

**Distributed Custodial
Frameworks for
Archival Preservation**
From Frameworks to “Real” Work:
Preservation Efforts
at Tufts University

Eliot Wilczek
University Records Manager

April 2, 2009

DigCCurp 2009
Digital Curation
Practices, Promise
and Prospects

Tufts
UNIVERSITY

Digital Collections
and Archives

University of North Carolina
at Chapel Hill

Introduction

Basic Facts Tufts University
Tufts Digital Library
Digital Collections and Archives

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Tufts Digital Library

Digital Collections and Archives

Frameworks to Actions

Community

OAIS Reference Model

Producer-Archive Interface Methodology

Abstract Standard

Tufts

Fedora and the Preservation of University

Record

TAPER

Policies & Procedures

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Policies & Procedures

Partnerships

Tufts and DCAPE

Basic Facts | Tufts Digital Library

System Fedora 2.2.4 (3.1 | *Summer 2009*)

Volume 95,000+ Objects

Object Types Texts (*PDF & TEI*)
Images
EAD finding guides
Datasets
Image Books
Oral Histories
Collection Objects

Tufts History

Learning Objects

Research Objects

University Electronic Records (*Dark Instance | 2009*)

Delivery Environments Digital Library, Artifact, VUE

Basic Facts | Digital Collections and Archives

Partnership & Staffing

Digital Collections and Archives

6 FT Staff + 1 FT Project Staff

2 spend significant time on Fedora

5 spend some time on Fedora

UIT/Academic Technology

18 FT Staff

5 spend some time on Fedora

UIT/University Systems Group

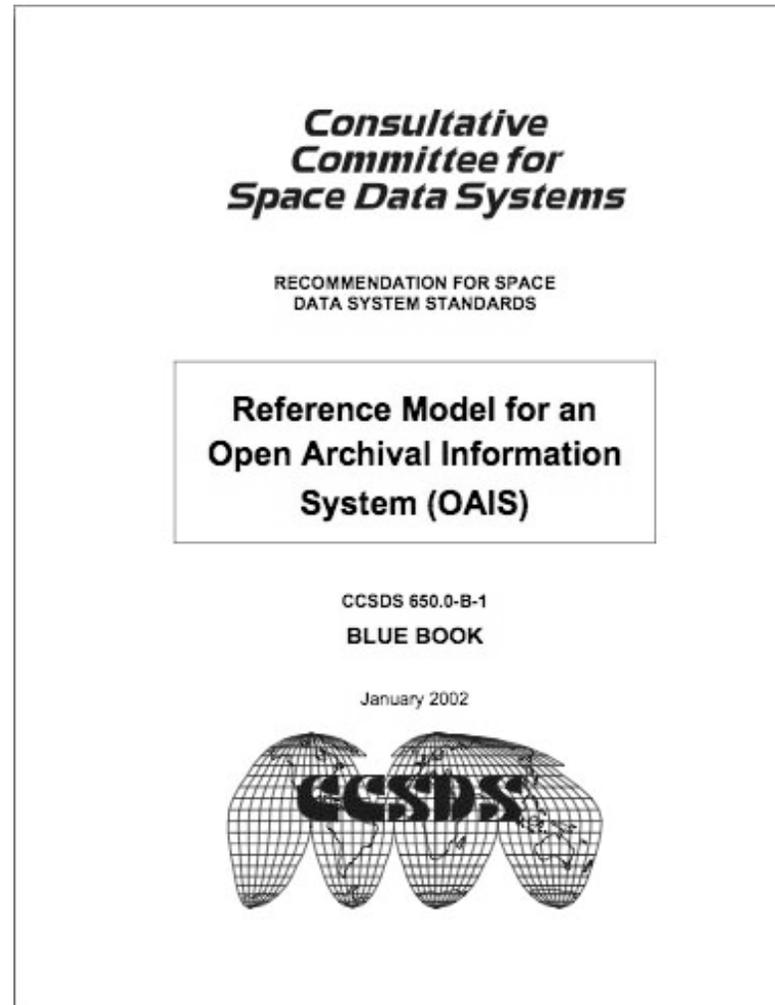
System & hardware support

Mandate

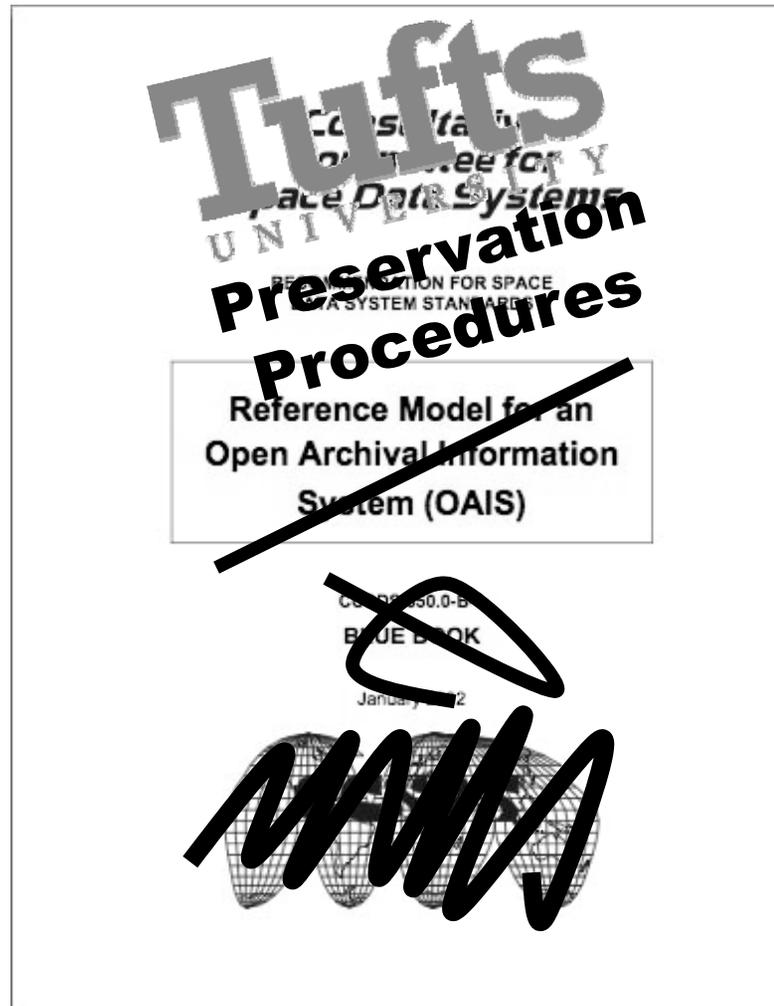
University Records Policy

<http://dca.tufts.edu/?pid=19>

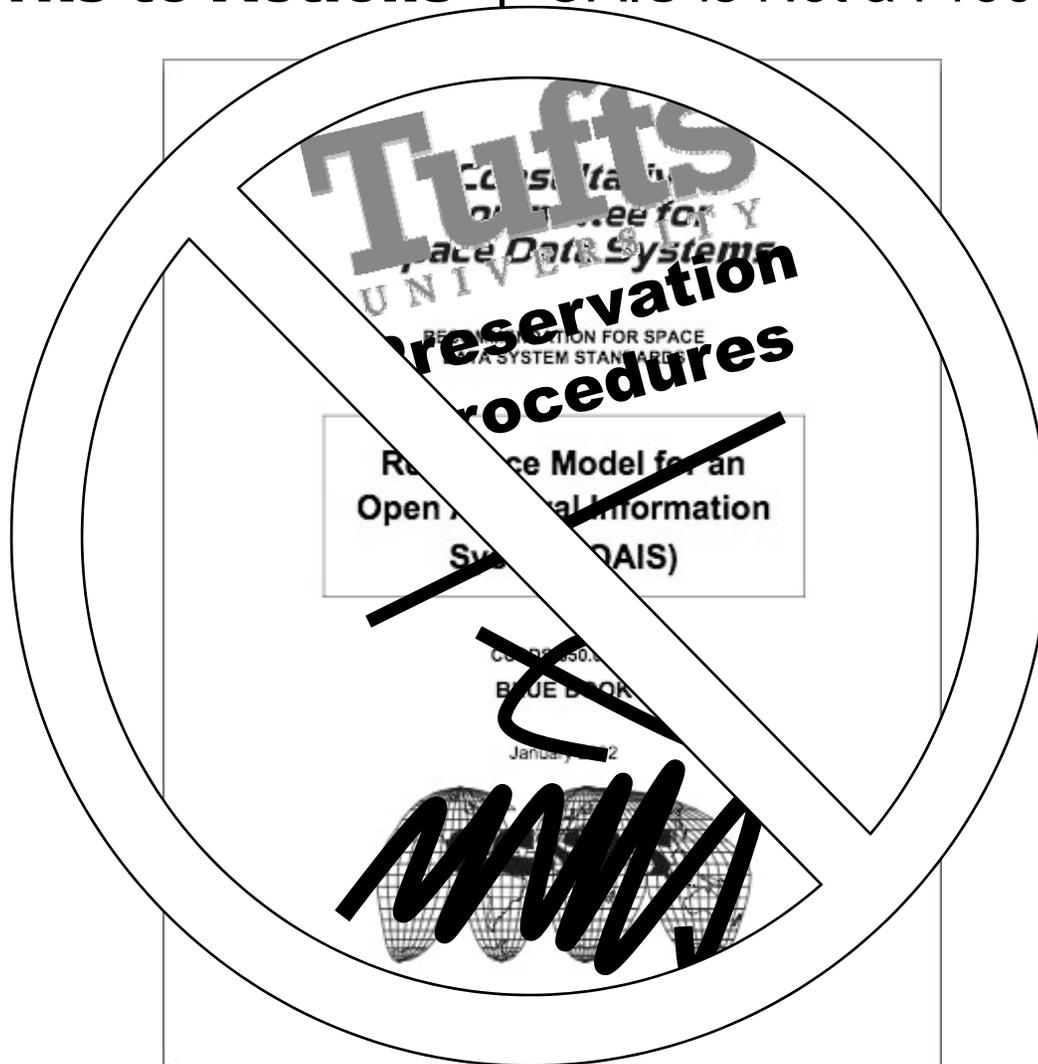
Frameworks to Actions | OAIS is Not a Procedure Manual



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From Frameworks to “Real” Work

