

Records and Information Management in the Age of e-Government

You can view this presentation on Records
Management Services' website:

<https://www.nj.gov/treasury/revenue/rms/training.shtml>

Also, refer to our website for the most recent
information regarding Records Management.

<https://www.nj.gov/treasury/revenue/rms/>



Records and Information Management in the Age of e-Government

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Department of the Treasury

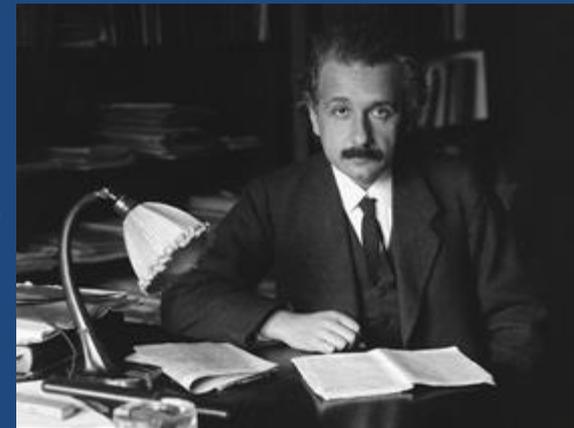
Division of Revenue and Enterprise Services

Records Management Services

Disclaimer: The content of this presentation is designed for educational and informational purposes only.

Records and Information Management in the Age of e-Government

According to Albert Einstein and the *Laws of Physics*, *nothing* can exist in a vacuum ... and Government is no exception.



Public Agencies in New Jersey consist of: State, County and Municipal Agencies; Boards, Authorities & Associations; School Districts & Colleges; Public Healthcare Facilities; etc. Traditionally, their Constituency Base were:

- Federal Agencies; Government Agencies from other States; Private Sector; Financial Institutions; the Media and the Public at Large. Interactions with these constituents usually resulted in the exchange of varying amounts of public information in hardcopy, electronic and/or digital format.

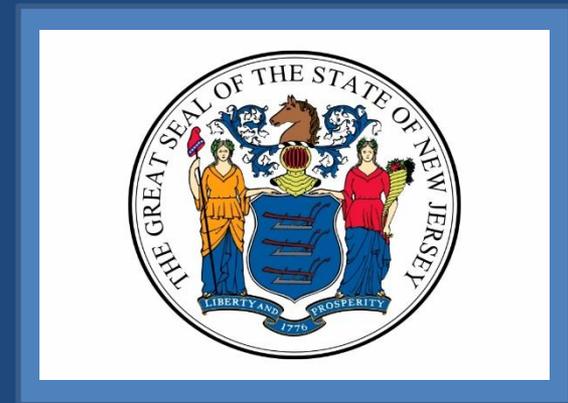
Today, Public Agencies in New Jersey have a Constituency Base that has expanded to include the International Arena resulting in a global exchange of even larger quantities of public information now being transmitted and stored via the Internet and Social Media and the Cloud, compounding the concerns for Security, Regulatory Compliance, Access, Retention, Preservation and Disposition.

Destruction of Public Records Act (PL 1953, c. 410) – The State Records Committee

