

No. IT-027	Policy Name: Data Imaging and Long-Term Maintenance Standards
Effective Date: 7-1-2011 Last Revised Date: 7-4-2014	Citywide Policy _ IT Policy _ IT Procedure <u>X</u>
Approved By: IT Director	

Data Imaging and Long-Term Maintenance Standards

Policy/Standard Reference:

Library of Virginia [Document Imaging Guidelines](#)

ISO - [Document Management - Electronic document file format for long term preservation - Part 1: Use of PDF 1.4 \(PDF/A-1\)](#).

Standard:

Several industry standards surround digital imaging. These standards topics include:

Imaged format

Copies of Originals as Evidence

Quality Control Standards

Technology Standards including: risk, security and long-term maintenance of electronic formats

Imaged Format

The City’s Document Management System allows for the use of a wide-variety of document formats. In order to accomplish numerous goals including day-to-day use by City staff, data integrity and long-term maintenance of electronic images two formats are recommended for long-term use and maintenance. Those being: TIFF and PDF/A.

Other formats such as Microsoft Office Applications may be used freely for non-permanent records and records with a retention period of less than 10-years.

Commonly used file formats are referenced in the [Library of Virginia’s Digital Imaging Guidelines](#).

Copies of Originals as Evidence

The [Code of Virginia, Section 8.01-391](#) allows for public records to be imaged, or reformatted, and maintained electronically. In addition, the imaged copy may be used as the record copy and the paper original can be destroyed.

In order to accomplish this, the Library of Virginia requires that a quality control process be in place “to certify that the imaged records are visually inspected for legibility and integrity, as well as an indexing system to allow for easy access and retrieval. If the records are considered vital a security copy of the images, indexing system and software application must be stored off-site.”

Lastly, original records that have a permanent retention period must be offered to the LVA prior

to being destroyed.

Quality Control Standards

Quality control is conducted at various stages during the scanning process, and quality assurance must be conducted before the original documents are destroyed.

Quality control criteria includes verification of the:

- image and index format compliance
- overall image legibility
- detail legibility capture and completeness of detail
- dimensional accuracy compared with the original
- scanner-generated speckle
- image skew, rotation, and cropping
- index data accuracy
- density of solid black areas and completeness of overall image area

Quality Assurance

The quality control criteria must be used when performing quality assurance. The City is responsible for verifying the validity and accuracy of the overall delivered product and accepting that produce within a specified time-frame. The recommended time allotted for this activity is 45-days.

The following options are available for departments when performing quality assurance on scanned documents:

Random sample: For documents with permanent retention where the paper will or must be retained **OR** for documents that do not fall under any of the Library of Virginia's retention schedule, this is an excellent method to assure quality. By selecting 1-5% of the total scanned documents and performing quality assurance on each page, the department may make a determination that the totality of scanned documents meet the quality control criteria.

Verify All: For documents with any specified retention period under any of the Library of Virginia's retention schedules, the LVA requires a 100% verification of original documents to scanned images when paper will be destroyed.

Technology Standards

Technology standards, records management standards and the City's Information Technology Department policies and procedures must be taken into consideration to allow for any risk mitigation and migration plans.

Risks/Security:

There are known risks associated with the recommended file formats, TIFF and PDF/A. Those risks specifically involve the ability to alter the image.

In order to mitigate this risk, the City's IT Department:

Controls access to City servers;

Audits the Document Management System for success and failure of edited images;

Requires individuals with Adobe software to lock PDF/A master documents prior to addition to the Document Management System for all city business records that are retained based on LVA retention requirements.

Performs end user and department awareness and education on the proper use of imaging software and the importance of controlling the use of software that could be used to alter image formats.

Migration:

The Records Management Program requires that electronic records with a retention period of ten (10) years or more be taken into consideration with long-term storage and strategy plans. This is done to reduce format obsolescence and ensure that retrieval of records from their original formats continues.