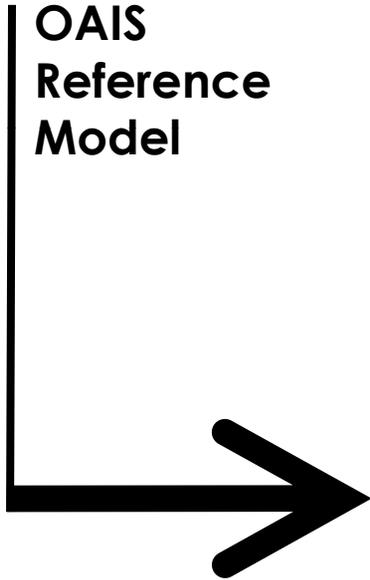


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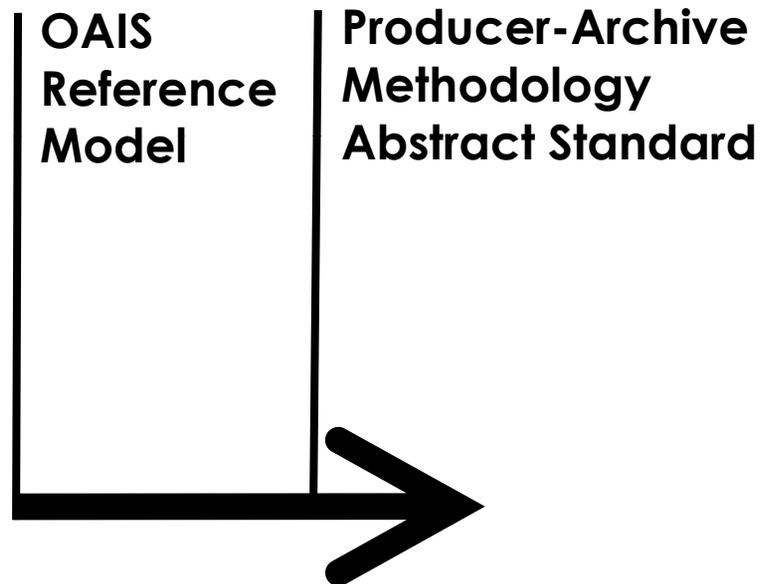
Frameworks to Actions | Knowledge to Preservation