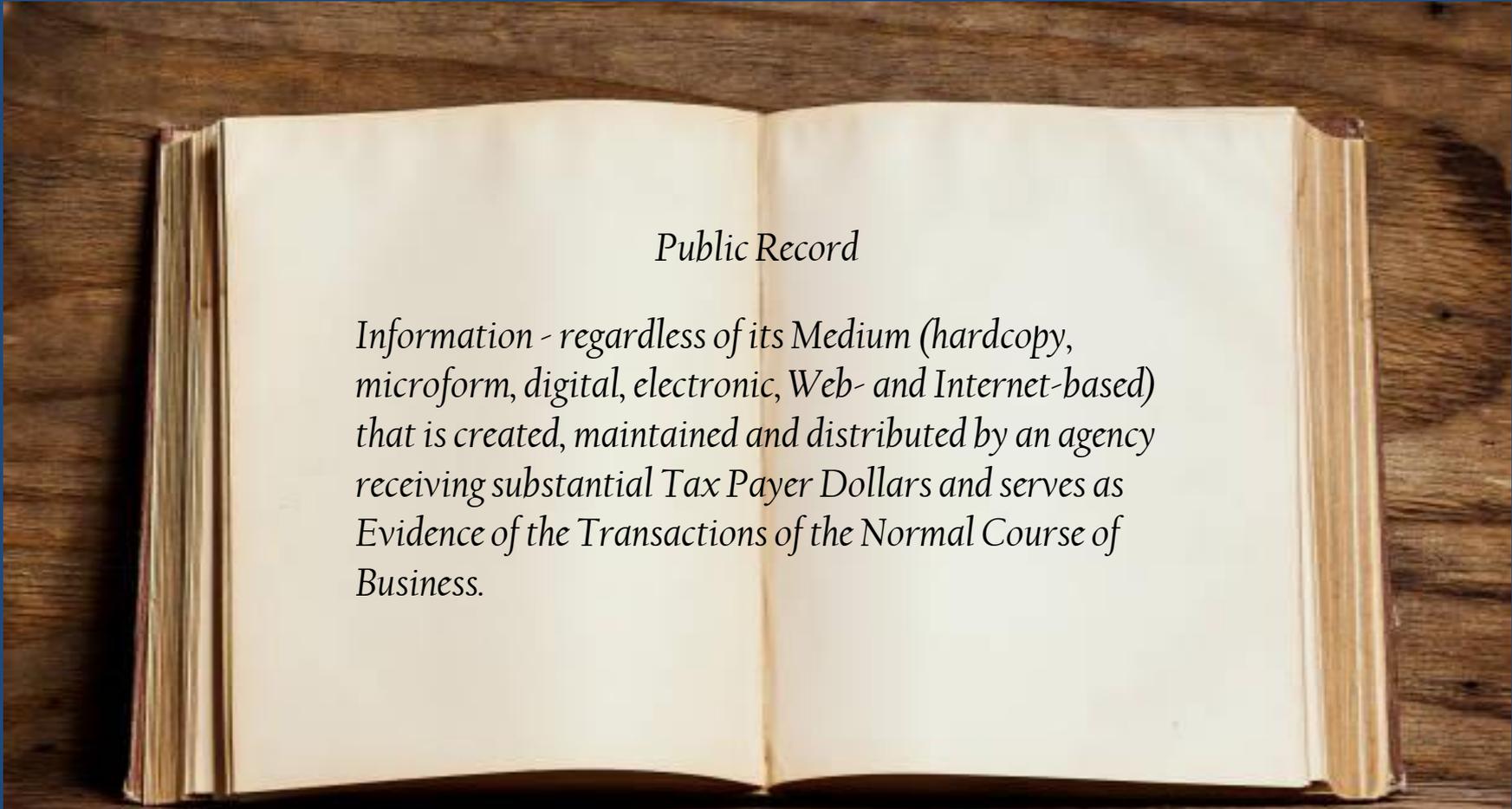
State Records Committee

The Destruction of Public Records Act (PL 1953, c. 410) created and entrusted the State Records Committee (SRC) with having *final authority* over the retention and disposition of *all* New Jersey Public Agency records. The SRC consists of representatives from:

- State Attorney General
- State Auditor
- State Treasurer
- State Archives
- Department of Community Affairs,
Local Government Services



Destruction of Public Records Act (PL 1953, c. 410) – Public Record Defined

An open book with two pages visible, resting on a wooden surface. The text is centered on the pages.

Public Record

Information - regardless of its Medium (hardcopy, microform, digital, electronic, Web- and Internet-based) that is created, maintained and distributed by an agency receiving substantial Tax Payer Dollars and serves as Evidence of the Transactions of the Normal Course of Business.

NOTE: This pertains to State, County & Municipal Agencies; Boards & Authorities; School Districts & Charter Schools; County & State Colleges/Universities & Public Healthcare Facilities.

Destruction of Public Records Act (PL 1953, c. 410) – Public Records Retention and Disposal



Records Retention and Disposition

- Records Retention Schedules must be created for all public records maintained by all New Jersey Public Agencies.
- Request and Authorization for Records Disposal must be submitted to obtain authorization *before* the Public Records of these Agencies can be disposed.

Open Public Records Act (OPRA) PL 2001, c. 404, NJSA 47:1A et seq.



In most instances, agencies were required to allow access to records under *The Right to Know Law*.

The Open Public Records Act (OPRA) PL 2001, c. 404, NJSA 47:1A et seq. replaced *The Right to Know Law* regarding public records access:

- Provides that Public Records must be made accessible to the public in *most* cases
- Established the position of Custodian of Public Record for public agency record-keepers
- Personal Financial & Legal Accountability for intentional denial of public records access

However, the degree of a record's accessibility does *not* determine whether a record is Public or Private. For example, classified military records concerning the National Defense are Public Records, even though they are *not publicly accessible* for reasons of National Security. An agency may restrict access to records due to considerations of :

- Privacy
- Confidentiality
- Security

The Government Records Council (GRC) is the Government Entity created under OPRA which:

- Responds to inquiries and complaints about OPRA from the Public and Records Custodians
- Issue public information and training about OPRA
- Issues advisory opinions on public records accessibility or exemption
- Provides mediation and resolution of disputes about public records

Open Public Records Act (OPRA) PL 2001, c. 404, NJSA 47:1A et seq. – Access



CUSTODIAN OF PUBLIC RECORD

The Municipal Clerk is cited *by law* as the Custodian of Public Record for Municipal Government. All other Custodians of Public Record are designated accordingly for State, County, Public & Charter School Districts, State Colleges & Universities, Boards & Authorities and Public Healthcare Facilities.

PUBLIC RECORDS ACCESS REQUEST FOR GOVERNMENT RECORDS

Verifies what documents have been requested & that they have been supplied within the specified time limits:

- Immediate Access – Means Immediate Access!

Budgets, Bills, Vouchers, Contracts, and Employee Salary & Overtime Information

- Seven (7) Business Days Access

Non-Immediate access records and Offsite-Stored Records must be supplied within a seven (7) Business Day time period.

If the Custodian of Public Record cannot fulfill the request within these Time Periods, a written *Extension of Time* with an explanation, must be submitted within Seven (7) Business Days to the Requestor.

Open Public Records Act (OPRA) PL 2001, c. 404, NJS 47:1A et seq. - Exemptions



OPRA Exemptions – Government Records Council (9-1-2015)

- 1) Inter-agency or intra-agency advisory, consultative or deliberative material
- 2) Legislative records.
- 3) Medical examiner records
- 4) Criminal investigatory records
- 5) Victims' records
- 6) Personal firearms records:
- 7) Trade secrets and proprietary commercial or financial information
- 8) Any record within the attorney-client privilege.
- 9) Administrative or technical information regarding computer hardware, software and networks
- 10) Emergency or security information or procedures for any buildings or facility
- 11) Security measures and surveillance techniques
- 12) Information which, if disclosed, would give an advantage to competitors or bidders.
- 13) Information generated by/on behalf of public employers/employees re: sexual harassment, grievance, collective negotiations/strategy/position.
- 14) Information which is a communication between a public agency and its insurance carrier, risk management
- 15) Information which is to be kept confidential pursuant to court order.
- 16) Certificate of honorable discharge
- 17) Personal identifying information – SSN, Credit Card Numbers, Unlisted Telephone Numbers, Driver's License Numbers,
- 18) Certain records of higher education institutions:
- 19) Biotechnology trade secrets.
- 20) Limitations to convicts
- 21) Ongoing investigations
- 22) Public defender records N.J.S.A. 47:1A-9
- 23) Upholds exemptions contained in other State/Federal Statutes/Regulations, Executive Orders/, Rules of Court, Constitution/Judicial case law.
- 24) Personnel and pension records, except specific information identified
- 25) Privacy Interest

Always consult the GRC for a complete list of OPRA Public Record Exemptions.

