computing assets and infrastructures. It is effective immediately to all County departments, offices, employees, volunteers, contractors and business partners.

The Chief Administrative Officer (CAO) has determined that the issuance of this revised AP 6-7 is necessary because the County's technology investment has grown significantly since the last policy update and the information security threat landscape has extended, and continues to extend, beyond the dimensions of computing investments and practices covered by the current policy. While the County continues to invest in technical security controls, experience shows that we, individually and collectively, as the users of technology are key to the success of the County's efforts to protect information in the County's possession including the information pertaining to the workforce, constituents, business partners, and volunteers, and to comply with the law, including laws recently passed or updated by the State and Federal governments.

AP 6-7 incorporates the recommendations of the CAO's Information Technology Policy Advisory Committee (IPAC) and uses a concise three-part format that is easy to reference, understand and implement by non-technical and technical audiences: AP 6-7 (3 pages); the Rules of Behavior Handbook (2 pages) and the System and Data Owners' Handbook (32 pages).

Interim AP 6-7 was issued on March 5, 2019. Based on comments and questions received following issuance of the interim AP, various provisions of the interim AP were clarified. The final AP 6-7 will be placed on the OMB Sharepoint site at: https://omb.mcgov.org/administrative-procedures/.

Attachments: Administrative Procedure 6-7, Information Security

Information Security Rules of Behavior Handbook

Information Security System and Data Owners Handbook



Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

NO. 6-7
PAGE 1 OF 5
DATE

12/20/2019 CAO APPROVAL

an arraya

Information Security

PURPOSE

1.0 To establish an Administrative Procedure (AP) for the Users of the County's Information System(s) to ensure that the County's Information System(s) is used and administered in a manner that protects it from unauthorized or inadvertent access, use, destruction, modification, disclosure, theft, or denial of service.

DEFINITIONS

- 2.0 Compliance-Mandated Departments or Information Systems Departments or Information Systems that process, store, and/or transmit data subject to security restrictions imposed by the Federal and State governments, Health Insurance Portability and Accountability Act (HIPAA), FBI Criminal Justice Information Services Division (FBI CJIS), and the Payment Card Industry Data Security Standard (PCI-DSS).
- 2.1 Department of Technology Services (DTS) An Executive Branch department responsible for County Government enterprise information systems and telecommunications.
- 2.2 Enterprise Information Security Office EISO An office within DTS that is responsible for the security of the County's Information System(s).
- 2.3 Information System –A discrete set of information resources organized for the collection, processing, maintenance, use, sharing, dissemination, or disposition of information.
- 2.4 Information System Registry a central repository containing information on Information System(s).
- 2.5 Users Individual or (system) process acting on behalf of an individual, authorized to access a system.
- 2.6 Using Department ("Department") a department or office that owns or uses an Information System.

POLICY

- 3.1 Montgomery County Government will implement security policies following security controls and associated assessment procedures defined in the most current revision of NIST SP 800–53 Recommended Security Controls for Federal Information Systems and Organizations, as adapted for County use.
- 3.2 Users must review and abide by the AP 6–7 Information Security Rules of Behavior Handbook. The handbook describes the rules associated with user's responsibilities in the use of an Information System.
- 3.3 All Departments, System owners, and data owners must review and abide by the AP 6–7 Information Security System and Data Owners Handbook, and must develop, document, and disseminate to their departments' Users procedures that implement this Administrative Procedure and associated Handbooks.



Information Security

MONTGOMERY COUNTY ADMINISTRATIVE PROCEDURE

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

NO. 6-7 PAGE

PAGE 2 OF 5

DATE 12/20/2019

CAO APPROVAL

PA

- 3.4 Compliance—Mandated Departments, System owners, and data owners must use this Administrative Procedure as baseline policy, and develop, document, and disseminate to their users Information System policies and procedures based on compliance specific guidelines. The policies and procedures must be managed by a designated official within the Department.
- 3.5 DTS must maintain and publish the Information Security Rules of Behavior Handbook and the Information Security System and Data Owners Handbook addressing the following NIST SP 800–53 Recommended Security Controls families:
 - 3.5.1 Information Access Control
 - 3.5.2 Information Security Awareness and Training
 - 3.5.3 Audit and Accountability
 - 3.5.4 Information Security Assessment, Authorization and Monitoring
 - 3.5.5 Configuration Management
 - 3.5.6 Contingency Planning
 - 3.5.7 Identification and Authentication
 - 3.5.8 Incident Response
 - 3.5.9 Maintenance
 - 3.5.10 Media Protection
 - 3.5.11 Physical and Environmental Protection
 - 3.5.12 Planning
 - 3.5.13 Personnel Security
 - 3.5.14 Risk Assessment
 - 3.5.15 System and Services Acquisition
 - 3.5.16 System and Communication Protection
 - 3.5.17 System and Information Integrity
 - 3.5.18 Program Management
 - 3.5.19 Exemption from Administrative Procedure
- 3.6 Exemptions Any deviations from this policy, including Information Security Rules of Behavior Handbook and Information Security System and Data Owners Handbook, require an Exemption Request to be submitted in writing by the Using Department and approved in by DTS EISO. The request must describe a) the business case justification, b) compensating controls, c) duration, and d) the specific user, system, or application to be exempted. DTS EISO must track and report on exemptions granted.



NO. 6-7

> PAGE 3 OF 5

DATE 12/20/2019

CAO APPROVAL

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Information Security

- 3.7 Information System Registration Using Departments must register all Information Systems with DTS and keep the registry updated at all times.
- 3.8 Information System Authorization A Risk Assessment must be performed and approved by DTS, before any new Information System is put in production. Periodic Risk Assessments must be performed for existing Information Systems, as determined by DTS. Operations of any Information System not approved by DTS must have an approved exemption or be removed from operations.
- 3.9 Violation of this procedure is prohibited and may lead to disciplinary action, including dismissal, and other legal remedies available to the County. A County employee who violates this administrative procedure may be subject to disciplinary action, in accordance with Montgomery County law and executive regulations, including without limitation, the Personnel laws and regulations, the Ethics Laws, currently codified at Chapter 33, COMCOR Chapter 33, and Chapter 19A of the County Code, respectively, and applicable collective bargaining agreements, as amended.
- In any contract where a contractor or business partner may have remote access to, or otherwise work or interface with, Information System(s), the following language, or language of similar import, must be included in the solicitation document and the contract, and AP 6–7 must be attached:

The Contractor may be afforded remote access privileges to Information Systems, or otherwise work on or interface with Information Systems, and must ensure that the Information Systems, including electronic data assets, are protected from unauthorized or inadvertent access, use, destruction, modification, disclosure, theft, or denial of service. The Contractor must adhere to the County's Information Security Procedure (AP 6–7), which is attached to, incorporated by reference into, and made a part of this contract.

RESPONSIBILITIES

- 4.1 User User uses Information System(s) for County business purposes only and in compliance with this administrative procedure.
- 4.2 Department
 - 4.2.1 Ensures users participate in the County's Information Security Awareness Training Program and comply with the County's information technology security procedures including this administrative procedure and the Information Security Rules of Behavior Handbook and the Information Security System and Data Owners Handbook.
 - 4.2.2 Enunciates department-specific information security policies and procedures and train users on them.
 - 4.2.3 Reviews and updates department–specific information security policies and procedures annually.
 - 4.2.4 Incorporates this administrative procedure in contracts if a contractor's employees or its agents are provided access to the Information Systems.



NO. 6-7

PAGE

4 OF 5

12/20/2019 CAO APPROVAL

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Information Security

- 4.2.5 Cooperates with DTS in the vulnerability testing and remediation process of department—operated Information Systems assets.
- 4.2.6 Reports security incidents per procedure and assist in their investigation and prevention.
- 4.2.7 Assists DTS with maintaining Information Systems in compliance with this administrative procedure.
- 4.2.8 Ensures that all Information Systems are registered with DTS and updated annually.
- 4.2.9 Reports on compliance to handbooks as referenced in the Information Security Rules of Behavior Handbook and the Information Security System and Data Owners Handbook.

4.3 DTS

- 4.3.1 Provides information security awareness training.
- 4.3.2 Reports Information Security risk and compliance status to the CAO.
- 4.3.3 Advises Departments on information security issues.
- 4.3.4 Assists Departments in the remediation of identified vulnerabilities.
- 4.3.5 Advises Departments in the secure design of Information Systems.
- 4.3.6 Periodically conducts security scans and vulnerability testing to identify vulnerabilities.
- 4.3.7 Leads investigations and responses to Information System security incidents.
- 4.3.8 Monitors Information System security threats and manages countermeasures.
- 4.3.9 Reviews Information System solicitations/contracts for inclusion of Information Security procedure and policy.
- 4.3.10 Performs/Evaluates Risk Assessments for all new Information Systems, and periodically for all existing Information Systems identified as critical/sensitive by the Using Department and or DTS.
- 4.3.11 Maintains and implements enterprise Information System security measures; reviews and updates information security policies and handbooks.
- 4.3.12 Manages the exemption process.
- 4.3.13 Monitors and reports on Data Owners' and Departments' compliance with this AP.



NO. 6-7

6-7 PAGE

5 OF 5

DATE 12/20/2019 CAO APPROVAL

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Information Security

DEPARTMENTS AFFECTED

5.1 All Executive Branch departments and offices

APPENDICES

- 6.1 Information Security Rules of Behavior Handbook
- 6.2 Information Security System and Data Owners Handbook

Rules of Behavior
Page 1 of 2

Updated: 12/12/2019

1.0 Introduction and Purpose

The Information Security Rules of Behavior Handbook describes the rules associated with user's responsibilities and certain expectations of behavior using Information Systems and while connected to the County network, as required by Administrative Procedure 6–7. This handbook makes users aware of their role in safeguarding Information Systems and applies to all County employees, volunteers, interns, contractors, and business partners at all times, regardless of how or where they are accessing the Information Systems.

2.0 Definitions

- 2.0 <u>Compliance–Mandated Departments or Information Systems</u> Departments or Information Systems that process, store, and/or transmit data subject to security restrictions imposed by the Federal and State governments, Health Insurance Portability and Accountability Act (HIPAA), FBI Criminal Justice Information Services Division (FBI CJIS), and the Payment Card Industry Data Security Standard (PCI–DSS).
- 2.1 <u>Department of Technology Services (DTS)</u> An Executive Branch department responsible for County Government enterprise information systems and telecommunications.
- 2.2 <u>Information System</u> A discrete set of information resources organized for the collection, processing, maintenance, use, sharing, dissemination, or disposition of information.
- 2.3 <u>Sensitive Information</u> Any information that by law or County policy cannot be publicly disclosed, including without limitation:
 - A. Non-Public criminal justice information;
 - B. Credit or debit card numbers;
 - C. An individual's first name or first initial and last name, name suffixes, or unique biometric or genetic print or image, in combination with one or more of the following data elements;
 - a) A Social Security number;
 - b) A driver's license number or state identification card number, or other individual identification number issued by a State or local government;
 - c) Passport number or other identification number issued by the United States government;
 - d) An Individual Taxpayer Identification Number; e) A financial or other account number that in combination with any required security code, access code, or password, would permit access to an individual's account;
 - f) Medical records; or
 - g) Health insurance information.
- 2.4 Users Individual, or (system) process acting on behalf of an individual, authorized to access a system.

3.0 Information Security Rules of Behavior

3.1 General

- 3.1.1 Any Information that is contained in, or stored on Information Systems, or transmitted, or received using Information Systems, is the property of the County and, therefore, is not private.
- 3.1.2 All activities performed on Information Systems may be monitored or logged.
- 3.1.3 Users teleworking at any alternate workplace must follow security practices that are the same as or equivalent to those required at the primary workplace.
- 3.1.4 Users must only use County provided and approved infrastructure or cloud solutions for conducting County business and storing County information.
- 3.1.5 Users must use only the County-provided email / calendaring / collaboration solution (Office 365) for County work; forwarding of a County business email to a User's personal email system is prohibited.
- 3.2 When accessing or using Information Systems, Users must comply with the following:
 - 3.2.1 Users must only access Information Systems and Information that is required in the performance of their official duties.