OAIS
Reference
Model



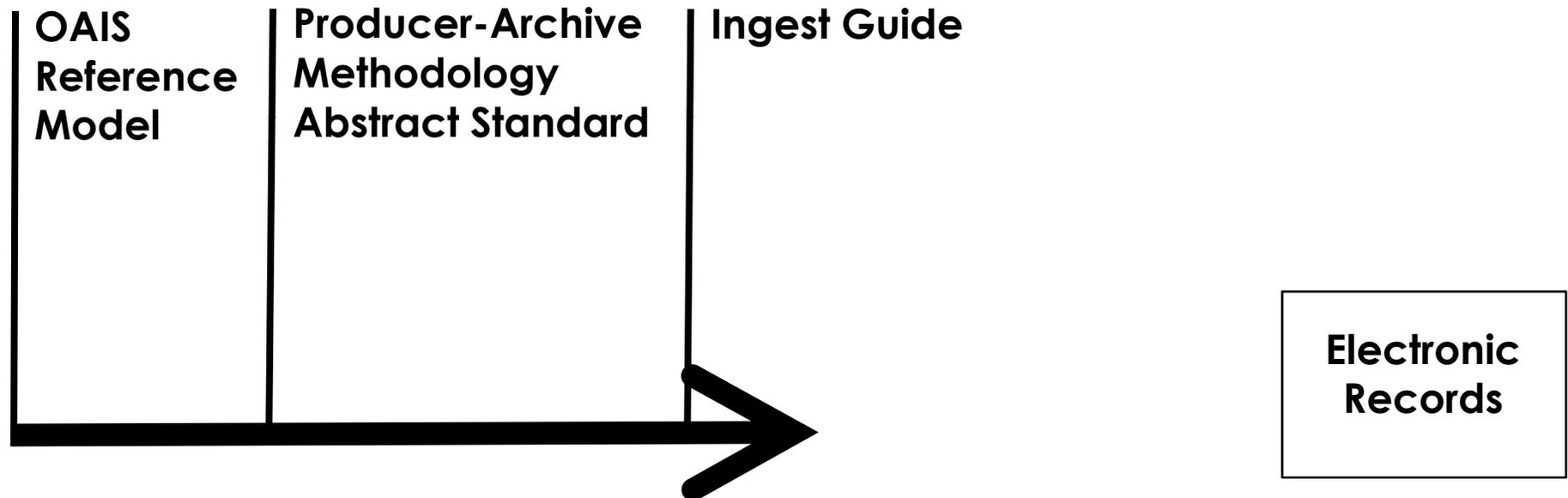
Electronic
Records

Frameworks to Actions | Knowledge to Preservation

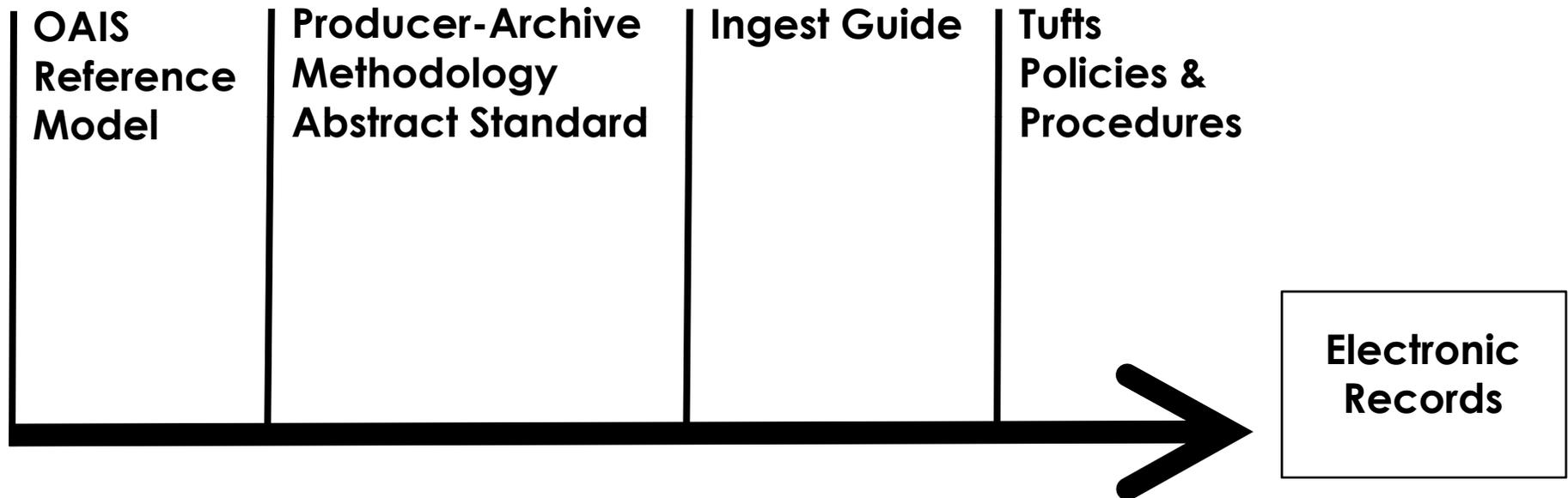


**Electronic
Records**

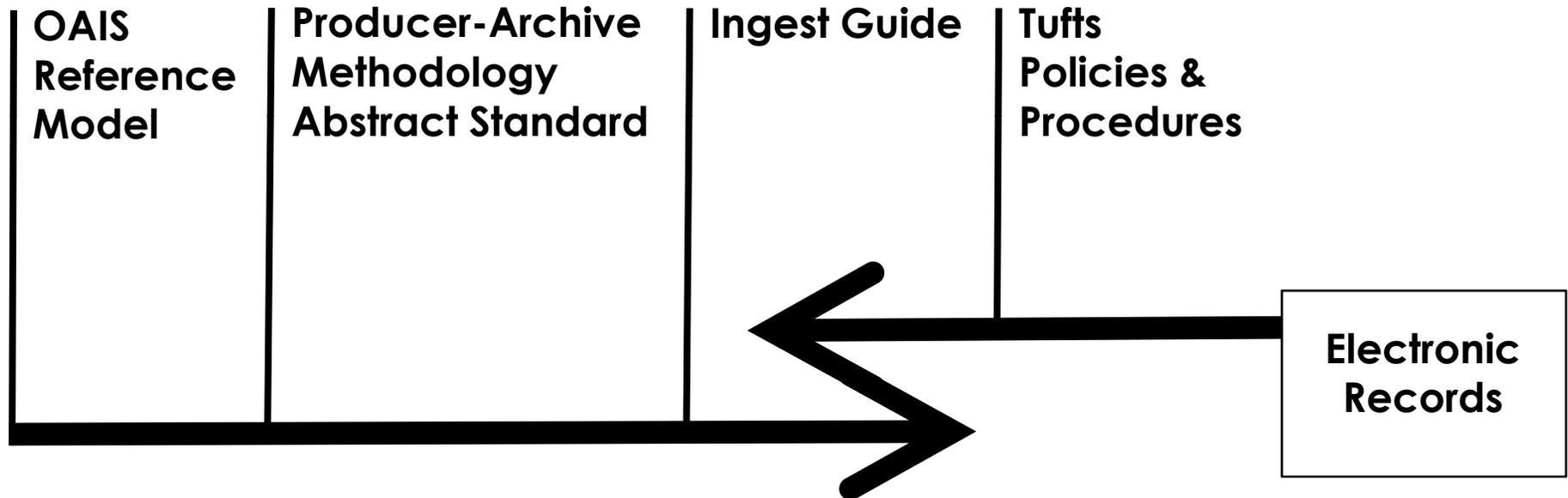
Frameworks to Actions | Knowledge to Preservation