Open Public Records Act (OPRA) PL 2001, c. 404, NJSA 47:1A et seq. – Government Records Council

New Jersey Government Records Council



New Jersey Government Records Council

P.O. Box 819

Trenton, NJ 08625-0819

Phone: (609) 292-6830

Fax: (609) 633-6337

Toll-Free 1-(866) 850-0511

E-Mail: Government.Records@dca.nj.gov

Website: <http://www.nj.gov/grc>

Records and Information Management (RIM)



- Documents an Agency's History
- Federal & State Litigation and e-Discovery Support
- Federal & State Audit and Program Review Compliance
- Federal & State Regulatory Compliance
- Fosters OPRA Public Records Access

Records Inventory



In the event of an OPRA Request, Audit, e-Discovery, Litigation, etc. a records inventory can be invaluable - it is a complete and accurate listing of all records maintained (e.g., paper, microform, digital, Web- and Internet-based) that indicates:

- How & Where Physically Stored
- Volume
- Classification
- Retention Periods as per the Records Retention Schedule
- Disposition
- Federal & State Regulations & Codes

Records Retention – Records Retention Schedules

Mandated by the New Jersey Public Records Laws – Records Retention Schedules are a detailed listing of the records maintained by an agency and the Minimum Legal and Fiscal time periods they must be retained.

Records Retention Schedules address:

- Vital Records
- Legal, Fiscal, & Administrative Value
- Historical Records
- Confidentiality
- Records Retention
- Final Disposition

Records Retention - ARTEMIS



Records Retention and Disposition Management System (ARTEMIS)
Division of Revenue and Enterprise Services
Records Management Services

ARTEMIS enables users to:

- Search - General & Agency Records Retention Schedules,
- Create Electronic Records Disposal Requests & Check Status - Pending, Approved, Denied,
- Produce Authorized Records Disposal Requests for OPRA Requests, and
- Create Reports - Records Retention & Disposal.

Records Retention – ARTEMIS Online Records Retention Schedule



Records Retention Schedule

Artemis
RECORDS RETENTION AND DISPOSITION MANAGEMENT SYSTEM

Home | My Profile | Contact Us | Help | FAQ | Training Video

Disposition Management | **Retention Schedule** | System Management | Reports

Treasury - Pensions & Benefits
NJ - 5821100 | LOGOUT

View Retention Schedule

Organization: S - State Agency Agency: 5821110 - Treasury - Supplemental Annuity Collective Trust (SACT)
 Division: -N/A Bureau: -N/A
 Schedule Number: 002 Status: Published Date Approved: -N/A

Agency Representative Name: -N/A Job Title: -N/A Phone: -N/A Ext: -N/A

Record Series Details

Record Series #	Record Series Number: 0019-0000	Section Header Record: No	Status: Active
0019-0000	<p>Title: Quarterly Report Of Pension Contributions</p> <p>Description: Quarterly report of projected liability for program members of a reporting unit for the current quarter. The reports pertain to the PERS, PFRS, and TPAF programs.</p> <p>Group Name: -N/A</p> <p>Superseded: -N/A</p> <p>Permanent Record: No</p> <p>Total Retention: 3 Years</p> <p>Additional Info (Retention): -N/A</p> <p>Minimum AT Agency: 3 Years before moving to Records Center</p> <p>Additional Info (Agency): -N/A</p> <p>Final Disposition: Destroy</p> <p>Archival Review Required: No Alternate Media Recommended: No Audit Verification Required: No</p> <p>Confidential: -N/A Vital Record: No</p> <p>Citations: -N/A</p> <p>Agency Representative Name: -N/A Job Title: -N/A Phone: -N/A Ext: -N/A</p>		

Show All Record Series Back to Search Results Print

Records Retention – Records Retention Schedule Report Generated in ARTEMIS

Department of the Treasury, Division of Revenue and Enterprise Services, Records Management Services

Records Retention and Disposition Schedule		Agency: S821110	Schedule: 002	Page #: 1 of 4
Department:	Treasury - Supplemental Annuity Collective Trust (SACT)	Agency Representative:		
Division:		Title:		
Bureau:		Phone #:		

SCHEDULE APPROVAL: Unless in litigation, the records covered by this schedule, upon expiration of their retention periods, will be deemed to have no continuing value to the State of New Jersey and will be disposed of as indicated in accordance with the law and regulations of the State Records Committee. This schedule will become effective on the date approved by the State Records Committee.

Status	Last Updated Date/Time	Approved Date	Effective Date
Published	3/18/2015 3:56 PM		

Record Series #	Record Title and Description	Audit	Alternate Media	Archival Review	Vital Record	Confidential	Retention Policy		Disposition	Citation
							Total Retention Period	Minimum Period in Agency		
0001-0000	Authorization of Disbursement --- Form authorizes the disbursement of checks from the SACT section.						7 Years	7 Years	Destroy	
0002-0000	Bank Record File --- Contains: acknowledgements, deposit slips, reconciliations, and bank statements.						7 Years	7 Years	Destroy	
0003-0000	Cash Disbursements Journal - Manual Input --- Contains: payment totals, check dates, and reason for refunds.						7 Years	7 Years	Destroy	
0004-0000	Cash Disbursement List --- List of cash disbursements for various programs types (i.e., retirements, withdrawals, deaths). Serves as a cross-reference of terminations for supplemental annuity cases.						7 Years	7 Years	Destroy	
0005-0000	Cash Receipt File --- Contains cash receipts documents and a listing of contributions from the various pension funds, utilized for monthly journal entries.						7 Years	7 Years	Destroy	



Records Disposal – Regulatory Compliance

In accordance with the New Jersey Public Records Laws, a *Request & Authorization for Records Disposal* must be submitted to Records Management Services for legal, authorization for disposal *before* records can be destroyed. The authorization:

- Removes OPRA, Legal, and Fiscal Liabilities
- Cost Effective
- Safety
- Identifies a Confidential and Archival Records for Preservation

Records Disposal - ARTEMIS



Records Retention and Disposition Management System (ARTEMIS)

- Search and View Records Retention Schedules and Disposition time periods.
- Create, View, Update, and Submit Disposition Requests.
- Update Disposition Status for agency



Records Disposal Request Detail

Artemis RECORDS RETENTION AND DISPOSITION MANAGEMENT SYSTEM

Home | My Profile | Contact Us | Help | FAQ | Training Video

Board of Education
High Bridge Borough School District- jones - M700000 | LOGOUT

Disposition Management | Retention Schedule | System Management | Reports

Create Disposition Request Request Id : N/A Status : Work In Progress

*Agency: M700105 - Financial

*Schedule #: M700105-001-Financial

Limit Record Series to: those not requiring archival review

*Request Date: 06 / 24 / 2019

Requester First Name: Christopher Requester Last Name: Jones Requester Title:

Custodian Name: --Select-- Custodian First Name: Custodian Last Name:

Microfilm Present: Digital Image Present: Damaged Records Certificate:

Location: Comments:

Is this request for the Disposition of Emails? Yes No ← Email Disposal Request

Would you like to sign this Disposition Request Electronically? Yes No

Does this Disposition Request require a Local Agency Auditor's Signature? Yes No

Disposition Request Details

S.#	Record Series #	Title	Retention Period	From (MM/yyyy)	To (MM/yyyy)	Dispose After (MM/yyyy)	Medium Type	Volume (Cu. ft)
1	0002 - 0000	Annual Financial File (Copy)	7 Years				Paper	.00

Add New Row Add Multiple Rows

Requester Approver Auditor eSignature History

Upload Disposition Form / Supporting Documents Save Submit Delete eSign / Reroute Print

Developed by Sunrise Systems Inc. Artemis (RELEASE) (3.2.1.11)

DISPOSITION: For E-mail to be legally destroyed, an email-defined ARTEMIS Request and Authorization for Records Disposal must be submitted to for authorization before disposal can occur.

Records Disposal – ARTEMIS Request & Authorization

Online Records Disposition Request

Request Id: 34274 **Status:** Authorized
Agency: S821112 - Treasury-Pensions & Benefits-Financial Services **Image Type:** Disposition Request Packet

This Disposition Request is selected for Electronic Signature. Disposition Form upload is not required. However, you may upload any supporting documents.

Status:

1

2

3

Department of the Treasury, Division of Revenue and Enterprise Services, Records Management Services

REQUEST AND AUTHORIZATION FOR RECORDS DISPOSAL		Instructions: This request must be submitted prior to the disposition of any public records. Items 1. through 14 must be completed in full and Items 15.A and 15.B signed for fiscal records. NOTE: In the event of an unexpected scanning failure, until the problem is resolved, the form may be sent to: DISPOSAL REQUESTS, Department of the Treasury, Division of Revenue and Enterprise Services, Records Management Services, P.O. Box 661, Trenton, N.J. 08625-0661. Questions, call long E-30 7-ans		1. Requesting Agency Name and Address Treasury - Pensions & Benefits 50 West State Street PO Box 295 Trenton NJ 08625	
2. Request Id/Date 34274 3/8/2016		3. Requested By (Electronically Signed by)		4. Request Approved By (Electronically Signed by)	
5. Records Manager		6. Archival Review Not Required		7. Early Records Disposal (Due to Document Conversion or Damage) Microfilm Digital Image Damaged Records Certificate	
8. Comments - Document Conversion or Damage		Authorization is hereby requested for the disposal of the following public records in accordance with New Jersey P.L. 1953, c. 410 as amended. It is further certified that the record series listed herein have exceeded their respective retention periods and are not involved in any action, such as a pending OPRA request, litigation, or anticipated litigation as per the Federal Rules of Civil Procedure, December 2006, and are not required for a present or a future audit.			
9. Record Series #	10. Record Series Title	11. Retention Period	12. Inclusive Dates		13. Dispose After
1 0001-0000	Annual Statement Workpapers	10 Years	From (MM/YYYY)	To (MM/YYYY)	14. Volume (in Cubic Feet)
			01/2004	12/2005	1.00

For Records Management Services Use Only :		Total Volume :		1.00
15. Audit Verification		16. Authorization		17. Disposition
15.A Auditor (Electronically Signed by) <i>William D. Robinson</i>	16.A Authorization Date	16.B Authorization Number		
15.B Date	16.C Authorizing Signature, Records Management Services <i>[Signature]</i>		17.A Verification Signature	17.B Date

Verification Date: 03/08/2016 By: William Robinson Authorization Date: 03/08/2016 Authorization Number: 525729 Page 2 of 3 Form No. CR-AA-0005 (rev. 09-11-2012) Page 1 of 1 Run Date: 3/9/2016 8:21:44 AM

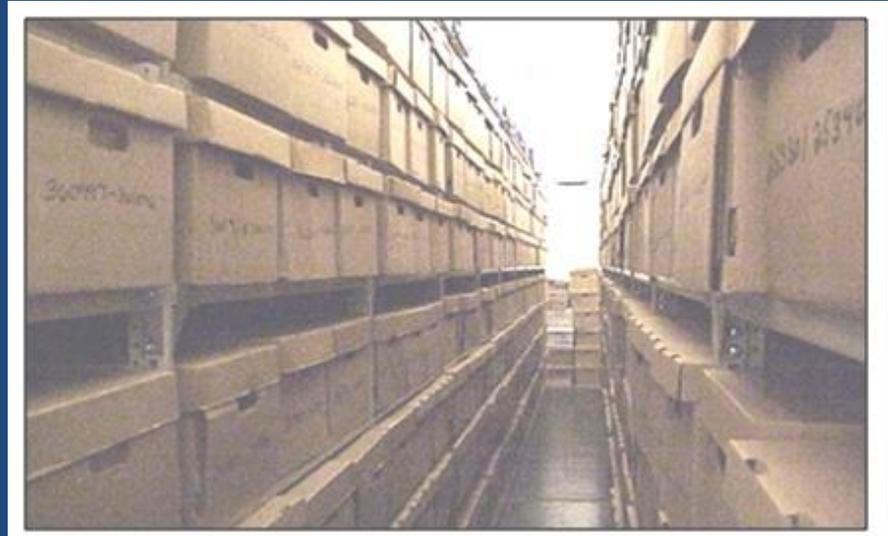
Records Preservation & Conservation

- Preservation: preventative maintenance of Active, Inactive, Permanent and Historical Records
- Conservation: “corrective surgery” to records - should be performed by qualified Document Conservationists.