Rules of Behavior Page 2 of 2

Updated: 12/12/2019

3.2.2 Users must promptly report any observed or suspected security problems/incidents, including loss/theft of Information Systems, or persons requesting that user to reveal their password.

- 3.2.3 Users must protect Sensitive Information per departmental procedures and report access, copying, or use of Sensitive Information that is not necessary to perform the User's County-assigned responsibilities.
- 3.2.4 Users must protect Information Systems from theft, destruction, or misuse.
- 3.2.5 Users must abide by software copyright laws.
- 3.2.6 Users must promptly change a password whenever it is compromised or suspected to be compromised.
- 3.2.7 Users must maintain the confidentiality of passwords and are responsible for actions performed with their accounts.
- 3.2.8 Users must lock Information Systems with a password when away from the work area (on–site and off–site), including for meals, breaks, or any extended period.
- 3.2.9 Users must physically protect Information Systems when used for teleworking and even when not in use.
- 3.2.10 Users must report unauthorized personnel that appear in the work area.
- 3.2.11 Users must protect Sensitive Information stored on electronic media, or in any physical format, such as paper, must lock the information in a secure area when not in use, and must delete, reformat, or shred Sensitive Information when it is no longer needed.
- 3.3 When accessing or using Information Systems, Users must not engage in the following activities:
 - 3.3.1 Users must not write, display, or store passwords where others may access or view them.
 - 3.3.2 Users must not download software or code from the Internet while connected to the County's network, unless explicitly approved and authorized by the County, as such downloads may introduce malware to the County's network.
 - 3.3.3. Users must not obtain, install, replicate, or use unlicensed software unless authorized by their Department.
 - 3.3.4 Users must not open emails from suspicious sources.
 - 3.3.5 Users must not use peer-to-peer networking unless approved by the County or required for vendor support.

 Users must not conduct software or music piracy, hacking activities, or participate in online gaming.
 - 3.3.6 Users must not acquire, possess, or use hardware or software tools that defeat software copy protection, discover passwords, identify security vulnerabilities, or circumvent encryption.
 - 3.3.7 Users must not attempt unauthorized access to an Information System, including attempt to access the information contained within the system.
 - 3.3.8 Users must not use copyrighted or otherwise legally protected material without permission.
 - 3.3.9 Users must not transmit chain letters, unauthorized mass mailings, or intentionally send malware.
 - 3.3.10 Users must not use any personal computers/devices for County business or Information System that show signs of being infected by a virus or other malware.
 - 3.3.11 Users must report any suspected information security incident to the IT Help Desk.
 - 3.3.12 The County will determine and provide approved and authorized hardware or peripheral devices to documented, authorized Users. General Users may not add any devices to the County network without permission from County management.
 - 3.3.13 Users must not alter hardware or software settings on any Information Systems without permission.
 - 3.3.14 Users must not authorize or make a ransom payment.





Information Security System and Data Owners Handbook

December 12, 2019

Table of Contents

Chapte	r 1 - Information System Access Control AC	15
1.1	User Account Management AC-2	15
1.2	Access Enforcement AC-3	15
1.3	Least Privilege AC-6	15
1.4	Unsuccessful Logon Attempts AC-7	16
1.5	Information System Use Notification AC-8	16
1.6	Permitted Actions Without Identification or Authentication AC-14	16
1.7	Remote Access AC-17	16
1.8	Wireless Access AC-18	17
1.9	Access Control for Mobile Devices AC-19	17
1.10	Use of External Information Systems AC-20	17
1.11	Publicly Accessible Content AC-22	17
1.12	Sensitive Information Access (COUNTY ADDED)	17
1.13	Device Lock AC-11	17
Chapte	r 2 – Security Awareness and Training AT	18
2.1	Information Security Awareness Training AT-2	18
2.2	Role-Based Training AT-3	18
2.3	Information Security Training Records AT-4	18
Chapte	r 3 – Audit and Accountability AU	18
3.1	Audit Events AU-2	18
3.2	Content of Audit Records AU-3	18
3.3	Audit Storage Capacity AU-4	19
3.4	Response to Audit Processing Failures AU-5	19
3.5	Audit Review, Analysis, and Reporting AU-6	19
3.6	Time Stamps AU-8	19
3.7	Protection of Audit Information AU-9	19
3.8	Audit Record Retention AU-11	19
3.9	Audit Generation AU-12	19
Chapte	r 4 – Information Security Assessments and Privacy Assessments, Authorization, and Monitoring C	
4.1	Security Controls Assessments and Privacy Controls Assessments CA-2	20
4.2	Information System Interconnections CA-3	20
4.3	Plan of Action and Milestones (POAMS) CA-5	20
4.4	Information System Authorization CA-6	21
4.5	Continuous Monitoring/Risk Monitoring CA-7	21

Updated:	1	2/1	2/	2019

4.6	Penetration Testing CA-8	21
4.7	Internal Information System Connections CA-9	21
4.8	Information System Registration (COUNTY ADDED)	21
Chapte	er 5 – Configuration Management CM	21
5.1	Baseline Configuration CM-2	22
5.2	Configuration Change Control CM-3	22
5.3	Security Impact Analyses and Privacy Impact Analyses CM-4	22
5.4	Access Restrictions for Change CM-5	22
5.5	Configuration Settings CM-6	22
5.6	Least Functionality CM-7	23
5.7	Information System Component Inventory CM-8	23
5.8	Software Usage Restrictions CM-10	23
5.9	User-Installed Software CM-11	23
Chapte	r 6 – Contingency Planning CP	24
6.1	Contingency Plan CP-2	.24
6.2	Contingency Training CP-3	.24
6.3	Contingency Plan Testing CP-4	.25
6.4	Alternate Storage Site CP-6	.25
6.5	Alternate Processing Site CP-7	.25
6.6	Information System Backup CP-9	.25
6.7	Information System Recovery and Reconstitution CP-10	.26
Chapte	r 7 – Identification and Authentication IA	.26
7.1	Identification and Authentication (County Users) IA-2	.26
7.2	Identification and Authentication (County Users) Multifactor Authentication to Information Syst User Accounts IA-2(1)	
7.3	Identification and Authentication (County Users) Access to Accounts - Replay Resistant IA-2(8).	.26
7.4	Identifier Management IA-4	.26
7.5	Authenticator Management IA-5	.26
7.6	Authenticator Feedback IA-6	.27
7.7	Cryptographic Module Authentication IA-7	.27
7.8	Identification and Authentication (Non-County Users – Business Partners) IA-8	.27
7.9	Re-Authentication IA-11	.27
Chapte	r 8 – Incident Response	.28
8.1	Incident Response (IR) Training IR-2	.28
8.2	Incident Handling IR-4	.28
8.3	Incident Monitoring IR-5	.28
8.4	Incident Reporting IR-6	.28

8.5	Incident Response Assistance IR-7	28
8.6	Incident Response Plan IR-8	
Chapt	ter 9 – Maintenance MA	29
9.1	Controlled Maintenance MA-2	29
9.2	Nonlocal Maintenance MA-4	30
9.3	Maintenance Personnel MA-5	30
Chapt	ter 10 – Media Protection MP	30
10.1	Media Access MP-2	30
10.2	Media Storage MP-4	30
10.3	Media Transport MP-5	31
10.4	Media Sanitization MP-6	31
10.5	Media Use MP-7	31
Chapt	ter 11 – Physical and Environmental Protection PE	31
11.1	Physical Access Authorizations PE-2	31
11.2	Physical Access Control PE-3	31
11.3	Monitoring Physical Access PE-6	32
11.4	Visitor Access Records PE-8	32
11.5	Emergency Lighting PE-12	32
11.6	Fire Protection PE-13	32
11.7	Temperature and Humidity Controls PE-14	32
11.8	Water Damage Protection PE-15	33
11.9	Delivery and Removal PE-16	33
11.10	Alternate Work Site PE-17	33
11.11	Emergency Power Control/ Electromagnetic Pulse Protection PE-11/PE-21	33
Chapt	ter 12 – Planning PL	33
12.1	Information Security and Privacy Plans PL-2	33
12.2	Rules of Behavior PL-4	34
Chapt	ter 13 – Personnel Security PS	34
13.1	Position Risk Designation PS-2	34
13.2	Personnel Screening PS-3	34
13.3	Personnel Termination PS-4	34
13.4	Personnel Transfer PS-5	35
13.5	Personnel Security PS-1 & PS-7	35
13.6	Personnel Sanctions PS-8	35
Chapt	ter 14 Risk Assessment RA	35
14.1	Security Categorization RA-2	35
14.2	Risk Assessment RA-3	36

14.3	Vulnerability Scanning of Information Systems RA-5	36
14.4	Risk Response RA-7	37
14.5	Risk Assignment (COUNTY ADDED)	37
Chapt	ter 15 – Information System and Services Acquisition SA	37
15.1	Allocation of Resources SA-2	37
15.2	Information System Development Life Cycle SA-3	38
15.3	Acquisition Process SA-4	38
15.4	Information System Documentation SA-5	38
15.5	Security and Privacy Engineering Principles SA-8	39
15.6	Unsupported Information System Components SA-22	39
Chapt	er 16 – Information System and Communications Protection SC	39
16.1	Denial of Service Protection SC-5	39
16.2	Boundary Protection SC-7	39
16.3	Cryptographic Key Establishment and Management SC-12	39
16.4	Cryptographic Protection SC-13	39
16.5	Collaborative Computing Devices and Applications SC-15	39
16.6	Secure Name/Address Resolution Service SC-20 & SC-21	40
16.7	Process Isolation SC-39	40
Chapt	er 17 – Information System and Information Integrity	40
17.1	Flaw Remediation SI-2	40
17.2	Malicious Code Protection SI-3	40
17.3	Information System Monitoring SI-4	40
17.4	Security Alerts, Advisories, and Directives SI-5	41
17.5	Information Management and Retention SI-12	41
Chapt	er 18 – Program Management PM	41
18.1	Information System Inventory PM-5	41
18.2	Enterprise Architecture PM-7	41
18.3	Registration Process PM-10 (COUNTY ADDED)	41
18.4	Security and Privacy Workforce PM-13	42
18.5	Contacts with Groups and Associations PM-15	42
18.6	Minimization of Personally Identifiable Information Used in Testing, Training, and Research PM	1-26
		42
18.7	Inventory of Personally Identifiable Information PM-29	42
Chant	er 19 Exemption from Administrative Procedure	42

Record of Changes

Date	Description	Version	Author

Revision History

	Date	Description	Version	Author
	11/22/18	Drafted by DTS and recommended to CAO as Interim procedure	0.1	Angel Stanley
	3/25/19	Resolved all attorney's questions	0.2	Joyce Graham
	5/1/19	Final with CAO and CISO updates	0.3	Joyce Graham
	6/10/19	Department edits added	0.4	Joyce Graham
	8/1/19	Final	1.0	Keith Young

Introduction and Purpose

This Information Security System and Data Owners Handbook has been developed as a support document to the County's Administrative Procedure (AP) 6-7. Its purpose is to define a set of Security Controls and Privacy Controls that provide a means for the County and its individual Information System Owners to manage risks while at the same time complying with Information Systems security and privacy policies and practices. The Security and Privacy Controls are intended to create a foundation for the development of Assessment methods and procedures that will be used to determine the effectiveness of the controls. Additionally, it is intended to improve communication among the County's Information System Owners by providing a common language and understanding of security, privacy, and risk management concepts. The controls contained within this Handbook are adapted from specific control families defined within NIST Special Publication (SP) 800-53. Although originally developed for Federal Information Resources the controls are considered guidelines and are intended to be flexible and adaptable to state, local and private sector organization's Information Resources.

This hand book has been developed as a support document to AP 6-7, Policy 3.5 that states:

DTS must maintain and publish the "Information Security Rules of Behavior Handbook" and the "Information Security System and Data Owners Handbook" addressing the following NIST SP 800-53 Recommended Security Controls families.