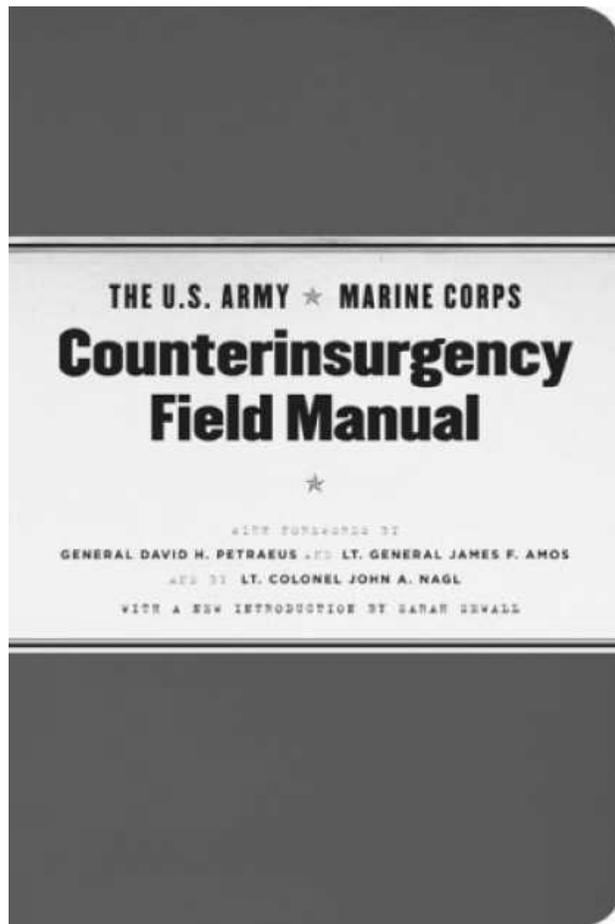
Frameworks to Actions | Knowledge to Preservation



Frameworks to Actions | All Preservation is Local



Frameworks to Actions | All Preservation is Local



The U.S. Army Marine Corps
Counterinsurgency Field Manual:
U.S. Army Field Manual No. 3-24:
Marine Corps Warfighting Publication No. 3-33.5

From Frameworks to “Real” Work

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Frameworks to Actions | All Preservation is Local



U.S. Army photo by
Staff Sgt. Adam Mancini
Zabul, Afghanistan
March 5, 2009

Army.mil photostream
<http://www.flickr.com/photos/soldiersmediacenter/3342067638/>

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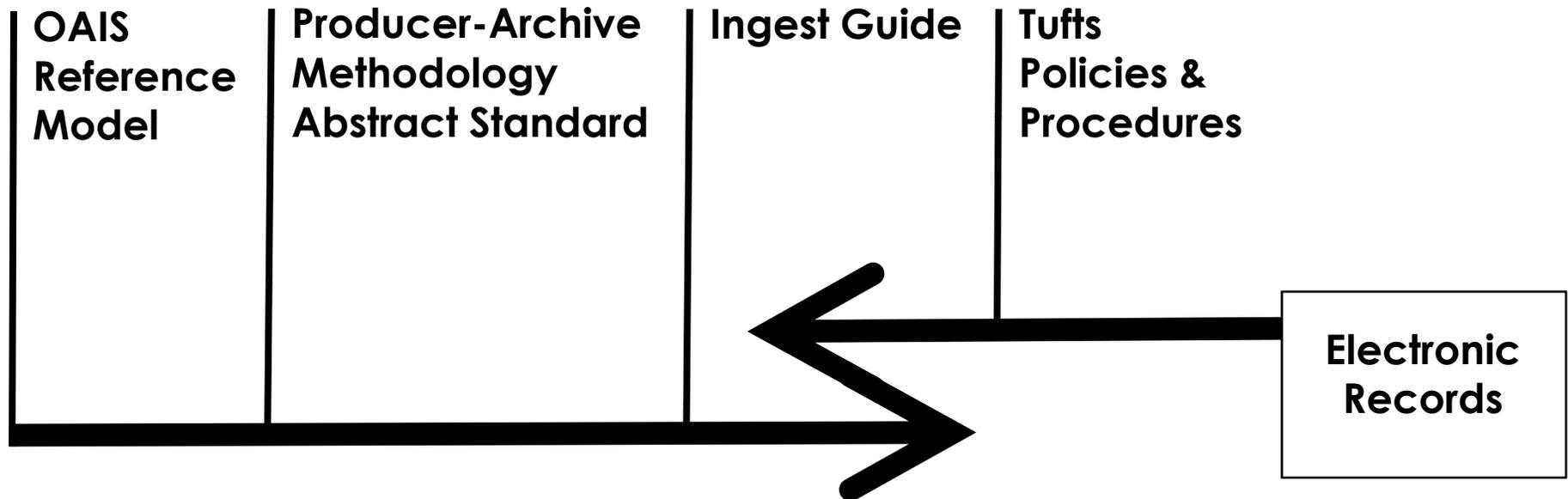
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U.S. Army photo by
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Frameworks to Actions | Tufts Policies and Procedures



Frameworks to Actions | Tufts Policies and Procedures

Tufts	AUO Access, Use, and Outreach
Policies &	ACC Accessioning
Procedures	AAM Authority and Mission
	COL Collection
<i>229 Total</i>	DAT Data Entry
<i>15 Functions</i>	DOC Digital Object Creation
	DBT Doing Business at Tufts
	ING Ingest
	MAS Machines and Servers
	NNV New Nation Votes
	PRO Processing
	RMT Records Management
	TDR TDR and TDL
	WEB Websites
	WRP Workplace

Frameworks to Actions | Tufts Policies and Procedures

Tufts Policies & Procedures	AUO Access, Use, and Outreach	
	ACC Accessioning	ACC-001 Accessioning University Records
	AAM Authority and Mission	ACC-002 Accessioning Manuscript Collections
	COL Collection	ACC-003 Accessioning Publications
	DAT Data Entry	ACC-004 Undergraduate Honors Thesis Submission Guidelines
	DOC Digital Object Creation	ACC-005 Paper Stabilization
	DBT Doing Business at Tufts	ACC-006 Analog Media Stabilization
	ING Ingest	ACC-007 Digital Media Stabilization
	MAS Machines and Servers	ACC-008 Running a Checksum
	NNV New Nation Votes	ACC-009 Digital Network Stabilization
	PRO Processing	ACC-010 Choosing Barcode Colors
	RMT Records Management	ACC-011 Creating Electronic Dropboxes
	TDR TDR and TDL	ACC-012 Verifying a Checksum
	WEB Websites	ACC-013 Exporting a Wiki
	WRP Workplace	ACC-014 Creating PDF-A files