Records Storage - Classifications

- Active Records
On-site storage
- Inactive Records
Off-site storage in Government
or Commercial Storage
- Historical Records
A Depository Agreement
should be established for the
protection of Historical
Records.



Records Storage – Offsite Facility



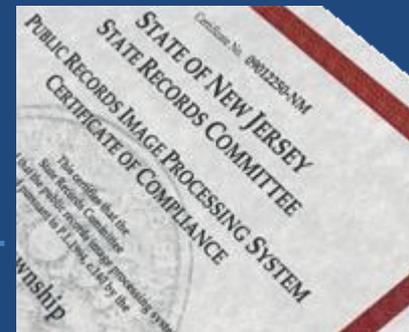
Records Transfer Request					
1. Agency ID	2. Schedule ID	3. Records Series #	4. records serial title		5. Date Completed
5748508	004	0006 0001	0006 Case Files - closed		8/1/2018
6. Department State		7. Division NJ State Archives		8. Bureau Reference Services	
9. Person to Contact Karen Kruger-Melton		10. title Business Files		11. telephone number 609-792-1977 ext 337	
12. Location of Records Bldg. 7, Suite 4, Room 777		13. Access Restriction Confidential		14. Statutory Authority	
			DISPOSITION CODES		
			B-Boycote A-Archives M-Mixed D-Destroy		
17. Storage Agency			18. Disposition		19. Agency
Box Number	10. Description of Box Contents (Year, Range)		Date	Code	Box Number
00701	Robinson - closed 12/2014		1/2090	D	122
00702	Hartmeyer - closed 12/2014		1/2090	D	124
00703	Harkin - closed 12/2014		1/2090	D	126
00704	Katz - closed 12/2014		1/2090	D	128
00705	Spelinski - closed 12/2014		1/2090	D	130
00706	Prager - closed 12/2014		1/2090	D	132
00707	Epstein - closed 12/2014		1/2090	D	134
00708	Dermatin - closed 12/2014		1/2090	D	144
00709	Marek - closed 12/2014		1/2090	D	146
19. Received By Karen A. Perry		20. Title Records Analyst 1		21. Date Received 8/27/2018	
22. Remarks Do not destroy until Jan. 1, 2021.					

A *Records Transfer Request Form* must be used to document the transaction and the *Records Retention Schedule* is used to determine the storage time periods - otherwise unnecessary storage fees could be incurred if records are stored beyond their legal retention period and could be destroyed.

Records and Information Management (RIM) Alternatives



Records and Information Management (RIM) Alternatives – Imaging



As per PL 1994, c. 140, the State of New Jersey allows for the replacement of hardcopy public records with digital images. The State Records Committee and Records Management Services issue initial imaging system certification to an agency, for an in-house or outsourced imaging application, and annual imaging system certification renewals.

The basic documents required for obtaining Imaging Certification from the State Records Committee and Records Management Services include:

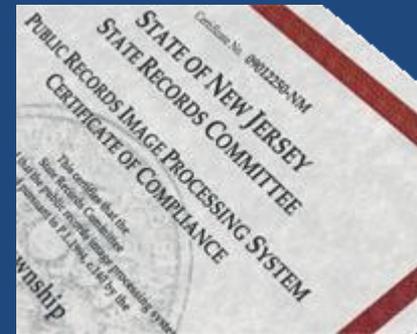
➤ *Image Processing System Registration Application* includes required documents such as:

- Scanning Policy and Procedures
- Disaster Prevention and Recovery
- Data Migration Path
- Feasibility Study
- RFP/RFI/RFB
- Vendor Detail
- Imaged Records Series List

➤ *Annual Review/Amendment* includes required documents such as:

- Scanning Policy and Procedures
- Disaster Prevention and Recovery
- Data Migration Path
- Imaged Records Series List

Records and Information Management (RIM) Alternatives – Imaging



State of New Jersey
Division of Revenue and Enterprise Services (DORES)
Records Management Services - RMS

IMAGE PROCESSING SYSTEM REGISTRATION APPLICATION

(N.J.A.C. 15:3-5et seq.) BEFORE completing this application, please read the [Instructions](#).

AGENCY NAME: _____

This is an application for:

- In-house Imaging System
 Service Bureau Imaging
 Special Document Imaging Services (DORES services)

APPLICATION PACKAGE CHECKLIST

- Review Form
 Feasibility Study and or RFP/RFI/RFB
 Data Migration Report (replacement s

Imaging Registration Annual Review / Amendment Form

Mailing: PO Box 661, Trenton, NJ 08625-0661
 Location: 2300 Stuyvesant Avenue, Trenton, NJ 08625
 609-530-3200

ANNUAL REVIEW AMENDMENT ANNUAL

AGENCY NAME : _____

CERTIFICATE #: _____

Primary Contact Name: _____

Address: _____

Phone/fax/email: _____

Imaging Registration Imaged Records Series List

Mailing: PO Box 661, Trenton, NJ 08625-0661
 Location: 2300 Stuyvesant Avenue, Trenton, NJ 08625
 609-530-3200



Complete this form and email to your Records Analyst.