- 3.5.1 Information Access Control
- 3.5.2 Information Security Awareness and Training
- 3.5.3 Audit and Accountability
- 3.5.4 Information Security Assessment, Authorization, and Monitoring
- 3.5.5 Configuration Management
- 3.5.6 Contingency Planning
- 3.5.7 Identification and Authentication
- 3.5.8 Incident Response
- 3.5.9 Maintenance
- 3.5.10 Media Protection
- 3.5.11 Physical and Environmental Protection
- 3.5.12 Planning
- 3.5.13 Personnel Security
- 3.5.14 Information System Risk Assessment
- 3.5.15 Information System and Services Acquisition
- 3.5.16 Information System and Communication Protection
- 3.5.17 Information System and Information Integrity
- 3.5.18 Program Management
- 3.5.19 Exemption from Administrative Procedure

Scope

The Montgomery County Information Security System and Data Owners Handbook (ISSaDO Handbook) policies apply to all individuals that have been granted access to any County Information Technology System, including, but not limited to Montgomery County staff, volunteers, students, contractors, vendors, and Third Parties. These policies are deemed to always be in effect and, as such, apply whether an Information System User is working internally or at an external location (e.g. individual's location, home, office, etc.) on Montgomery County business. Further, they apply equally to all Information Systems that are owned/operated by Montgomery County. In cases where it is not practical for Third-Party service providers to be knowledgeable of and follow the specific requirements of this policy, Third-Party contracts must include adequate language and safeguards to ensure County information and Information Systems are protected at a level that is equal to or greater than that required by this policy. These Policies supersede any conflicting statement or statements in any prior policy document.

Definitions

Account Manager – An Account Manager is a System Administrator role with specific duties to create, enable, modify, disable and remove user and service accounts in accordance with Montgomery County policy, procedures, and conditions.

Alternate Storage Site – An Alternate Storage Site is geographically distinct from a primary storage site. An Alternate Storage Site maintains duplicate copies of information and data that can be readily retrieved if the primary storage site becomes unavailable.

Assessment - See Security Assessment or Privacy Assessment

Assessor – The individual, group, or organization responsible for conducting Security and Privacy Controls Assessments.

Audit Event – An Audit Event is any observable security-relevant occurrence in an organizational Information System.

Authorized Access – Access privileges granted to a User, program, or process or the act of granting those privileges.

Audit Log – A chronological record of Information System activities, including records of Information System accesses and operations performed during a given period.

Audit Record - An individual entry in an Audit Log related to an audited event.

Audit Trail – A chronological record that reconstructs and examines the sequence of activities surrounding or leading to a specific operation, procedure, or event in a security-relevant transaction from inception to result.

Authenticator – The means used to confirm the identity of a User, processor, or device (e.g., User password or token).

Authorization Boundary – All components of an information system to be authorized for operation. This excludes separately authorized systems to which the information system is connected.

Baseline Configuration – A documented set of specifications for an Information System, or a configuration item within an Information System, that has been formally reviewed and agreed on at a given point in time, and which can be changed only through change control procedures. Baseline Configurations serve as a basis for future builds, releases, and/or changes to Information Systems. Baseline Configurations include information about Information System components, network topology, and the logical placement of those components within the Information System architecture. (for more information see NIST SP 800-128)

Boundary Protection – Monitoring and control of communications at the external boundary of an Information System to prevent and detect malicious and other unauthorized communications, using Boundary Protection Devices, for example, gateways, routers, firewalls, guards, encrypted tunnels.

Boundary Protection Device – A device with appropriate mechanisms that facilitates the adjudication of different interconnected Information System security policies or provides Information System Boundary Protection.

Change Monitoring – A process that identifies and tracks changes to County Information Systems and environments of operations that may affect security and privacy risks.

Compliance Monitoring – A process that verifies that the required Risk Response measures are implemented. It also verifies that security and privacy requirements are satisfied.

Component – A discrete identifiable information technology asset that represents a building block of an Information System and may include hardware, software, and firmware.

Computer Information Resource - Hardware, software, websites, web-based services, and databases.

Configuration Settings – Configuration Settings are the parameters that can be changed in hardware, software, or firmware Components of the Information System and affect the security posture or functionality of the Information System.

Collaborative Computing – An interactive multimedia conferencing application that enables multiple parties to collaborate on textual and graphic documents. Collaborative Computing devices and applications include, for example, remote meeting devices and applications, networked white boards, cameras, and microphones.

Compliance-Mandated Departments or Information Systems – Departments or Information Systems that process, store, and/or transmit data subject to security restrictions imposed by the Federal, State or Local Government contracts, such as, Health Insurance Portability and Accountability Act (HIPAA), FBI Criminal Justice Information Services Division (FBI CJIS), and the Payment Card Industry Data Security Standard (PCI-DSS).

Contingency Planning – Contingency Planning for Information Systems is part of an overall organizational program for achieving continuity of operations for mission/business functions. Contingency Planning addresses Information System restoration and implementation of alternative mission or business processes when Information Systems are compromised, breached or destroyed.

Control Baseline – The set of minimum security and privacy controls defined for a system or selected based on the privacy selection criteria that provide a starting point for the tailoring process. (For more information, see FIPS 200)

Controls – See Security Controls

Controls Assessment – See Security Controls Assessment

Countermeasures – Actions, devices, procedures, techniques, or other measures that reduce the Vulnerability of a system. Synonymous with Security Controls and Safeguards. (For more information, see FIPS 200)

Cryptographic Key – A Cryptographic Key is a technical method used to transform data from normal plain information to encrypted information that is no longer readable.

Cryptographic Module – A Cryptographic Module is defined as any combination of hardware, firmware or software that implements cryptographic functions such as encryption, decryption, digital signatures, authentication techniques or random number generation.

Denial of Service – A Denial of Service attack is a malicious security event that occurs when an attacker takes action that prevents legitimate Users from accessing targeted computer Information Systems, devices, or other network resources.

Department of Technology Services (DTS) – An Executive Branch Department that is responsible for County Government enterprise Information Systems and telecommunications.

Effectiveness Monitoring – A process that determines the ongoing efficiency of implemented Risk Response measures.

Enterprise Information Security Office (EISO) – An office within DTS that is responsible for the security of the County's Information System(s).

Execution Domain – An Execution Domain is a mechanism to isolate executed software applications from one another so that they do not affect each other; one process cannot modify the executing code of another process.

External Information System – Systems or components of systems that are outside of the authorization boundary established by the County and for which the County typically has no direct supervision and authority over the application of required security controls or the assessment of control effectiveness. This includes systems managed by contractors, systems owned by federal agencies, and systems owned by other entities. This control addresses the use of external systems for the processing, storage, or transmission of County information, including, for example, accessing cloud services from County systems.

Flaw – A Flaw is a weakness in an Information System's design, implementation or operation and management that can be exploited to violate the Information System's security policy.

Full Backups – A Full Backup is a backup of the Information Systems that contains all the data in the folders and files that are selected to be backed up.

High Risk – A High Risk could be expected to have a severe or catastrophic adverse effect on the County's operations, assets, or individuals. Corrective actions must be implemented as soon as possible.

Identifier – Unique data used to represent a person's identity and associated attributes. It may be an identifying name, card number, or may be something more abstract (for example, a string consisting of an IP address and timestamp), depending on the Information System.

Incremental Backups – An Incremental Backup is a backup of the Information System that contains only those files that have been altered since the last Full Backup (e.g. following a Full Back up on Friday, a Monday backup will contain only those files that changed since Friday. A Tuesday backup contains only those files that changed since Monday, and so on)

Information Security – The protection of information and systems from unauthorized or inadvertent access, use, destruction, modification, disclosure, theft, or denial of service.to provide confidentiality, integrity, and availability.

Information Steward – A County Information System security role with statutory or operational authority for information, governance processes, and responsibility for establishing the controls for its generation, collection, processing, dissemination, and disposal.

Information System – NIST: A discrete set of information resources organized for the collection, processing, maintenance, use, sharing, dissemination, or disposition of information, whether such information is in digital or non-digital form.

Information System Account Manager – A System Administrator role with specific duties to create, manage, disable and delete user, privileged user, and service accounts.

Information System-Level Information – The operating Information System or some other controls program information, for example, Information System state information, operating Information System type, application software, and licenses.

Information System Owner – Individual responsible for the overall security, budgeting, procurement, development, integration, modification, or operation and maintenance of an Information System.

Information Type – A specific category of information (e.g., privacy, medical, proprietary, financial, investigative, contractor-sensitive, security management) defined by an organization or in some instances, by a specific law, Executive Order, directive, policy, or regulation. (For more information see FIPS 199)

Interconnection Security Agreements (ISA) – A document that regulates security-relevant aspects of an intended connection between the County and an External Information System. It regulates the security interface between any two Information Systems operating under two different distinct authorities. It includes a variety of descriptive,

technical, procedural, and planning information. It is usually preceded by a formal Memorandum of Agreement (MOA)/Memorandum of Understanding (MOU) that defines high-level roles and responsibilities in management of a cross-domain connection.

Least Privilege – A security principle that restricts the access privileges of authorized personnel to the minimum Information System resources and authorizations that the User needs to perform its function.

Logical Access – Interactions with hardware through Remote Access. This type of access generally features identification, authentication, and authorization Protocols.

Low Risk - A Low Risk could be expected to have a limited adverse effect on the County's operations, assets or individuals.

Malicious Code – Software or firmware computer code or script intended to perform an unauthorized process that will have an adverse impact on the confidentiality, integrity, or availability of an Information System. A virus, worm, Trojan horse, back door or other code-based threat that infects a host. Spyware and some forms of adware are also examples of Malicious Code.

Malicious Code Protection Mechanisms (Non-signature Based Malicious Code and Signature Based Code Protection) – Hardware and/or software designed to prevent the execution of Malicious Code. Signature Based Malicious Code detection relies on previous identification to prevent "known" Malicious Code. Non-signature based Malicious Code detection uses behavior-based analysis to prevent "unknown" Malicious Code.

Moderate Risk – A Moderate Risk could be expected to have a serious adverse effect on the County's operations, assets, or individuals.

Multifactor (Two Factor) Authentication – An authentication system or an authenticator that requires more than one authentication factor for successful authentication. Multifactor authentication can be performed using a single authenticator that provides more than one factor or by a combination of authenticators that provide different factors. The three authentication factors are something you know, something you have, and something you are.

Nonlocal Maintenance – Nonlocal Maintenance and diagnostic activities are those activities conducted by individuals communicating through a network, either an external or internal network.

Peer-to-Peer (P2P) File Sharing Technology – P2P file sharing allows users to access media files such as books, music, movies, and games using a P2P software program that searches for other connected computers on a P2P network to locate the desired content. Examples: iTunes, Napster or BitTorrent.

Penetration Testing – A test methodology in which assessors, typically working under specific constraints, attempt to circumvent or defeat the security features of a system.

Personally Identifiable Information – Information that can be used to distinguish or trace an individual's identity, either alone or when combined with other information that is linked or linkable to a specific individual.

Ports – A computer Port is a connection point or interface between a computer and an external or internal device. Internal Ports may connect such devices as hard drives and CD ROM or DVD drives; external Ports may connect modems, printers, mice, and other devices.

Privacy Controls Assessment Plan – The objectives for Privacy Controls Assessments and a detailed roadmap of how to conduct such assessments.

Privacy Controls Assessments – The testing or evaluation of privacy controls to determine the extent to which the controls are implemented correctly, operating as intended, and producing the desired outcome with respect to meeting the privacy requirements for an Information System.

Protocol – A Protocol is a set of rules or procedures for transmitting data between electronic devices, such as computers.

Remote Access – Remote access to an Information System by a User (or an automated Information System acting on behalf of a User) communicating through an external network.

Replay Resistant – Protection against the capture of transmitted authentication or access control information and its subsequent retransmission with the intent of producing an unauthorized effect or gaining unauthorized access

Risk Acceptance – Accepting risk occurs when an Information System Owner acknowledges that the potential loss from a risk is not great enough to warrant spending money to avoid or mitigate it.

Risk Assessment – The process of identifying risks to County operations (including mission, functions, image, reputation), assets, personnel, or residents, resulting from the operation of an Information System. Risk Assessment is part of risk management and incorporates threat/Vulnerability analyses, and considers mitigations provided by security controls planned or in place.

Risk Avoidance/Rejection – Risk Avoidance is the elimination of hazards, activities, and exposures that can negatively affect the County's assets.