From Frameworks to "Real" Work



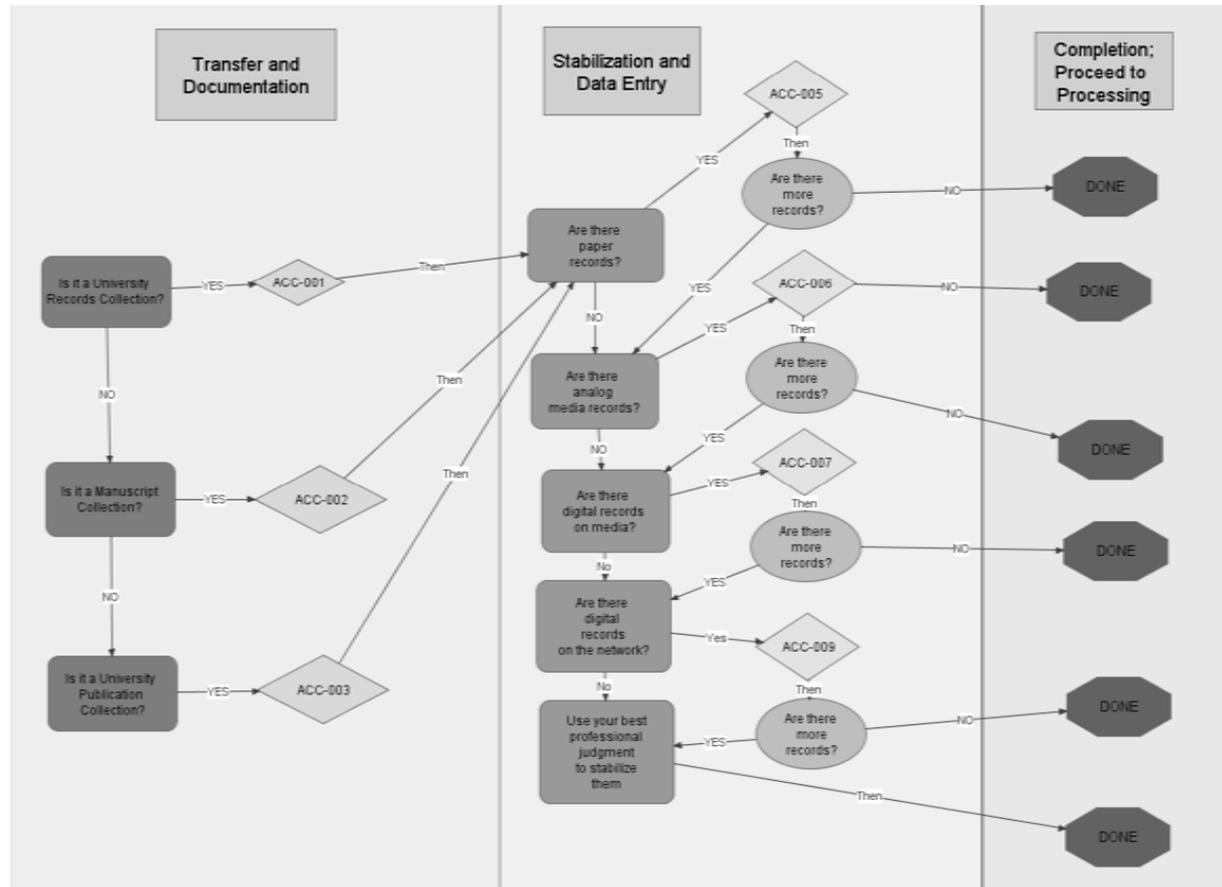
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Digital Collections and Archives

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Frameworks to Actions | Tufts Policies and Procedures

WFL-002 Accession Materials

The Accession Process In the door to basic stabilization



Partnerships | Preservation, Not So Easy

**Trustworthy
Repository**

- AUO** Access, Use, and Outreach
- ACC** Accessioning
- AAM** Authority and Mission
- COL** Collection
- DAT** Data Entry
- DOC** Digital Object Creation
- DBT** Doing Business at Tufts
- ING** Ingest
- MAS** Machines and Servers
- NNV** New Nation Votes
- PRO** Processing
- RMT** Records Management
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- WEB** Websites
- WRP** Workplace

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More Procedures

Transformation: More
Formats

Format Validation

Object Monitoring

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Transformation: More Formats