AGENCY NAME: _____

CERTIFICATION NUMBER: _____

RETENTION SCHEDULE AGENCY NUMBER: _____

SCHEDULE NUMBER: _____

Record Series Number	Record Series Name	Retention Time	Inclusive Years	Back-up? (paper, microfilm, or migration path)

Electronic Records Storage

Fixed (Stand Alone) Storage

- Disk backup – quick access and can hold large amounts of data, can be used for disaster recovery if the server is placed offsite.

Virtual Storage

• Cloud computing – Internet-based of shared resources, software, and data/information for immediate access. Based on a common server site, inexpensive and mobile, low maintenance and Internet-based and does not have to be installed per PC. The cloud structure consists of:

- Client – Hardware or software dependent upon the cloud to function
- Application – Software downloaded via the Internet to a desktop/laptop
- Platform – Cloud computing structure that houses the applications/software
- Infrastructure – Complete, packaged virtual platform environment per desktop/laptop
- Server – Operating system from simple to complex per client

Due to the fluid and fragile nature of virtual cloud storage and its data, precautions must be taken when dealing with Database Data, Metadata, Portable Data, Text Messages, and Email.



Email



e-mail

–noun 1. a system for sending messages from one individual to another via telecommunications links between computers or terminals.

2. a message sent by e-mail: Send me an e-mail on the idea.

–verb (used with object) 3. to send a message by e-mail.
Also, E-mail, email.

Email (including content, metadata, and attachments) are created, sent, or received electronically. They are Public Records with the same Records Retention, Disposition, Access, Intellectual Property, and Legal Rules of Evidence and e-Discovery concerns. This also includes Email, Instant Messaging, Blogs, Wikis, Pod Casts, Social Media, etc.

- Email is a Public Record.
- Email is Discoverable.
- Email may be Accessed under OPRA.
- Email may be Disclosed in a Court of Law.
- Email may be Disclosed through e-Discovery.
- Email must be placed on a Records Retention Schedule.
- Email may *not* be destroyed without ARTEMIS authorization.



Email



Email is:

- Email is a Public Record.
- Email is Discoverable.
- Email may be Accessed under OPRA.
- Email may be Disclosed in a Court of Law.
- Email may be Disclosed through e-Discovery.
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Social Media

Social Media: interactive communication via web-based and mobile technology.

- IT IS: global, immediate and accessible.
- IT IS NOT: Private. It is PUBLIC and directives should be established regarding content - language, subject matter, etc.
- It can be used a portal for Cyberattack. Also, it can be altered, which presents a real concern for an agency to release public information.
- Because of this, Social Media is subject to the same Records Retention, Disposition, Access; Intellectual Property; OPRA, and Legal Rules of Evidence and e-Discovery concerns like e-mail, instant messaging, blogs, wikis, pod casts, metadata, or website content.
- An agency should consult with Records Management Services for guidance in developing a *Social Media Policy*. Social Media is similar to digitally-borne or website records. On your own website, you have control and can print hardcopy and protect it. With Social Media, you cannot control it and it can be altered or removed .
- A Disclaimer should accompany the data being placed on a Social Media site and hardcopy should be printed as an audit trail in the event of an OPRA Request, e-Discovery, litigation, etc.



The World Wide Web and the Internet of Things



The World Wide Web and the Internet of Things

The World Wide Web via the Internet of Things (IoT) or the Internet, is how government operates with other government agencies, business and industry, finance, healthcare, education, etc. The Web is comprised of three (3) different strata:

Surface Web

The unencrypted part of the Internet accessible by government, education, business and industry, finance, healthcare, the general public, etc. through the use of conventional search engines, such as Google .

Deep Web

The part of Internet that cannot be reached by conventional search engines. Unauthorized access or hacking may be employed to obtain the information in the Deep Web such as, Medical Records, Student Records, Government Documents, etc.

Dark Web

The encrypted part of the Internet that refers to alleged questionable content that is not easily reached and requires the multi-layered Tor software for access.

The World Wide Web and the Internet of Things - Perspectives



Due to its ever-changing content and structure, an agency should maintain documentation regarding their website. These records reflect hardware, software, metadata and content and their respective areas of concern:

- IT Perspective - reflects website creation, maintenance, and growth
- Intellectual Property & Historical Perspective - digitally-born documents if not printed to hardcopy could be lost forever
- Legal Perspective - records needed for Litigation, Legal Rules of Evidence, and e-Discovery
- Financial Perspective - records needed for a Local, State and/or Federal Audit
- Records Management & Access Perspective - verify retention & disposition in the event of an OPRA Request

The World Wide Web and the Internet of Things - Records



Records associated with website development and maintenance include:

- Agency Website/Internet Access Log – *Internal and External Users*
- Agency Website Creation and Update File – Content
- Agency Website Creation and Update File – Operation
Contains: graphic files, source code, operation and application software documents, user logs, statistical data, records verifying copyrighted documentation, website governance policies and procedures, input documents, testing reports, screen copies, and supporting documentation.
- Agency Website Creation and Update File – Structure
Contains: website diagnostics, website mapping data, source code, testing reports, screen copies, configuration data, and supporting documentation.

Note: Upon the revision or discontinuance of the website, for preservation purposes it is advised that hardcopy be maintained for agency-generated and supported documents that were solely created and maintained in an electronic format.

Security - Information Technology



Government uses Information Technology (IT), Networking, Mobile Computing, Telecommunications, Email, the Cloud, and Social Media in its normal course of business of receiving, processing & distributing data and information.

While this creates Operational Efficiencies, it can also create the potential for Internal & External Operational Vulnerabilities such as:

- Disrupt or shutdown operations
- Severe Legal, Intellectual, Political, Financial and Security ramifications
- Alter, corrupt or destroy information
- Physical harm
- Exploitation to ruin an Agency's Credibility and Reputation

Security – Types of Cyber Attack

TYPES OF CYBER ATTACK -----



UNINTENTIONAL: INTERNAL and/or EXTERNAL ACTIONS

Accidental access or release of information or its premature, unauthorized or inadvertent disposal.