Risk Mitigation – Prioritizing, evaluating, and implementing the appropriate risk-reducing controls/countermeasures recommended from the risk management process. A systematic reduction in the extent of exposure to a risk and/or the likelihood of its occurrence.

Risk Response - Accepting, avoiding, mitigating, transferring, or rejecting risk to County operations, assets, or residents.

Risk Sharing/Transfer – A strategy that involves the contractual shifting of a risk from one party to another.

Role-Based Access Control – Access control based on user roles (i.e., a collection of access authorizations a user receives based on an explicit or implicit assumption of a given role). Role permissions may be inherited through a role hierarchy and typically reflect the permissions needed to perform defined functions within an organization. A given role may apply to a single individual or to several individuals

Secure Name Server – A secure domain name server, or DNS server, is an Internet protocol that turns URLs like (https://www.montgomerycountymd.gov/) into IP addresses (like 192.168.18.29) that are used by internal County servers to identify each other on the network.

Security Controls Assessment Plan – The objectives for Security Controls Assessments and a detailed roadmap of how to conduct such assessments.

Security Controls Assessment – The testing or evaluation of security controls to determine the extent to which the controls are implemented correctly, operating as intended, and producing the desired outcome with respect to meeting the security requirements for an Information System.

Security Controls – Actions that are taken as a matter of process, procedure or automation that reduce security risks. Diverse requirements derived from mission and business needs, laws, Executive Orders, directives, regulations, policies, standards, and guidelines.

Security Impact Analysis – The analysis conducted by an organizational official to determine the extent to which changes to the system have affected the security state of the system.

Security Plan (AKA System Security Plan) – Formal document that provides an overview of the security requirements for an information system or an information security program and describes the security controls in

place or planned for meeting those requirements. The system security plan describes the system boundary; the environment in which the system operates; how the security requirements are implemented; and the relationships with or connections to other systems.

Sensitive Information – Any information that by law or County policy cannot publicly be disclosed, including without limitation:

- A. Non-Public criminal justice information;
- B. Credit or debit card numbers;
- C. An individual's first name or first initial and last name, name suffixes, or unique biometric or genetic print or image, in combination with one or more of the following data elements;
 - a) A Social Security number;
 - b) A driver's license number or state identification card number, or other individual identification number issued by a state or local government;
 - c) Passport number or other identification number issued by the United States government;
 - d) An Individual Taxpayer Identification Number;
 - e) A financial or other account number that in combination with any required security code, access code, or password, would permit access to an individual's account;
 - f) Medical records; or
 - g) Health insurance information.

Service Account – A special User account that an application or service uses to interact with the operating system. Services use the service accounts to log on and make changes to the operating system or the configuration. For example, if certain criteria are established on a device, then an action or service will occur. Service Accounts are used for many enterprise applications.

System Development Life Cycle (SDLC) – A framework defining tasks performed at each step (Requirements, Design, Implementation, Verification, Maintenance) in the software development process.

Tailoring – The process by which security Control Baselines are modified by: identifying and designating common controls; applying scoping considerations on the applicability and implementation of baseline controls; selecting compensating security controls; assigning specific values to organization-defined security control parameters; supplementing baselines with additional security controls or control enhancements; and providing additional specification information for control implementation

User or Information System User – Individual or (system) process acting on behalf of an individual, authorized to access a system.

County User – A County employee or an individual the County deems to have equivalent status of an employee including, for example, contractor, guest researcher, individual detailed from another entity. Policy and procedures for granting equivalent status of employees to individuals may include need-to-know, relationship to the County, and citizenship.

Non-organizational User – A user who is not a County user (including public users).

User Account – An established relationship between a User and a computer, network, or information service.

User-Level Information – Data that is created or consumed by the User on the Information System.

Vulnerability – A weakness in an information system, system security procedures, internal controls, or implementation that could be exploited or triggered by a threat source.

Vulnerability Assessment – Systematic examination of an information system or product to determine the adequacy of security measures, identify security deficiencies, provide data from which to predict the effectiveness of proposed security measures, and confirm the adequacy of such measures after implementation.

Wireless Access – Telecommunications in which electromagnetic waves (rather than some form of wire) carry the signal over part or all the communication path.

Chapter 1 - Information System Access Control AC

1.1 User Account Management AC-2

Information System Owners must:

- 1.1.1 Define and document the types of User accounts allowed for use within the Information System in support of departmental missions and business functions;
- 1.1.2 Assign account managers for all User or Service Accounts;
- 1.1.3 Establish conditions for group and role membership;
- 1.1.4 Specify authorized Users of the Information System, group and role membership, and access authorizations (i.e., privileges) and other attributes (as required) for each account;
- 1.1.5 Require documented approvals by Information System account managers for requests to create User accounts;
- 1.1.6 Create, enable, modify, disable, and remove User accounts.
- 1.1.7 Monitor the use of User accounts;
- 1.1.8 Notify Information System account managers within seven (7) days;
 - 1. When User accounts are no longer required;
 - 2. When Users are terminated or transferred; and
 - 3. When individual Information System usage or need-to-know changes for an individual;
- 1.1.9 Authorize access to the Information Systems based on:
 - 1. Approved authorization from Information System Owner;
 - 2. Intended Information System usage; and
 - 3. Other attributes as required by DTS or associated missions and business functions;
- 1.1.10 Review User and Information System accounts for compliance with account management requirements at least annually;
- 1.1.11 Establish a process for reissuing shared/group account credentials (if deployed) when individuals are removed from the group; and
- 1.1.12 Align User and Service Account management processes with personnel termination and transfer processes.

1.2 Access Enforcement AC-3

1.2.1 Information System Owners must enforce approved authorization for Logical Access to Information Systems.

1.3 Least Privilege AC-6

Information System Owners must ensure that access to Information Systems is secure, by taking measures that include the following:

- 1.3.1 Employ the principle of Least Privilege within the environment allowing only Authorized Accesses for Users (or automated Information System processes acting on behalf of Users) which are necessary to accomplish assigned tasks in accordance with County missions and business functions.
- 1.3.2 Reviews of the privileged accounts must be performed annually to validate the need for such privileges.
- 1.3.3 Privileges must be removed or reassigned, if necessary, to correctly reflect the County mission and business needs.

1.3.4 Assign staff to perform an audit of privileged Information System account functions.

1.4 Unsuccessful Logon Attempts AC-7

Information System Owners must:

- 1.4.1 Enforce a limit of three (3) consecutive invalid logon attempts by a User during a fifteen (15) minute time period; and
- 1.4.2 When the maximum number of unsuccessful attempts is exceeded, automatically lock the account/node for thirty (30) minutes or until released by an administrator.

1.5 Information System Use Notification AC-8

- 1.5.1 County Information Systems must display a warning banner to Users before granting access to the Information System that provides privacy and security notices consistent with applicable laws, Executive Orders, directives, policies, regulations, standards, and guidelines and state that:
 - 1. Users are accessing a Montgomery County Government Information System;
 - 2. Information System usage may be monitored, recorded, and subject to audit;
 - Unauthorized use of the Information System is prohibited and subject to criminal and civil penalties;
 - 4. Use of the Information System indicates consent to monitoring and recording.

Information System Owners must:

- 1.5.2 Configure the Information System so that the notification message or banner is retained on the screen until Users acknowledge the usage conditions and take explicit actions to log on to or further access the Information System; and
- 1.5.3 For publicly accessible Information Systems, configure the Computer Information Resource to:
 - 1. Display Information System use information conditions, before granting further access to the publicly accessible Information System;
 - 2. Display references, if any, to monitoring, recording, or auditing that are consistent with privacy accommodations for such Information Systems that generally prohibit those activities; and
 - 3. Include a description of the authorized uses of the Information System.

1.6 Permitted Actions Without Identification or Authentication AC-14

Information System Owners must:

- 1.6.1 Identify User actions that can be performed on the Information System without some form of Username or password (for example, individuals accessing public websites or other publicly accessible federal Information Systems, individuals using personal mobile phones to receive calls, or receiving facsimiles).
- 1.6.2 Document with supporting rationale the User actions that can be performed without a form of a Username or password.

1.7 Remote Access AC-17

1.7.1 DTS must establish and document usage restrictions, configuration/connection requirements, and implementation guidance for each type of Remote Access allowed to an Information System.

To have Remote Access to Information Systems, a User and/or a Department must do the following:

1.7.2 County-Sensitive Information may not be stored on non-County controlled resources unless all Department and DTS procedures in this handbook, all federal, state, and County laws and policies are followed.

1.8 Wireless Access AC-18

1.8.1 DTS must establish and document usage restrictions, configuration/connection requirements, and implementation guidance for Wireless Access to a County Information System. Wireless Access to a County Information System must be authorized by an Information Steward prior to allowing the connections.

1.9 Access Control for Mobile Devices AC-19

- 1.9.1 The County must establish usage restrictions, configuration and connection requirements, and implementation guidance of County-controlled mobile devices by a User when outside of County offices.
- 1.9.2 Sensitive Information must not be stored on non-County controlled resources unless the Department ensures adherence to AP 6-7, all state, and County laws and policies.
- 1.9.3 The County is not responsible for maintenance, damage, or loss of personally-owned computers, data, or peripherals used by employees in the work place.
- 1.9.4 A User with access to County Information System on a County-owned mobile devices must lock the screen until the correct password is entered. When the mobile device is not in use, the User must store the device in a secure area and delete Sensitive Information when it is no longer needed. The Department is responsible for ensuring that Sensitive Information has been deleted from County-controlled mobile devices and determining the frequency of review.

1.10 Use of External Information Systems AC-20

1.10.1 DTS must establish terms and conditions for authorized individuals accessing County Information Systems from External or Third-Party Information Systems.

1.11 Publicly Accessible Content AC-22

1.11.1 The County and its individual Information System Owners must designate and train authorized individuals to post information on publicly accessible information sites in accordance with AP 6-8 Social Media. The proposed content must be reviewed by designated personnel prior to posting to ensure non-public information is not included and must remove such information, if discovered.

1.12 Sensitive Information Access (COUNTY ADDED)

1.12.1 A User must not access, copy, or use County Sensitive Information that is not necessary to perform the User's County-assigned responsibilities.

1.13 Device Lock (AC-11 COUNTY ADDED – Not in NIST LOW)

1.13.1 To protect Sensitive Information, a User must not leave the PC terminal area while Sensitive Information displayed on the screen. An employee must never leave Sensitive Information on the computer terminal unattended. If necessary, the Information System Owner must ensure that a screen-locking feature, installed on the PC that blanks the screen until the correct password, is entered.

Chapter 2 - Security Awareness and Training AT

2.1 Information Security Awareness Training AT-2

The County must:

- 2.1.1 Provide basic information security and privacy awareness training to Information System Users as part of initial training for new Users;
- 2.1.2 Train when required by Information System changes; and
- 2.1.3 Train regularly to include recognizing and reporting potential indicators of insider threat and User's Rules of Behavior.

2.2 Role-Based Training AT-3

Information System Owners must ensure that role-based Information Security awareness training is provided to personnel with assigned security roles and responsibilities (personnel role example types include Information System administrators, Information System security personnel, and Information System privacy personnel):

- 2.2.1 Before authorizing access to the Information System or performing assigned duties;
- 2.2.2 When required by Information System changes; and
- 2.2.3 On a regularly scheduled basis.

2.3 Information Security Training Records AT-4 (NIST says 'and privacy & role-based')

The County must document and monitor basic Information Security awareness training activities. Information System Owners must:

- 2.3.1 Ensure that Information Security awareness training activities are documented and monitored; and
- 2.3.2 That individual training records are retained for at least six (6) years.

Chapter 3 - Audit and Accountability AU

3.1 Audit Events AU-2

Information System Owners must:

- 3.1.1 Verify that the auditable Components of Information Systems can Audit Event types for their specific departmental needs. (Examples of auditable event types are: successful and unsuccessful User Account logon events, Account management events, policy change, Information System events, all administrator activity, data deletions, data access, data changes, and permission changes.)
- 3.1.2 Coordinate the security audit function with EISO and other County entities requiring audit related information to enhance mutual support and to help guide the selection of auditable event types;
- 3.1.3 Provide a rationale for why the auditable event types are deemed to be adequate to support after-the-fact investigations of security and privacy incidents; and
- 3.1.4 Audit and document the subset auditable events determined from Audit Event (3.1.1) monthly.

