

May 25, 2017



Introducing ROSA P :

The National Transportation Library's New Digital Repository

Mary Moulton & Leighton Christiansen, US DOT National Transportation Library

<http://ntl.bts.gov/networking/roundtable.html>

Audio call-in number: 877-336-1274; Access code: 5759713

In this TLR, staff from the National Transportation Library (NTL) introduce their new digital repository, the Repository and Open Science Access Portal, affectionately known as ROSA P.

ROSA P will replace the existing NTL repository. But before that can happen, the NTL staff would like show off the look and feel of ROSA P to the transportation library community. Plus, the NTL staff invites users of ROSA P to participate in testing the new software during this soft launch phase. Details on how to become a volunteer user-tester will be given during the TLR.



Introducing *ROSA P*

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Mary Moulton
Leighton Christiansen
US DOT National Transportation Library

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About NTL

Established in 1998, we provide access to:

- Digital collections
- Data services
- Reference and research services
- Networking



Transportation Equity Act for the 21st Century (1998)

“(e) NATIONAL TRANSPORTATION LIBRARY.—

“(1) IN GENERAL.—The Director shall establish and maintain a National Transportation Library, which shall contain a collection of statistical and other information needed for transportation decisionmaking at the Federal, State, and local levels.

“(2) ACCESS.—The Director shall facilitate and promote access to the Library, with the goal of improving the ability of the transportation community to share information and the ability of the Director to make statistics readily accessible under subsection (c)(5).

“(3) COORDINATION.—The Director shall work with other transportation libraries and other transportation information providers, both public and private, to achieve the goal specified in paragraph (2).



MAP-21 & NTL (2012)

- National Transportation Library functions:
 - Services to DOT, other Federal agencies, public and private organizations, and individuals within the U.S. and internationally
 - Set specific requirements for the NTL Director's position
 - Acquire, preserve and manage transportation information and information products and services for use by DOT, other Federal agencies, and the public**
 - Provide reference and research services
 - Central repository for DOT research results and technical publications
 - Central clearinghouse for transportation data and information of the Federal Government**
 - Serve as coordinator and policy lead for transportation information access
 - Coordinate among and cooperate with multiple external parties to develop a "comprehensive transportation information and knowledge network" to support the I-XI list [information required of BTS at 49 USC 6302((b)(3)(B)(vi)]
 - Publicize, facilitate and promote access to information products and services
 - Receives contract, grant and agreement authority to support these goals



Public Access: The Vital Role of NTL

- **February 22, 2013** – The White House Office of Science and Technology Policy released a memorandum requiring all Executive Departments and Agencies spending more than \$100 million/year on R&D to ensure public access to ***peer-reviewed publications and digital datasets*** arising from ***federally-funded scientific research***

More information:

https://www.whitehouse.gov/sites/default/files/microsites/ostp/ostp_public_access_memo_2013.pdf

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF SCIENCE AND TECHNOLOGY POLICY
WASHINGTON, D.C. 20502

February 22, 2013

MEMORANDUM FOR THE HEADS OF EXECUTIVE DEPARTMENTS AND AGENCIES

FROM: John P. Holdren *JPH*
Director

SUBJECT: Increasing Access to the Results of Federally Funded Scientific Research

I. Policy Principles

The Administration is committed to ensuring that, to the greatest extent and with the fewest constraints possible and consistent with law and the objectives set out below, the direct results of federally funded scientific research are made available to and useful for the public, industry, and the scientific community. Such results include peer-reviewed publications and digital data.

Scientific research supported by the Federal Government catalyzes innovative breakthroughs that drive our economy. The results of that research become the grist for new insights and are assets for progress in areas such as health, energy, the environment, agriculture, and national security.

Access to digital data sets resulting from federally funded research allows companies to focus resources and efforts on understanding and exploiting discoveries. For example, open weather data underpins the forecasting industry, and making genome sequences publicly available has

NTL Digital Repository and Services

- Digital Repository
 - Purpose: serve as central clearinghouse and archive for public access transportation information
 - 50,000+ items
 - Special features: access to specialized collections and integration of USDOT repositories in our platform
 - Volpe Reports
 - Directory of Transportation Data Sources
 - NHTSA Behavioral Safety
 - ITS JPO Electronic Library
 - Services: digitization activities, preservation & ensuring perpetual access; permanent URLs, links incorporated into TRID records
- NTL Digital Repository:
<http://ntlsearch.bts.gov/repository/index.do>
- ROSA-P: <https://rosap.ntl.bts.gov/>



NTL Digital Repository Migration

Current

- Homegrown OAI-PMH compliant repository (Open Archives Initiative Protocol for Metadata Harvesting)
- In-house hardware
- Modified Dublin Core metadata
- Indexed by popular search services Google and Bing
- Self governance using OAIS model

ROSA P

- Open source platform
 - CDC Stacks platform (Islandora/Drupal/Fedora)
- Cloud storage – stable and responsive
- Revised metadata accommodates public access documents and linked open data
- Additional indexing by Google Scholar
- DOIs minted for every report and dataset in NTL repository – persistent, uniquely identifies each object
- Compliance with core trustworthy repository requirements (ISO 16363) via self-audit and peer review



New Partnerships



Roles and Responsibilities

- Relationship with CDC
 - NTL is responsible for content, including metadata
 - CDC provides SaaS, responsible for product enhancements and bug fixes
- NTL will collect user feedback and evaluate for change
- Stacks change control meetings
 - Organized by CDC
 - NOAA and NTL



National Transportation Library

Home Collections Recent Additions Public Access Submit Content

About ROSA P



All Collections

Enter keyword or phrase...