INTENTIONAL, DELIBERATE: INTERNAL and/or EXTERNAL ACTIONS

Advance persistent threats, Zero Day threats, overt/covert cyber hacking from a foreign national with deliberate intent to influence and or disrupt a government activity or action, man-made disasters, social engineering, cyberespionage/cyberspies, cyber-intrusions, cyberthreats, cyberterrorists, cyberthieves, cyberwarriors, cyberhacktivists, internal and external sabotage, data mining, data theft and modification, root enablers, Brute-Force attack, Doxing, Point of Sale (POS) malware, browser attack, WannaCry Ransomware, botnets, botnet bitcoin sales via the Dark Web, Exhaustive Master Key Search attack, ransomware, overlay attack, drop box malware, spyware, network eavesdropping, data modification, identity falsification, password attacks, denial of service attacks, man-in-the-middle monitoring attack, botnets; zero-day threat, compromised key attack, keylogger, exploits, exploit kits, backdoor, sniffer attack, application software layer attack, unpatched software attack, trojans, worms, phishing, spearphishing, whaling, advanced persistent threats, root malware, malware, jailbreak, drive by downloads, typosquatting, wiper, Denial of Service (DoS), Distributed Denial of Service (DDoS), spoofing, lax or delayed software patches, malvertising, rogue software, cross-platform malware, mobile malware, metamorphic and polymorphic malware, pineapple, surveillanceware, hacking and identity theft with questionable, CEO Fraud/BEC, threatening sources (gadflies, competitors, third parties, activists, hackers, criminals, terrorists), Fake News, etc.

Security – IT Safeguard Measures



IT Measures must be taken to safeguard informational and areas susceptible to Cyber Attack: Web/Internet applications; desktops; mobile devices; the Cloud; Network-connected devices; Communication lines; Hardware, System and Application Software; Metadata and Data; Records and Reports; Email; Social Media; Internet- and Web-based documents, etc.

These basic IT Measures should include:

- Routine backups and migration of Legacy Information and Records,
- Update antiquated hardware and system software with: built-in Security, Firewall/System/Network Segmentation, Cyber-Tracking, Data Loss Prevention, Anti-Virus, Spam, Malware and Ransomware,
- Develop and routinely update data encryption policies, employee passwords and facility passwords and access level codes,
- Regulate that all government computing including mobile, must be conducted on specific government-issued devices that only agency-authorized apps are to be downloaded on agency computing and mobile devices,
- Identify Agency Data and System vulnerable access points - including email, websites and social media, and
- Implement Intrusion Prevention and Detection Systems.

Vital Records

Records essential to meet operational responsibilities under emergency or disaster conditions.
An Agency needs to ask:

“What records are absolutely crucial to operations and can they be recreated from hardcopy , digital, electronic or microfilmed backups if the originals are lost in a disaster?”

Conduct a Risk Analysis by evaluating potential hazards to records:

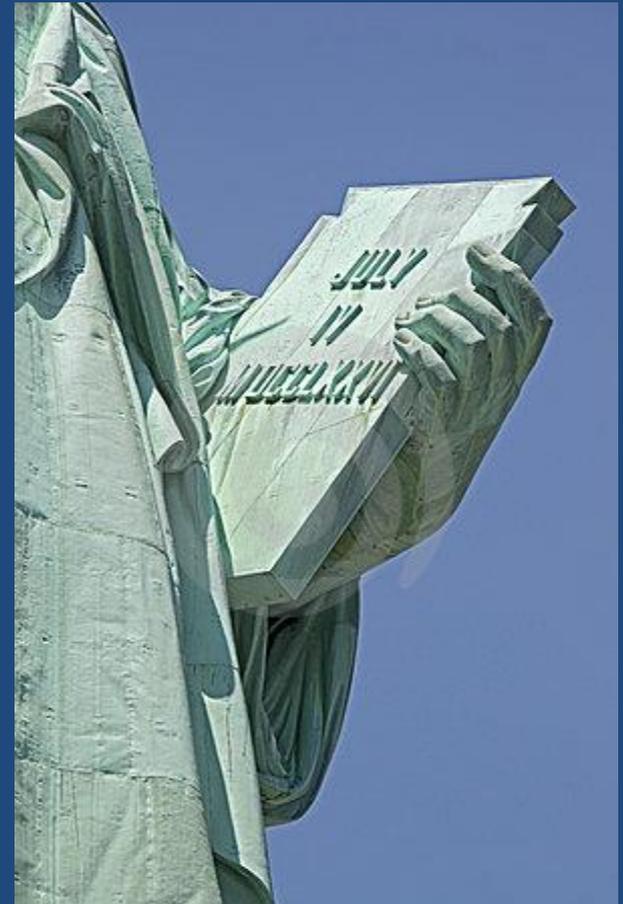
- Natural & Environmental
- Human inflicted
- Facility related

Determine records protection methods:

- Appropriate protection measures
- Measures may vary by type of record
- Inclusive of paper-based, microform and electronic

Identify Vital Records:

- For emergency operations
- To resume normal business
- Comply with Legal and Fiscal obligations



Disaster Prevention and Recovery & Business Continuity

Procedures and operations before and after a disaster, that identify essential personnel, equipment, and alternate space if a closing of a facility is deemed necessary in order to resume Information Technology services to an agency. A *Disaster Prevention and Recovery Plan* and a *Business Continuity Plan* are the key elements to safe and successful operations.

Disaster Prevention & Recovery

- Mitigates Loss of Records -Water is the single most significant culprit in a records disaster
- Protects Vital and Historical Records
- Protects Electronic Records, Hardware, & Software

Business Continuity

- To resume operations quickly and efficiently
- To ensure the normal flow of business

Seaside Heights, NJ – October 2012
Seaside Heights, NJ – September 2013



Disaster Prevention and Recovery & Business Continuity – Information Technology

The Objective –

To mitigate the amount of damage and associated costs (i.e., lost revenue, wages, labor, employee morale, customer goodwill, marketing opportunities; incurred bank fees and legal penalties; and bad publicity from Planned and/or Unplanned Downtime) and to protect information and resume information technology services to agencies after a disaster.