3.2 Content of Audit Records AU-3

3.2.1 Information System Owners must ensure that Audit Records are generated in an Audit Trail containing information that establishes what type of event occurred, when the event occurred, where the event occurred, the source of the event, the outcome of the event, and the identity of any individuals or subjects associated with the event

3.3 Audit Storage Capacity AU-4

3.3.1 Information System Owners must allocate Audit Record storage capacity to accommodate the Audit Record retention requirements.

3.4 Response to Audit Processing Failures AU-5

Information System Owners must:

- 3.4.1 Alert designated personnel, identified by Department heads, in the event of an audit processing failure within one (1) hour; and
- 3.4.2 Take the following additional actions: overwrite the oldest Audit Record if space is an issue.

3.5 Audit Review, Analysis, and Reporting AU-6

Information System Owners must:

- 3.5.1 Review and analyze Information System Audit Records at least weekly for indications of inappropriate or unusual activity;
- 3.5.2 Report findings to designated personnel; and
- 3.5.3 Adjust the level of audit review, analysis, and reporting within the Information System when there is a change in Risk based on law enforcement information, intelligence information, or other credible sources of information.

3.6 Time Stamps AU-8

Information System Owners must:

- 3.6.1 Use internal Information System clocks to generate time stamps for Audit Records; and
- 3.6.2 Record time stamps for Audit Records that can be mapped to Coordinated Universal Time or Greenwich Mean Time and meets one (1) second granularity of time measurement.

3.7 Protection of Audit Information AU-9

3.7.1 Information System Owners must protect audit information and audit tools from unauthorized access, modification, and deletion.

3.8 Audit Record Retention AU-11

3.8.1 Information System Owners must retain Audit Records for at least one hundred eighty (180) days to provide support for after-the-fact investigations of security and privacy incidents and to meet regulatory and organizational information retention requirements.

3.9 Audit Generation AU-12

- Information System Owners must:
- 3.9.1 Provide Audit Record generation capability for the auditable event types in Audit Event (3.1.1) at all Information System Components where audit capability is deployed/available;
- 3.9.2 Allow designated personnel, identified by Department heads, to select which auditable event types are to be audited.
- 3.9.3 Generate Audit Records for the event types defined in Audit Event (3.1.1) with the information in Content of Audit Record.

Chapter 4 - Information Security Assessments and Privacy Assessments, Authorization, and Monitoring CA

4.1 Security Controls Assessments and Privacy Controls Assessments CA-2

DTS must:

- 4.1.1 Develop a Security Controls Assessment Plan and Privacy Controls Assessment Plan that describes the scope of the Assessments including:
 - 1. Security controls and privacy controls under Assessment;
 - 2. Assessment procedures used to determine controls effectiveness;
 - 3. Assessment environment and Assessment team;
- 4.1.2 Ensure the Security Controls Assessment Plan and Privacy Controls Assessment Plan are reviewed and approved by the designated EISO County representative prior to retaining an independent Assessor to conduct the Assessments;
- 4.1.3 Have an independent Assessor assess the security and privacy controls in the Information System pursuant to the Security Controls Assessment Plan, Privacy Controls Assessment Plan, and its environment of operation at least every four (4) years to determine the extent to which the controls are implemented correctly, operating as intended, and producing the desired outcome with respect to meeting established security and privacy requirements;
- 4.1.4 Have an independent Assessor produce a Security Controls Assessment Report and a Privacy Controls Assessment Report that documents the results of the Assessments. The County should explicitly include in the contract with the independent Assessor the requirement for them to produce the Assessment report based on the Assessment Plans.
- 4.1.5 The independent Assessor should provide DTS with Assessment Reports that document the type of Assessments performed and the results from each area assessed.
- 4.1.6 Include as part of Security Controls Assessments and Privacy Controls Assessments, an in-depth monitoring; Vulnerability scanning; malicious User testing; insider threat Assessment; performance and load testing of Departments Computer Information Systems every three (3) years.

4.2 Information System Interconnections CA-3

The County must:

- 4.2.1 Authorize connections from Information Systems to other non-County Information Systems using Interconnection Security Agreements;
- 4.2.2 Document, for each interconnection, the interface characteristics, security and privacy requirements, and the nature of the information communicated; and
- 4.2.3 Review and update Interconnection Security Agreements at least every two years or upon contract renewal.

4.3 Plan of Action and Milestones (POAMS) CA-5

DTS must:

- 4.3.1 Develop a Plan of Action and Milestones, called a Risk Registry for Information Systems, to document the planned remedial actions of the County to correct weaknesses or deficiencies noted during the Assessment performed in 4.1.4 and 4.1.5, or otherwise identified, to reduce or eliminate known vulnerabilities in Information Systems;
- 4.3.2 Update Risk Registry/Plan of Action and Milestones at least annually based on findings from the ISP Assessment Report, Security Controls Assessments, Privacy Controls Assessments, Risk Assessments, or Information System monitoring activities.

4.4 Information System Authorization CA-6

- 4.4.1 Prior to purchase decisions, contract executions, and/or internal system implementation, the Information System Owner must request that a Risk Assessment be performed by DTS. Based on the results of the Risk Assessment, DTS may or may not provide their written approval to proceed.
- 4.4.2 Periodic Risk Assessments must be performed for existing Information Systems that process, store, or transmit County information. Based on the results of the Risk Assessment, Information Systems not approved by DTS is prohibited.

4.5 Continuous Monitoring/Risk Monitoring CA-7

- 4.5.1 DTS must ensure continuous Risk Monitoring is an integral part of the governance process that includes the following:
 - 1. Effectiveness Monitoring
 - 2. Compliance Monitoring
 - 3. Change Monitoring

4.6 Penetration Testing CA-8 (COUNTY ADDED – Not in NIST LOW)

4.6.1 DTS must perform Penetration Testing every three (3) years on Information Systems with High Risks.

4.7 Internal Information System Connections CA-9

The County must:

- 4.7.1 Authorize internal connections of Information System Components to the Information System; and
- 4.7.2 Document, for each internal connection, the interface characteristics, security and privacy requirements, and the nature of the information communicated.

4.8 Information System Registration (COUNTY ADDED)

4.8.1 As defined in AP 6-7 "Information Resources Security" Section 3.7 "County Information System Registration" – "Using Departments must register all Information Systems with DTS and keep the registry updated at all times." Registration information must be updated at least annually or after a significant change occurs that impacts the registration.

5.1 Baseline Configuration CM-2

Information System Owners must:

- 5.1.1 Develop, document, and maintain a current Baseline Configuration for their Information Systems; and
- 5.1.2 Review and update the Baseline Configuration of the Information Systems at least annually; when required due to significant change; and when Information System Components are installed or upgraded.

5.2 Configuration Change Control CM-3

DTS must:

- 5.2.1 Determine the types of changes to the Information System that are configuration-controlled;
- 5.2.2 Perform a Security Impact Analysis on proposed configuration-controlled changes submitted by Information System Owners.
- 5.2.3 Monitor and review Information System activities associated with configuration-controlled changes that pose a High Risk for the County.

Information System Owners must:

- 5.2.4 Submit proposed configuration-controlled changes to the Information System to DTS for approval.
- 5.2.5 Ensure that only approved configuration-controlled changes to the Information Systems are implemented.
- 5.2.6 Ensure that records of configuration-controlled changes to the Information Systems are documented and retained.
- 5.2.7 Report all configuration-controlled changes to the Information System to DTS prior to implementation

5.3 Security Impact Analyses and Privacy Impact Analyses CM-4

DTS must:

- 5.3.1 Identify and analyze changes to the Information Systems to determine potential security and privacy impacts prior to change implementation.
- 5.3.2 Notify the Information System Owners in the event that the requested change poses a significant security or privacy risk to the County.

The Information System Owners must:

5.3.2 Analyze the risk determination provided from DTS to decide whether to continue with the implementation or select an alternative implementation.

5.4 Access Restrictions for Change CM-5

5.4.1 Information System Owners must define, document, approve, and enforce physical and Logical Access restrictions associated with configuration-controlled changes to the Information Systems.

5.5 Configuration Settings CM-6

Information System Owners must:

- 5.5.1 Establish and document Configuration Settings for Components within the County Information System using industry acceptable standards (e.g. CIS Benchmarks) that reflect the most restrictive mode consistent with operational requirements;
- 5.5.2 Implement the Configuration Settings;
- 5.5.3 Identify, document, and approve any deviations from established Configuration Settings for Information System Components based on operational requirements; and
- 5.5.4 Monitor and control changes to the Configuration Settings in accordance with County policies and procedures.

5.6 Least Functionality CM-7

Information System Owners must:

- 5.6.1 Configure the Information Systems to provide only essential capabilities; and
- 5.6.2 Prohibit or restrict the use of functions, Ports, Protocols, and/or services defined by Information System Owners as not required for Information System operation. Information System Owners should create their own Configuration Baseline and include a justification statement as to how they determined the Configuration Baseline settings.

5.7 Information System Component Inventory CM-8

Information System Owners must:

- 5.7.1 Develop and document an inventory of Information System Components that:
 - 1. Accurately reflects the current Information System;
 - 2. Includes all Components within the Information System boundary;
 - 3. Is at the level of granularity deemed necessary for Information System Owners to track and report on a regular basis; and
 - 4. Includes information deemed necessary for DTS to achieve effective Information System Component accountability; and
- 5.7.2 Review and update the Information System Component inventory at least every six months.

5.8 Software Usage Restrictions CM-10

- 5.8.1 DTS, Departments, and Users must use any licensed software and associated documentation in accordance with all applicable contractual terms, including, without limitation, any software license agreements.
- To the extent a contract or software license agreement tracks use by quantity of Users or other numeric value, DTS and Departments must track the use of the software and associated documentation to ensure it is consistent with the terms of the applicable contract or software license agreement to control copying and distributions.
- 5.8.3 Information System Owners must control and document the use of Peer-to-Peer File Sharing Technology to ensure that this capability is not used for the unauthorized distribution, display, performance, or reproduction of copyrighted work.

5.9 User-Installed Software CM-11

DTS must:

- 5.9.1 Establish policies governing the installation of software by Users;
- 5.9.2 Enforce software installation policies; and
- 5.9.3 Monitor policy compliance continuously.

Chapter 6 – Contingency Planning CP

6.1 Contingency Plan CP-2

Information System Owners must:

- 6.1.1 Develop an Information System-specific Contingency Plan that:
 - 1. Identifies essential missions and business functions and associated contingency requirements;
 - 2. Provides recovery objectives and restoration priorities;
 - 3. Addresses contingency roles, responsibilities, and assigned individuals with contact information;
 - 4. Addresses maintaining essential mission and business functions despite an Information System disruption, compromise, or failure;
 - Addresses eventual, full Information System restoration (if applicable, based on Information System
 criticality) without deterioration of the security and privacy controls originally planned and implemented;
 and
 - 6. Is reviewed and approved by DTS.
- 6.1.2 Distribute copies of the Contingency Plan to key contingency personnel.
- 6.1.3 Coordinate Contingency Planning activities with incident handling activities and the Office of Emergency Management and Homeland Security (OEMHS);
- 6.1.4 Review the Contingency Plan for the Information System at least annually
- 6.1.5 Update the Contingency Plan to address changes to the County, Information Systems, or environment of operation and problems encountered during Contingency Plan implementation, execution, or testing;
- 6.1.6 Communicate Contingency Plan changes to key contingency personnel; and
- 6.1.7 Protect the Contingency Plan from unauthorized disclosure and modification.

6.2 Contingency Training CP-3

Information System Owners must:

- 6.2.1 Provide Contingency Plan training to Information System Users consistent with departmental Contingency roles and responsibilities.
- 6.2.2 Perform training procedures using written and functional exercises, as appropriate, to determine the effectiveness of the plan and the County's readiness to execute the plan.
 - 1. Train within thirty (30) days of assuming a contingency role and responsibilities;
 - 2. Train when required by Information System changes; and
 - 3. At least every four (4) years, thereafter.
- 6.2.3 Be familiar with the Contingency Plan and its associated activation, recovery, and reconstitution procedures.