Format Validation

Object Monitoring

Storage & Management Environment

Robust and Secure

Monitoring

Preservation Formats &

Designated Communities

Stable Funding Model & Institutional Commitment

Sufficient and Well-trained Staff

Partnerships | Preservation, Not So Easy

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Scalable

Partnerships | Preservation, Not So Local

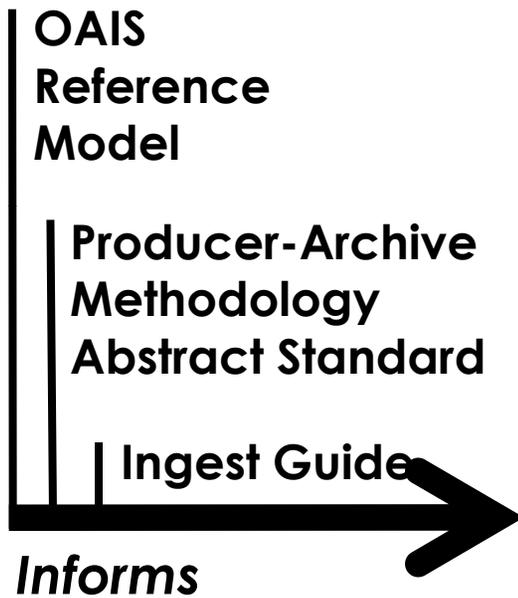
**Trustworthy
Repository** Leverage
 External Tools and
 Services

Partnerships | Preservation, Not So Local

DCAPE *Provides*

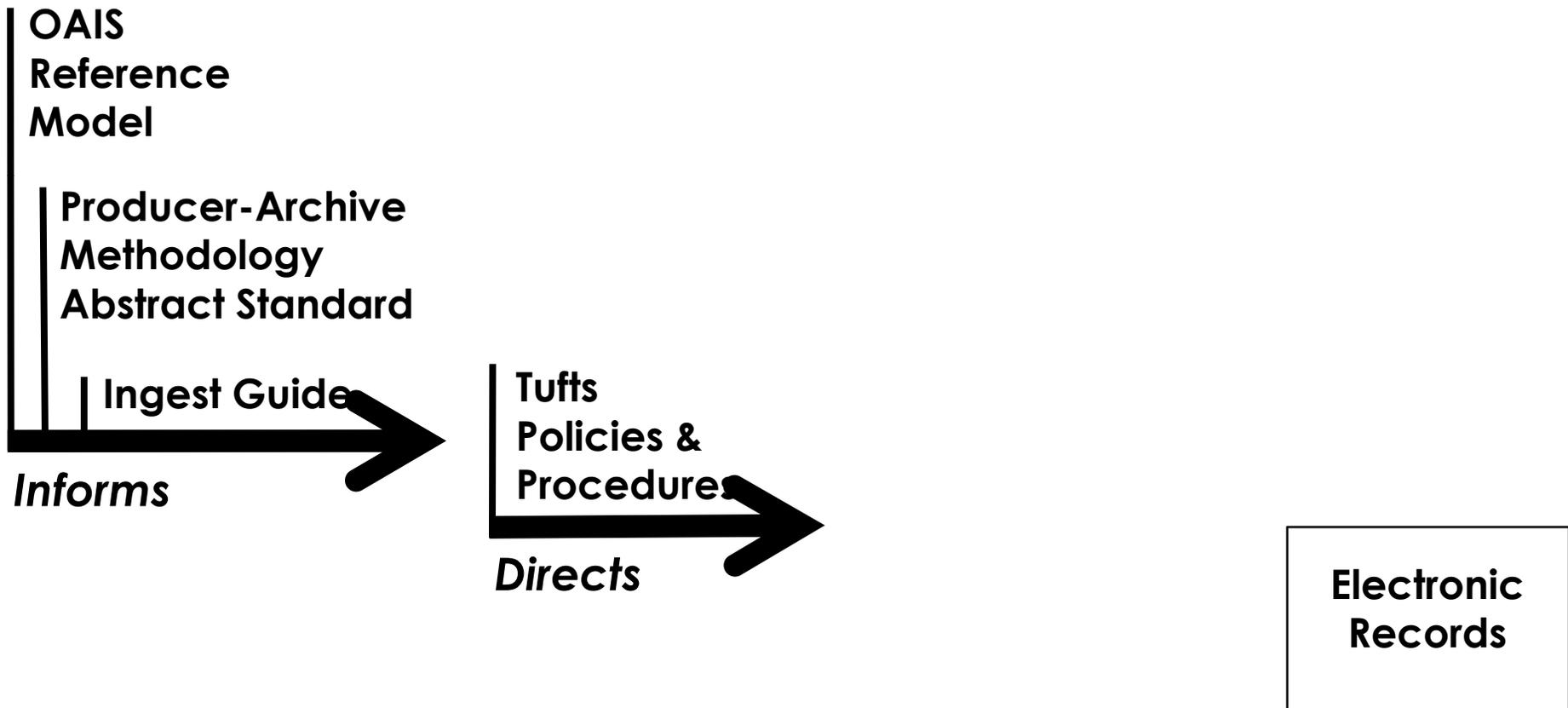
- Rule-based data management systems
- Commodity storage systems
- Sustainable preservation services