Planned Downtime –

Is scheduled and recognized throughout an agency. Batch-related jobs and IT routine procedures such as hardware and software security, backups, testing, upgrades, installation and de-installation are common and staff are informed and measures are taken to store and protect data and information agency-wide before the activity.

Unplanned Downtime –

Can have serious impact on a Government Agency. Downtime is related to: hardware and/or software malfunction, failure and obsolescence due to lack of proper installation, maintenance and upgrades; external security attack or breach of a system or network; computer viruses; sabotage; cloud data crash and loss; data corruption; power outages; theft; human error; lack of training and tools; security violations and man-made and natural environmental disasters. The consequences of downtime are: financial hardship; lost revenue, wages and labor; low employee morale and customer goodwill; lost marketing opportunities; incurred bank fees and legal penalties; bad publicity; loss of productivity; data and information inaccessibility and/or inaccuracy and the inability to provide real-time, immediate response to constituents.

Contains –

Disaster Prevention and Recovery Plan, Standards, and Guidelines; Security Policy and Procedures; Client Network Installation and De-installation data; and supporting documentation. The Disaster Prevention and Recover Plan is to be used in conjunction with an agency's Business Continuity Plan.

Disaster Prevention and Recovery & Business Continuity – The Plan



What to do before something goes wrong.

Establish

- *Disaster Prevention and Recovery and Business Continuity Plans.*
- Vendors Lists for Disaster Recovery Services and Supplies, System Hardware and Software and Electronic Disaster.
- Disaster Recovery Team - Records Management, IT and Custodian of Public Record .
- Agency Chain of Command.
- Data Center Hot & Cold Sites Identify Information Technology Staff.
- Alternate Operations Site for Agency Staff, PCs, Records.

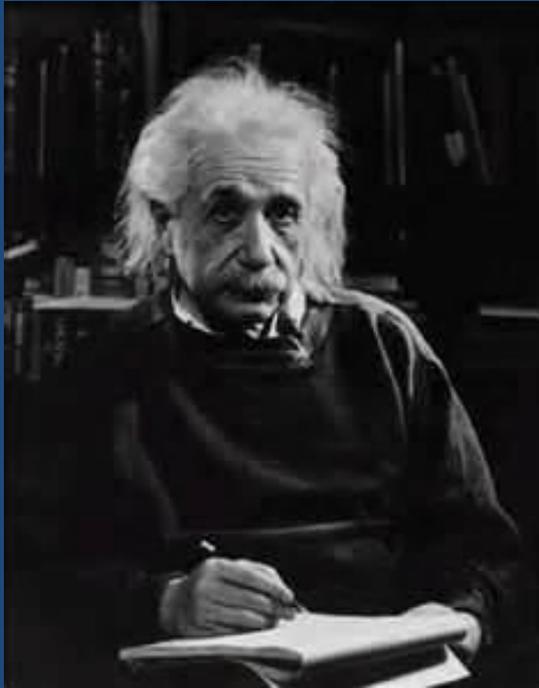
Identify

- Hardware, Software (models and versions), and Data.
- Agency Vital Records.
- Potential Recovery Costs – Hardware, Software, Supplies, etc. Necessary Information Technology Supplies.
- Necessary Emergency Supplies.

Retain

- Disaster Prevention and Recovery and Business Continuity Plans - copies in safe and accessible Offsite Locations.

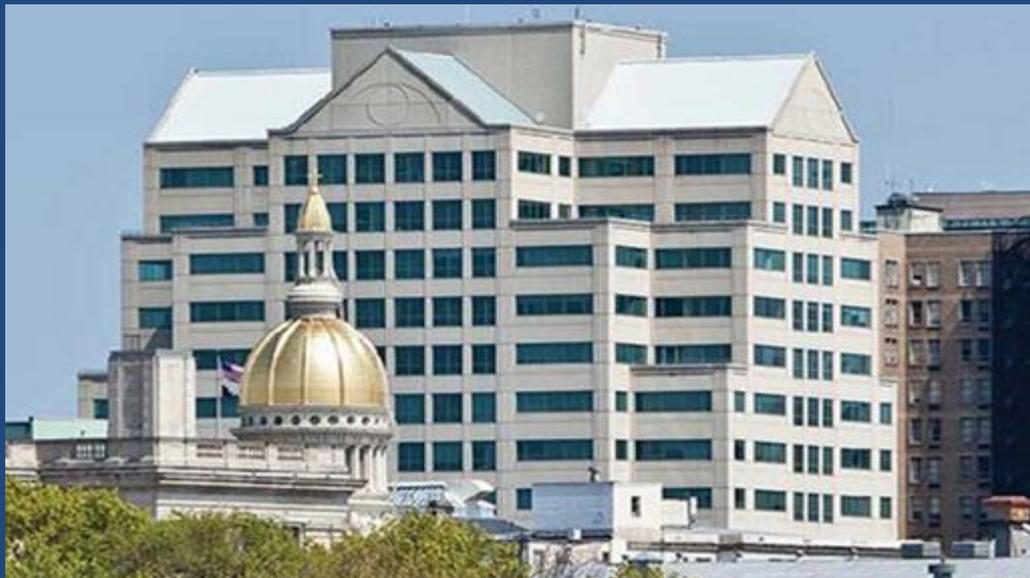
A Final Thought, With Some Common Sense...



*“It has become
appallingly obvious that
our technology
has exceeded our
humanity.”*

Albert Einstein

Department of the Treasury
Division of Revenue and Enterprise Services
Records Management Services



RECORDS MANAGEMENT SERVICES



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Thank you.