6.3 Contingency Plan Testing CP-4

Information System Owners must:

- 6.3.1 Test the Contingency Plan for Information Systems that process, store, or transmit County Information at least every two years using practice simulated tests to determine the effectiveness of the plan and the County's readiness to execute the plan;
- 6.3.2 Review the Contingency Plan Test Results; and
- 6.3.3 Initiate corrective actions, if needed.

6.4 Alternate Storage Site CP-6

DTS, Department of Police Security Services, and the Department of General Services must:

- 6.4.1 Establish an Alternate Storage Site including necessary agreements to permit the storage and retrieval of Information System Backup information for critical network Information Systems, if possible,
- 6.4.2 Ensure that the Alternate Storage Site provides security controls equivalent to that of the primary site.
- 6.4.3 Identify an Alternate Storage Site that is separated from the primary storage site to reduce susceptibility to the same threats.

Information System Owners must:

- 6.4.4 Backup crucial data and files as scheduled and retain at least the last three (3) Backup copies. The backing up of data is to be commensurate with the frequency of change of the data and the importance of recovering the lost data in a timely manner.
- 6.4.5 Maintain Backups at a physically separate, environmentally controlled facility.
- 6.4.6 Identify potential accessibility problems to the Alternate Storage Site in the event of an area-wide disruption or disaster and outline explicit Mitigation actions.
- 6.4.7 Notify DTS as soon as changes in facilities are determined.

6.5 Alternate Processing Site CP-7 (COUNTY ADDED – Not in NIST LOW)

DTS, Department of Police Security Services, and the Department of General Services must:

- 6.5.1 Establish an alternate processing site for the safety of Information Systems and personnel;
- 6.5.2 Identify an alternate processing site that is separated from the primary processing site to reduce susceptibility to the same threats:
- 6.5.3 Make available at the alternate processing site, the equipment and supplies required to transfer and resume operations or put contracts in place to support delivery to the site within the departmentally-defined time-period for transfer and resumption; and
- 6.5.4 Provide information security and privacy safeguards at the alternate processing site that are equivalent to those at the primary site.

6.6 Information System Backup CP-9

Information System Owners must:

6.6.1 Conduct daily Incremental Backups and weekly Full Backups of User-Level Information contained in the Information System;

- 6.6.2 Conduct daily Incremental Backups and weekly Full Backups of Information System-Level Information contained in the Information System;
- 6.6.3 Conduct daily Incremental Backups and weekly Full Backups of Information System documentation including security-related documentation and;
- 6.6.4 Protect the confidentiality, integrity, and availability of Backup information at storage locations.

6.7 Information System Recovery and Reconstitution CP-10

Information System Owners must:

- 6.7.1 Provide for the recovery and reconstitution of the Information System to a known state after a disruption, compromise, or failure.
- 6.7.2 Focus on implementing recovery strategies during recovery activities to restore Information System capabilities through the restoration of Information System Components, repair of damage, and resumption of operational capabilities at the original or new permanent location

Chapter 7 - Identification and Authentication IA

7.1 Identification and Authentication (County Users) IA-2

7.1.1 Information System Owners must uniquely identify and authenticate Users or automated Information System processes (Service Accounts) acting on behalf of County Users.

7.2 Identification and Authentication (County Users) | Multifactor Authentication to Information System User Accounts IA-2(1)

7.2.1 Information System Owners must implement multifactor authentication for access to User Accounts, including both privileged and non-privileged Accounts.

7.3 Identification and Authentication (County Users) | Access to Accounts – Replay Resistant IA-2(8) (COUNTY ADDED – Not in NIST LOW)

7.3.1 Information System Owners must implement replay-resistant authentication mechanisms for access to privileged Accounts.

7.4 Identifier Management IA-4

Information System Owners must manage Information System Identifiers by:

- 7.4.1 Receiving authorization from designated personnel to assign an individual, group, role, or device Identifier;
- 7.4.2 Selecting an Identifier that identifies an individual, group, role, or device:
- 7.4.3 Assigning the Identifier to the intended individual, group, role, or device; and
- 7.4.4 Preventing reuse of Identifiers for 180 days.

7.5 Authenticator Management IA-5

Information System Owners must manage Information System Authenticators by:

- 7.5.1 Verifying, as part of the initial Authenticator distribution, the identity of the individual, group, role, or device receiving the Authenticator;
- 7.5.2 Establishing and implementing administrative procedures for initial authenticator distribution, for lost/compromised or damaged authenticators, and for revoking authenticators;
- 7.5.3 Establishing minimum and maximum lifetime restrictions and reuse conditions for authenticators;
- 7.5.4 Changing/refreshing authenticators every ninety (90) days.
- 7.5.5 Authenticators must be at least eight (8) characters in length, have at least one (1) each of upper and lower-case letters, numbers, and special characters. Users cannot reuse the same password from the past four (4) password cycles.
- 7.5.6 Protecting authenticator content from unauthorized disclosure and modification;
- 7.5.7 Requiring individuals to take, and having devices implement, specific security controls to protect authenticators; and
- 7.5.8 Changing authenticators for group/role accounts when membership to those accounts changes.
 - For password-based authentication, Information System Owners must: IA-5(1)
- 7.5.9 Maintain a list of commonly-used, expected, or compromised passwords and update the list annually or when County passwords are suspected to have been compromised directly or indirectly;
- 7.5.10 Verify, when Users create or update passwords, that the passwords are not found on the County-defined list of commonly-used, expected, or compromised passwords;
- 7.5.11 Transmit only cryptographically-protected passwords;
- 7.5.12 Store passwords using a DTS approved-hash algorithm
- 7.5.13 Require immediate selection of a new password upon Account recovery;
- 7.5.14 Allow User selection of long passwords and passphrases, including spaces and all printable characters; and
- 7.5.15 Employ automated tools to assist the User in selecting strong password Authenticators.

7.6 Authenticator Feedback IA-6

7.6.1 Information System Owners must obscure feedback of authentication information during the authentication process to protect the information from possible exploitation and use by unauthorized individuals.

7.7 Cryptographic Module Authentication IA-7

Information System Owners must:

7.7.1 Implement mechanisms for authentication to a Cryptographic Module that meet the requirements of applicable laws, Executive Orders, directives, policies, regulations, standards, and guidelines for such authentication.

7.8 Identification and Authentication (Non-County Users – Business Partners) IA-8

7.8.1 Information System Owners must uniquely identify and authenticate non-County Users or automated Information Systems acting on behalf of non-County Users.

7.9 Re-Authentication IA-11

7.9.1 Information System Owners must require Users to re-authenticate when passwords have expired, and new passwords are created.

Chapter 8 - Incident Response

8.1 Incident Response (IR) Training IR-2

EISO Computer Incident Response Team (CIRT) and Department Head/IT Staff must:

- 8.1.1 Provide IR training to team members/coordinators with Incident Response responsibilities;
 - 1. Within 30 days of assuming an incident response role or responsibility, and
 - 2. When required by Information System changes and annually thereafter.

8.2 Incident Handling IR-4

EISO must:

- 8.2.1 Implement an incident handling capability for security and privacy incidents that includes preparation, detection and analysis, containment, eradication, and recovery;
- 8.2.2 Coordinate incident handling activities with Contingency Planning activities;
- 8.2.3 Incorporate lessons learned from ongoing incident handling activities into incident response procedures, training, and testing, and implement the resulting changes accordingly; and
- 8.2.4 Ensure the rigor, intensity, scope, and results of incident handling activities are comparable and predictable across the organization.
 - Office of Human Resources (OHR) must:
- 8.2.5 Provide support and direction for sanctions on all events or incidents that involve employees.

8.3 Incident Monitoring IR-5

8.3.1 EISO must track and document Information System security and privacy incidents.

8.4 Incident Reporting IR-6

Information System Owners must:

- 8.4.1 Require personnel to report suspected security and privacy incidents to EISO within one (1) hour; and
- 8.4.2 Report security, privacy, and supply chain incident information to designated departmental personnel. EISO must:
- 8.4.3 Communicate status of critical incidents to CAO, Department Directors, and/or to the extent required by applicable laws, notify outside agencies or stakeholders.

8.5 Incident Response Assistance IR-7

8.5.1 EISO and other key players per EISO Incident Response Plan must provide an incident response support resource, integral to the County's incident response capability, that offers advice and assistance to Users of the Information System, for the handling and reporting of security and privacy incidents.

8.6 Incident Response Plan IR-8

EISO must:

- 8.6.1 Develop an Incident Response Plan that:
 - 1. Identifies the following:
 - a. Preparing for an incident;
 - b. Identifying and incident;
 - c. Containing the incident;
 - d. Eradicating the incident;
 - e. Recovering from the incident;
 - f. Conducting lessons learned after the incident;
 - 2. Provides guidance for assessing and mitigating the risk of harm to the County and to individuals potentially affect by an incident and/or breach;
 - 3. Outlines procedures for reporting an incident and a breach;
 - 4. Defines reportable incidents;
 - 5. Provides metrics for measuring the incident response capability within the County;
 - 6. Defines the resources and management support needed to effectively maintain and mature an incident response capability; and
 - 7. Is reviewed and approved by designated personnel or roles annually.
- 8.6.2 Distribute copies of the incident response plan to designated incident response personnel within DTS and Departments;
- 8.6.3 Update the Incident Response Plan to address Information Systems and County changes or problems encountered during plan implementation, execution, or testing;
- 8.6.4 Communicate Incident Response Plan changes to DTS and Departments; and
- 8.6.5 Protect the Incident Response Plan from unauthorized disclosure and modification.
- 8.6.6 Include the following additional processes in the Incident Response Plan for incidents involving Personally Identifiable Information:
 - 1. A process for notifying affected individuals, if appropriate;
 - An Assessment process to determine the extent of the harm, embarrassment, inconvenience, or unfairness to affected individuals; and
 - 3. A process to ensure prompt reporting by County Users of any privacy incident.

Chapter 9 - Maintenance MA

9.1 Controlled Maintenance MA-2

For non-cloud-based Information Systems, Information System Owners must:

9.1.1 Schedule, document, and review records of maintenance, repair, or replacement on Computer Information Resource Components in accordance with manufacturer or vendor specifications and/or County requirements;

- 9.1.2 Approve and monitor all maintenance activities performed by non-County entities, whether performed on site or remotely and whether the Information System or its Components are serviced on site or removed to another location;
- 9.1.3 Require that designated personnel explicitly approve the removal of the Information System or its Components from County facilities for off-site maintenance, repair, or replacement;
- 9.1.4 Sanitize equipment to remove all information from associated media prior to removal from County facilities for off-site maintenance, repair, or replacement;
- 9.1.5 Check all potentially impacted security and privacy controls to verify that the controls are still functioning properly following maintenance, repair, or replacement actions; and
- 9.1.6 Include in County maintenance records response times for service, if possible, when repairing a network server.

9.2 Nonlocal Maintenance MA-4

For non-cloud-based Information Systems, Information System Owners must:

- 9.2.1 Approve and monitor Nonlocal Maintenance and diagnostic activities performed by the County's vendors.
- 9.2.2 Allow the use of Nonlocal Maintenance and diagnostic tools only as consistent with County policy.
- 9.2.3 Employ strong Authenticators in the establishment of Nonlocal Maintenance and diagnostic sessions;
- 9.2.4 Maintain records for Nonlocal Maintenance and diagnostic activities; and
- 9.2.5 Terminate session and network connections when Nonlocal Maintenance is completed.

9.3 Maintenance Personnel MA-5

Information System Owners must:

- 9.3.1 Establish a process for maintenance personnel authorization and maintain a list of authorized maintenance organizations or personnel.
- 9.3.2 Verify that all escorted personnel performing maintenance on the Information System possess the required access authorizations; and
- 9.3.3 Designate personnel with required access authorizations and technical competence to supervise the maintenance activities of personnel who do not possess the required access authorizations.