Partnerships | Preservation, Not So Local

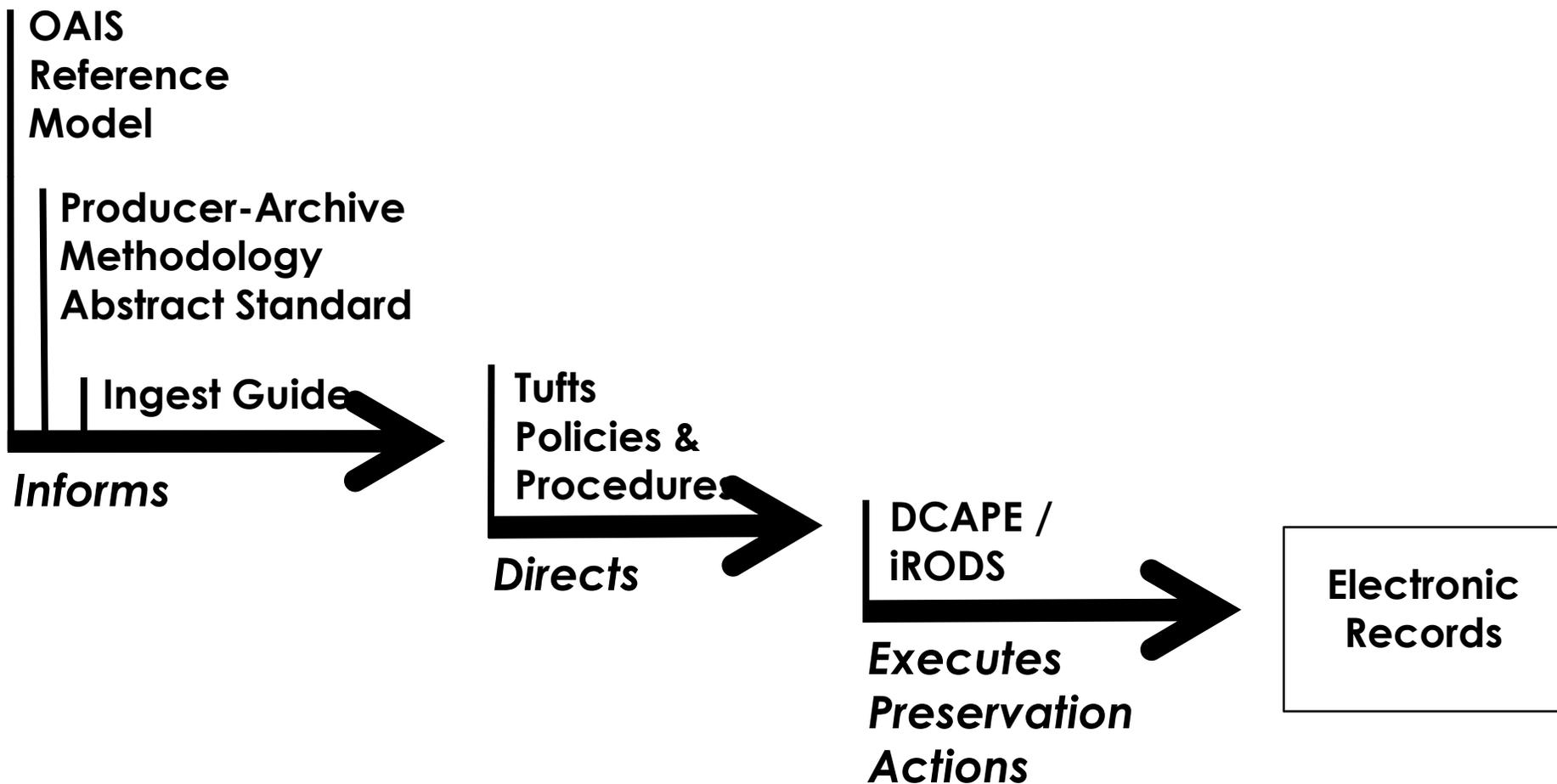


**Electronic
Records**

Partnerships | Preservation, Not So Local



Partnerships | Preservation, Not So Local



Partnerships | Preservation, Not So Local

DCAPE Scalable Turn
& **iRODS**

Partnerships | Preservation, Not So Local

DCAPE Scalable Turn
& iRODS Preservation Multiplier

Partnerships | Preservation, Not So Local

DCAPE Scalable Turn
& **iRODS**

Preservation Multiplier

Tufts Articulate local decisions in a community language

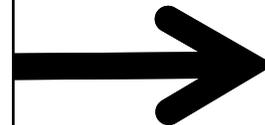
Partnerships | Preservation, Not So Local

DCAPE Scalable Turn
& **iRODS**

Preservation Multiplier

Tufts Articulate local decisions in a community language

ACC-007 Digital Media Stabilization
6. Create Checksum



msiDataObjChecksum

Grant Projects | Support

Fedora and the Preservation of University Records

<http://dca.tufts.edu/?pid=49>

TAPER Tufts Accessioning Program for Electronic Records

<http://dca.lib.tufts.edu/features/nhprc/index.html>

DCAPE Distributed Custodial Archival Preservation Environments

<http://www.dcape.org/>

NHPRC

DOCUMENTING DEMOCRACY



Title Village Elders

Photographer Staff Sgt. Adam Mancini

Publisher Army.mil

Description U.S. Army 1st Lt. Jared Tomberlin, second from left, Bravo Company, 1st Battalion, 4th Infantry Regiment, U.S. Army Europe, speaks with village elders during a key leader engagement in a town near Forward Operating Base Lane, Zabul, Afghanistan

Date March 5, 2009

Identifier

<http://www.flickr.com/photos/soldiersmediacenter/3342067638/>

Places Zabul, Afghanistan



Title Mclloy Fluid Network Analyzer analog computer, 1958

Publisher Digital Collections and Archives, Tufts University

Identifier tufts:central:dca:UA136:UA136.002.DO.00140

Organizations Department of Mechanical Engineering

Places Bray Laboratory

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