Chapter 10 - Media Protection MP

10.1 Media Access MP-2

- 10.1.1 DTS must restrict access to personal devices connected to County Computer Information Resources (i.e. USBs thumb drives, external storage drives, cameras, smart devices, and SD cards).
- 10.1.2 Restrict access to magnetic tape, disk, and documentation libraries to only Users whose responsibilities require access to them.
- 10.1.3 Information System Owners must define types of restricted digital and/or non-digital media and restrict the access.

10.2 Media Storage MP-4

10.2.1 Information System Owners must physically control and securely store Information System media and

protect Information System media until the media are destroyed or sanitized using approved equipment, techniques, and procedures.

10.3 Media Transport MP-5

Information System Owners must:

- 10.3.1 Protect and control electronic and non-electronic media during transport outside of controlled areas using protections commensurate with the security category or classification of the information;
- 10.3.2 Maintain accountability for Information System media during transport outside of controlled areas;
- 10.3.3 Document activities associated with the transport of Information System media; and
- 10.3.4 Restrict the activities associated with the transport of Information System media to authorized personnel.

10.4 Media Sanitization MP-6

Information System Owners must:

- 10.4.1 Sanitize Information System media prior to disposal, release out of County control, or release for reuse using DTS sanitization techniques and procedures;
- 10.4.2 Employ sanitization mechanisms with the strength and integrity commensurate with the security category or classification of the information.

10.5 Media Use MP-7

DTS must:

- 10.5.1 Restrict/prohibit the use of personal USBs, personal external drives, personal smart devices on Information Systems or Components using defined security safeguards such as Port disabling, Information System scanning, detection software devices;
- 10.5.2 Prohibit the use of portable storage devices in Information Systems when such devices have no identifiable Owners.

Chapter 11 - Physical and Environmental Protection PE

11.1 Physical Access Authorizations PE-2

Department of General Services and Department of Police Security Services must:

11.1.1 Permit only authorized personnel to have access to facilities where systems reside to ensure that access to Information Systems is secure.

Departments must:

- 11.1.2 Develop, approve, review, and maintain a list of individuals with Authorized Access to the facility where the Information System resides.
- 11.1.3 Authorization credentials must be issued for facility access.
- 11.1.4 Review the access list detailing authorized facility access by individuals annually; and
- 11.1.5 Remove individuals from the facility access list when access is no longer required

11.2 Physical Access Control PE-3

- Department of General Services and Department of Police Security Services must
- 11.2.1 Physically restrict unauthorized personnel from accessing non-public areas of County buildings, computer labs, offices, and work areas containing the Information Systems hardware, including related equipment.
 - Information System Owners must
- 11.2.2 Enforce physical access authorizations, safeguards, and maintain physical access Audit Logs at non-public entry and exit points to the facility where the Information Systems hardware resides.
- 11.2.3 Escort visitors and monitor visitor activity in non-public areas.
- 11.2.4 Secure keys, combinations, and other physical access devices;
- 11.2.5 Inventory County defined physical access devices annually;
- 11.2.6 Change combinations and keys when keys are lost, combinations are compromised, or individuals are transferred or terminated.

11.3 Monitoring Physical Access PE-6

- 11.3.1 Department of General Services and Department of Police Security Services must periodically inspect environment and safety of Information Systems by qualified personnel to ensure the safety of Information Systems.
- 11.3.2 Information System Owners must monitor and review physical access to the facility where the Information Systems resides to detect and respond to physical security incidents.

11.4 Visitor Access Records PE-8

11.4.1 Information System Owners must maintain and review visitor access records to the non-public sections of the facility where the Information Systems resides.

11.5 Emergency Lighting PE-12

11.5.1 DTS and the Department of General Services must employ and maintain automatic emergency lighting that activates in the event of a power outage or disruption and that covers emergency exits and evacuation routes within the facility.

11.6 Fire Protection PE-13

Department of General Services must:

- 11.6.1 Install fire detection and suppression equipment, as required by County, federal, and state law.
- 11.6.2 Employ and maintain fire suppression and detection devices/Information Systems for the Information Systems that are supported by an independent energy source.
 - Information System Owners must:
- 11.6.3 Ensure alternate work site facilities must be constructed to protect against fire to ensure the safety of County Information.

11.7 Temperature and Humidity Controls PE-14

11.7.1 Department of General Services must maintain and monitor temperature and humidity levels within the facility where the Information Systems resides to ensure the safety of the Information Systems.

11.8 Water Damage Protection PE-15

- 11.8.1 Department of General Services must protect the Information Systems from damage resulting from water leakage by providing master shutoff or isolation valves.
- 11.8.2 Information System Owners must ensure that alternate work site facilities protect against water damage to ensure the safety of Information Systems.

11.9 Delivery and Removal PE-16

11.9.1 Information System Owners must authorize, monitor, and control Information System Components entering and exiting the facility and maintain records of those items.

11.10 Alternate Work Site PE-17

Departments must:

- 11.10.1 Determine and document the sites allowed for use by employees.
- 11.10.2 Employ the same EISO security and privacy controls at alternate work site.
- 11.10.3 Assess as feasible, the effectiveness of security controls at alternate work sites; and

 Provide a means for employees to communicate with information security and privacy personnel in case of security or privacy incidents or problems.

11.11 Emergency Power Control/ Electromagnetic Pulse Protection PE-11/PE-21

11.11.1 Department of General Services must use electrical protections and a long-term alternative power supply on Information Systems, commensurate with the importance of the Information System to ensure the safety of Information Systems and personnel.

Chapter 12 - Planning PL

12.1 Information Security and Privacy Plans PL-2

Information System Owners whose Information Systems store, process, or transmit sensitive data must:

- 12.1.1 Develop security and privacy plans for the Information System that:
 - 1. Are consistent with the County's and Department's IT enterprise architecture;
 - 2. Explicitly define the authorization boundary for the Information System;
 - 3. Describe the operational context of the Information System in terms of missions and business processes;
 - 4. Provide the security categorization of the Information System including supporting rationale;
 - 5. Describe the operational environment for the Information System and relationships with or connections to other Information Systems;
 - 6. Provide an overview of the security and privacy requirements for the Information System;
 - 7. Identify any relevant overlays, (additional controls or requirements), if applicable;

- 8. Describe the security and privacy controls in place or planned for meeting those requirements including a rational for the tailoring decisions; and
- 9. Are reviewed and approved by a designated official or designated representative prior to plan implementation;
- 12.1.2 Distribute copies of the security and privacy plans and communicate subsequent changes to the plans to DTS;
- 12.1.3 Review the security and privacy plans at least annually;
- 12.1.4 Update the security and privacy plans to address changes to the Information Systems and environment of operation or problems identified during plan implementation or Security Controls Assessments and Privacy Controls Assessments; and
- 12.1.5 Protect the security and privacy plans from unauthorized disclosure and modification.

12.2 Rules of Behavior PL-4

EISO and Information System Owners must:

- 12.2.1 Establish and provide to individuals requiring access to the County Information Systems the rules that describe their responsibilities and expected behavior for information and Information Systems usage, security, and privacy;
- 12.2.2 Review and update the Rules of Behavior at least every four (4) years; and
- 12.2.3 Require individuals who have read a previous version of the Rules of Behavior to read them again at least every year or when the rules are revised or updated; and
- 12.2.4 Include in the Rules of Behavior explicit restrictions on the use of social media and networking sites and posting organizational information on public websites. Official use of social media on behalf of County government must comply with Administrative Procedure 6-8, "Social Media."

Personal use of social media on any County-provided computing device is subject to Administrative Procedure 6-1, "Use of County-Provided Internet, Intranet, and Electronic Mail Services." As noted in Administrative Procedure 6-1, all use must comply with all applicable laws and policies.

Chapter 13 – Personnel Security PS

13.1 Position Risk Designation PS-2

Departments must:

- 13.1.1 Assign a risk designation to all County positions
- 13.1.2 Establish screening criteria for individuals filling those positions; and
- 13.1.3 Review and update position risk designations every two years or as frequently as needed.

13.2 Personnel Screening PS-3

Departments must:

- 13.2.1 Screen individuals prior to authorizing access to the Information System.
- 13.2.2 Rescreen individuals in accordance with specific departmental requirements.

13.3 Personnel Termination PS-4

Departments must, upon termination of User employment:

- 13.3.1 Disable Information System access within the same day;
- 13.3.2 Terminate or revoke any Authenticators and credentials associated with the User;
- 13.3.3 If possible, conduct exit interviews that include a discussion of departmentally defined Information Security topics;
- 13.3.4 Retrieve all security-related County Information System-related property;
- 13.3.5 Retain access to County information and Information Systems formerly controlled by terminated User; and
- 13.3.6 Notify the Help Desk per DTS policy within same day.

13.4 Personnel Transfer PS-5

Departments must:

- 13.4.1 Review and confirm ongoing operational need for current logical and physical access authorizations to Information Systems and facilities when Users are reassigned or transferred to other positions within the County;
- 13.4.2 Initiate User transfer within the guidelines of the formal OHR transfer action;
- 13.4.3 Modify access authorization, as needed, to correspond with any changes in operational need due to reassignment or transfer; and
- 13.4.4 Notify the Help Desk per DTS policy within five (5) days of the formal transfer action.

13.5 Personnel Security PS-1 & PS-7

Departments must:

- 13.5.1 Explicitly define, document, and enforce personnel security requirements for all departmental and contracted personnel.
- 13.5.2 Require all departmental and contracted personnel comply with personnel security policies and procedures established by the Departments;

13.6 Personnel Sanctions PS-8

Departments must:

- 13.6.1 Employ a formal sanctions process for individuals failing to comply with established information security policies and procedures.
- 13.6.2 Notify OHR within seven (7) days when a formal User sanctions process is initiated, identifying the User sanctioned and the reason for the sanction.

Chapter 14 Risk Assessment RA

14.1 Security Categorization RA-2

Departments must:

- 14.1.1 Categorize the system and the information it processes, stores, and transmits;
- 14.1.2 Document the security categorization results including supporting rationale, in the security plan for the system; and

14.1.3 Verify that the Department head or Department head-designated representative reviews and approves the security categorization decision.

14.2 Risk Assessment RA-3

EISO must:

- 14.2.1 Conduct a Risk Assessment for new Information System requests, in addition to existing Information Systems that process, store, or transmit County information, and that are appropriately prioritized by EISO, including the likelihood and magnitude of harm, from
 - The unauthorized or inadvertent access, use, destruction, modification, disclosure, theft, or denial of service of the Information System, the information it processes, stores, or transmits, and any related information; and
 - 2. Privacy-related issues for individuals arising from the intentional processing of Personally Identifiable Information;
- 14.2.2 Integrate Risk Assessment results and risk management decisions from the County and missions/business process perspectives with Information System-level Risk Assessments;
- 14.2.3 Document Risk Assessment results in Risk Assessment reports;
- 14.2.4 Review Risk Assessment results annually;
- 14.2.5 Disseminate Risk Assessment results to respective Information System Owners; and
- 14.2.6 Update the Risk Assessment every 4 (four) years or when there are significant changes to the Information System, its environment of operation, or other conditions that may impact the security or privacy state of the Information System

14.3 Vulnerability Scanning of Information Systems RA-5

EISO must:

- 14.3.1 Scan for vulnerabilities at least monthly in the operating Information Systems/infrastructure, web applications and databases, and when new vulnerabilities potentially affecting the Information System are identified and reported;
- 14.3.2 Employ Vulnerability scanning tools and techniques that facilitate interoperability among tools and automate parts of the Vulnerability management process by using standards for:
 - 1. Enumerating platforms, software Flaws, and improper configurations;
 - 2. Formatting checklists and test procedures; and
 - 3. Measuring Vulnerability impact;
- 14.3.3 Employ Vulnerability scanning tools that include the capability to readily update the vulnerabilities to be scanned.

Information System Owners must:

- 14.3.4 Analyze Vulnerability scan reports and results from Security Controls Assessments;
- 14.3.5 Remediate High Risk Vulnerabilities immediately upon notification from EISO. Remediate Moderate Risk Vulnerabilities within thirty (30) days from date of discovery and Low Risk Vulnerabilities within ninety (90) days from date of discovery.
- 14.3.6 Share information obtained from the Vulnerability scanning process and Security Controls Assessments with EISO to help eliminate similar Vulnerabilities in other Information Systems.

14.4 Risk Response RA-7

14.4.1 Departments must respond to findings from Security Controls Assessments and Privacy Controls Assessments, Risk Assessments, monitoring, and audits with Risk Mitigation plans. If the risk cannot be mitigated, the Department must notify DTS so that Risk Acceptance, Risk Avoidance, Risk Rejection, or Risk Transfer can be identified.

14.5 Risk Assignment (COUNTY ADDED – Not in NIST 800-53)

Risk will be assigned at the following levels

14.5.1 Information System Department Head

If the Department:

- 1. Fails to register an Information System with DTS, or
- 2. Fails to follow DTS recommendations for implementation/remediation, or
- 3. Fails to champion a budget request as a result of Security Controls Assessments or Privacy Controls Assessment.
- 14.5.2 Chief Information Officer in the Department of Technology Services (DTS)

If DTS:

- 1. Fails to perform a Risk Assessment, or
- 2. Fails to document, and/or not appropriately communicate Risk Assessment risks, or
- 3. Fails to submit a budget request following a risk identified from a Security and Privacy Assessment, or
- 4. If CIO accepts the risk(s) based on the Risk Assessment, priorities, constraints, and/or business need
- 14.5.3 Office of Management & Budget Director

If OMB, in its sole discretion:

 Denies or partially funds requests to mitigate/resolve risks identified as the result of a Risk Assessment.

14.5.4 Chief Administrative Officer (CAO)

If the CAO:

1. Accepts the risk(s) based on the Risk Assessment, priorities, constraints, and business need

Chapter 15 - Information System and Services Acquisition SA

15.1 Allocation of Resources SA-2

The County must:

- 15.1.1 Determine information security and privacy requirements for the Information Systems or services in County in mission and business process planning
- 15.1.2 Determine, document, and allocate the resources required to protect the Information Systems or service as part of the County capital planning and investment control process; and
- 15.1.3 Establish a discrete line item for information security and privacy in County programming and budgeting documentation.

15.2 Information System Development Life Cycle SA-3

Information System Owners must:

- 15.2.1 Manage the Information System using Information System Development Life Cycle processes that incorporate information security and privacy considerations;
- 15.2.2 Define and document information security and privacy roles and responsibilities throughout the Information System Development Life Cycle;
- 15.2.3 Identify individuals having information security and privacy roles and responsibilities; and
- 15.2.4 Integrate the County's information security and privacy risk management process into Information System Development Life Cycle activities.

15.3 Acquisition Process SA-4

- 15.3.1 The County must include the following requirements, descriptions, and criteria, explicitly or by reference, in the acquisition contract for the Information System, Component, or service:
 - 1. Security and privacy functional requirements;
 - 2. Strength of mechanism requirements, including degree of correctness, completeness, resistance to tampering or bypass, and resistance to direct attack.
 - 3. Security and privacy assurance requirements;
 - 4. Security and privacy documentation requirements;
 - 5. Requirements for protecting security and privacy documentation;
 - 6. Description of the Information System development environment and environment in which the Information System is intended to operate;
 - Allocation of responsibility or identification of parties responsible for information security, privacy, and supply chain Risk management; and
 - 8. Acceptance criteria.

15.4 Information System Documentation SA-5

Information System Owners must:

- 15.4.1 Obtain administrator documentation for the Information System, Component, or service that describes:
 - 1. Secure configuration, installation, and operation of the Information System, Component, or service;
 - 2. Effective use and maintenance of security and privacy functions and mechanisms; and
 - 3. Known vulnerabilities regarding configuration and use of administrative or privileged functions;
- 15.4.2. Obtain User documentation for the Information System, Component, or service that describes:
 - 1. User-accessible security and privacy functions and mechanisms and how to effectively use those functions and mechanisms;
 - 2. Methods for User interaction, which enables individuals to use the Information System, Component, or service in a more secure manner and protect individual privacy; and
 - 3. User responsibilities in maintaining the security of the Information System, Component, or service and privacy of individuals;
- 15.4.3 Document attempts to obtain Information System, Information System Component, or Information System service documentation when such documentation is either unavailable or nonexistent-

- 15.4.4 Protect documentation as required, in accordance with the County's Risk management strategy; and
- 15.4.5 Distribute documentation to Department Heads and DTS EISO.

15.5 Security and Privacy Engineering Principles SA-8

15.5.1 Information System Owners must apply EISO security and privacy engineering principles, as defined in DTS architecture documents, in the specification, design, development, implementation, and modification of the Information System and components.

15.6 Unsupported Information System Components SA-22

15.6.1 Information System Owners must replace Information System Components when support for the components is no longer available from the developer, vendor, or manufacturer.

Chapter 16 - Information System and Communications Protection SC

16.1 Denial of Service Protection SC-5

16.1.1 DTS must protect against or limit the effects of Denial of Service events by employing security safeguards.

16.2 Boundary Protection SC-7

DTS must:

- 16.2.1 Monitor and control communications at the external boundary of the Information System and at key internal boundaries within the Information System;
- 16.2.2 Implement subnetworks for publicly accessible Information System Components that are separated from internal County networks; and
- 16.2.3 Connect to external networks or Information Systems only through managed interfaces consisting of Boundary Protection Devices arranged in accordance with County security and privacy architecture.

16.3 Cryptographic Key Establishment and Management SC-12

16.3.1 Information System Owners must establish and manage Cryptographic Keys for required cryptography employed within Information System in accordance with EISO requirements for key generation, distribution, storage, access, and destruction.

16.4 Cryptographic Protection SC-13

16.4.1 DTS must implement defined cryptographic uses and type of cryptography for each use to ensure cryptographic protection of data.

16.5 Collaborative Computing Devices and Applications SC-15

DTS must:

- 16.5.1 Prohibit remote activation of Collaborative Computing devices and applications with exceptions (if applicable); and
- 16.5.2 Provide an explicit indication of use to Users physically present at the devices.

16.6 Secure Name/Address Resolution Service SC-20 & SC-21

DTS must:

- 16.6.1 Utilize a secure name server (DNS) where zone administration is conducted. The name server should not be identified as a "name server" and should not be accessible via the internet.
- 16.6.2 Provide the means to indicate the security status of networking zones.

16.7 Process Isolation SC-39

16.7.1 Maintain a separate execution domain for each executing process with the system.

Chapter 17 – Information System and Information Integrity

17.1 Flaw Remediation SI-2

Information System Owners must:

- 17.1.1 Identify, report, and correct Information System Flaws;
- 17.1.2 Test software and firmware updates related to Flaw remediation for effectiveness and potential side effects before installation;
- 17.1.3 Install security-relevant software and firmware updates immediately upon notification from EISO of High Vulnerabilities. Moderate-Risk Vulnerabilities must be updated within thirty (30) days from date of discovery and Low Risk Vulnerabilities mitigated within ninety (90) days and;
- 17.1.4 Incorporate Flaw remediation into DTS configuration management process.

17.2 Malicious Code Protection SI-3

DTS and Information System Owners must:

- 17.2.1 Implement Signature Based, and/or Non-signature Based Malicious Code protection mechanisms at Information System network entry and exit points to detect and eradicate Malicious Code;
- 17.2.2 Automatically update Malicious Code protection mechanisms whenever new releases are available in accordance with DTS configuration management policy and procedures;
- 17.2.3 Configure Malicious Code protection mechanisms to:
 - 1. Perform periodic scans of the Information System and real-time scans of files from external sources at endpoints and/or network entry/exit points as the files are downloaded, opened, or executed in accordance with County policy; and
 - 2. Block Malicious Code; and/or quarantine Malicious Code; and/or send alert to administrator; promptly in response to Malicious Code detection; and
- 17.2.4 Address the receipt of false positives during Malicious Code detection and eradication and the resulting potential impact on the availability of the Information System.

17.3 Information System Monitoring SI-4

EISO, and Information System Owners must:

17.3.1 Monitor the Information System to detect:

- 1. Attacks and indicators of potential attacks; and
- 2. Unauthorized local, network, and remote connections;
- 17.3.2 Identify unauthorized use of the Information System;
- 17.3.3 Invoke internal monitoring capabilities or deploy monitoring devices:
 - 1. Strategically within the Information System to collect County-determined essential information; and
 - 2. At ad hoc locations within the Information System to track specific types of transactions of interest to the County;
- 17.3.4. Protect information obtained from intrusion-monitoring tools from unauthorized access, modification, and deletion;
- 17.3.5 Adjust the level of Information System monitoring activity when there is a change in Risk to County's operations and assets, individuals, other organizations, or the Nation;
- 17.3.6 Ensure Information System monitoring complies with all applicable County policies/procedures, Federal, State, and Local laws; and
- 17.3.7 Provide Information System monitoring information to EISO.

17.4 Security Alerts, Advisories, and Directives SI-5

EISO must:

- 17.4.1 Receive Information System security alerts, advisories, and directives on an ongoing basis;
- 17.4.2 Generate internal security alerts, advisories, and directives as deemed necessary; and
- 17.4.3 Disseminate security alerts, advisories, and directives to: Users, Information System security personnel, and administrators with configuration/patch management responsibilities.
 - Information System Owners must:
- 17.4.4 Implement security directives in accordance with established time-frames, or
- 17.4.5 Notify EISO of the degree of noncompliance.

17.5 Information Management and Retention SI-12

17.5.1 Information System Owners must manage and retain information within the Information System and information output from the Information System in accordance with applicable laws, Executive Orders, directives, regulations, policies, standards, guidelines, and operational requirements.

Chapter 18 – Program Management PM

18.1 Information System Inventory PM-5

18.1.1 Information System Owners must develop and maintain an inventory of Information Systems.

18.2 Enterprise Architecture PM-7

18.2.1 DTS must develop an enterprise architecture with consideration for information security, privacy, and the resulting Risk to County operations and assets, individuals, other organizations, and the Nation.

18.3 Registration Process PM-10 (COUNTY ADDED)

18.3.1 DTS must manage the security and privacy state of Information Systems and the environments in which those Information Systems operate through Information System registration.

18.4 Security and Privacy Workforce PM-13

18.4.1 The County must establish a security and privacy workforce development and improvement program.

18.5 Contacts with Groups and Associations PM-15

- 18.5.1 The County must establish and institutionalize contact with selected groups and associations within the security and privacy communities:
 - 1. To facilitate ongoing security and privacy education and training for County personnel;
 - To maintain currency with recommended security and privacy practices, techniques, and technologies;
 - To share current security- and privacy-related information including threats, vulnerabilities, and incidents.

18.6 Minimization of Personally Identifiable Information Used in Testing, Training, and Research PM-26

The County must:

- 18.6.1 Develop and implement policies and procedures that address the use of Personally Identifiable Information for internal testing, training, and research;
- 18.6.2 Take measures to limit or minimize the amount of Personally Identifiable Information used for internal testing, training, and research purposes; and
- 18.6.3 Authorize the use of Personally Identifiable Information when such information is required for internal testing, training, and research.

18.7 Inventory of Personally Identifiable Information PM-29

DTS must:

- 18.7.1 Establish, maintain, and annually update an inventory of all Computer Information Systems and programs that create, collect, use, process, store, maintain, disseminate, disclose, or dispose of Personally Identifiable Information.
- 18.7.2 Use the Personally Identifiable Information inventory to support the establishment of Continuous Monitoring Program for all new or modified Information Systems containing Personally Identifiable Information.

Information System Owners must:

- 18.7.3 Provide updates of the Personally Identifiable Information inventory to DTS as needed
- 18.7.4 Review the Personally Identifiable Information inventory as needed
- 18.7.5 Ensure to the extent practicable, that Personally Identifiable Information is accurate, relevant, timely, and complete; and
- 18.7.6 Reduce Personally Identifiable Information to the minimum necessary for the proper performance of authorized organizational functions.

Chapter 19 - Exemption from Administrative Procedure

A Department may be exempt from the AP 6-7 Administrative Procedure under the following conditions:

19.1.1 Information security awareness training – a Department may request exemptions for specific employees due to resource limitations or conflicts for up to one (1) year. A Department head may request exemptions for non-employees (such as contractors or volunteers) that completed comparable training elsewhere within the past year. Exemption requests must be submitted to the EISO, and the Department Head must assume the risk.