Search

Advanced Search

Welcome to ROSA P

A digital library for transportation data and information

Featured Article



Beyond Traffic 2045 Reimagining Transport
Technology, disruptive innovation, and the future of transportation

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Put a ROSA P badge on your website



View All ROSA P Badges



In the Spotlight

Connected Vehicles

Learn about connected vehicle research at US DOT

- Connected Vehicles : Coming Soon to a Road Near You...
- Connected vehicles and cybersecurity.
- Connected vehicles and your privacy.

Spotlight Archive

Recently Added

Beyond Traffic 2045 Reimagining Transportation: Technology, Disruptive Innovation, and the Future of...
Added: 12/27/2016

Connected vehicles and your privacy
Added: 12/23/2016

Most Popular

Corridor incident management (CIM)

Heavy-duty truck activity data

Contracting out - benchmarking study - phase 1 - part 2 - external data collection

CPI detailed report - data for March 2001

CPI detailed report - data for September 2001

Featured Collection

US Transportation Collection
US Transportation Collection

Other Digital Initiatives

Next 6 months:

- NTL website – homepage and policy documents migrating to drupal platform
- Implementation of LibGuides for general information, resources (transportation websites, research tools), and NTKN



Behind the Curtain

- Metadata
 - NTL Minimum Cataloging Standard
 - Crossing walking to CDC Stacks
- Collection Development Policy Revisions
- Cataloging Policy
- Data Curation Policy
- Submission Process
- Persistent Identifiers for People and Things
- Feedback
- Improvements to Come



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Behind the Curtain: Metadata

NTL Minimum Cataloging Standard

- April 2016
- OCLC K-Level
- Modified Dublin Core

Title
Primary URL
Personal Creator(s)
Corp. Creator(s)
Corp. Contributor(s)
TRT Terms
Corp. Publisher
Publication Date

Format
Resource Type
Language(s)
Geographical Coverage
Abstract
Contract Number(s)
Report Number(s)
Collection(s)



Behind the Curtain: Metadata

Crossing walking to CDC Stacks

CDC Field Names	NL Field Names
Title	Title
Alternative Title	Alternate title
Description	Abstract
Content Notes	Table of Contents
Subject	Classification
Personal Author(s)	Personal Creator(s)/Contributor(s)
Corporate Author(s)	Corp. Creator(s)/Contributor(s)
Document Type	Resource Type
Published Date	Publication date
Main Document URL or Filename	Primary URL



Behind the Curtain: It's the Law

Among other national library program duties, the National Transportation Library is required by law to

- (1) Acquire, preserve and manage transportation information and information products and services for use by DOT, other Federal agencies, and the public;
- (2) Serve as a central digital repository for DOT research results and technical publications; and
- (3) Become a central clearinghouse for transportation data and information of the Federal Government (49 USC 6304).

NTL's Repository and Open Science Access Portal, or ROSA P, is the digital library for transportation information and data.



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Behind the Curtain: Collection Dev

Collection Development Policy Revisions

- To meet legislative mandate, NTL collects across transportation: USDOT, state DOTs, and other transportation organizations
- Content types found in ROSA P include text, links to websites, **datasets**, images, video, other multimedia, and maps
- All resources in ROSA P are in the **public domain** and/or permission provided
- Materials dating back to 1992
- Datasets:
 - 1) discrete datasets produced by USDOT
 - 2) links to datasets resulting from USDOT-funded research, and
 - 3) high-value, discrete, national-level datasets produced by non-DOT organizations
- All items are held permanently in *ROSA P (4 exceptions)*



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Item is wrong and causing harm;

Item has been withdrawn from the scientific community due to methodological errors or willful misrepresentation;

Item contains personally identifiable information, national security, or other sensitive information not previously discovered by NTL staff; or,

Contributor misrepresented their authorship of, or rights over, an item.

Behind the Curtain: Cataloging Policy

- Cataloging Policy
 - Revised in April 2016
 - Will be made public within ROSA P



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Behind the Curtain: Digital Curation Policy

- Preserve all digital information at the bit level
- Fully described to foster discovery, access, and re-use
- Digital object identifiers (DOI)
- SHA-2 Fixity Checksum (coming version)
- Back-ups: 3-2-1
- Format Migration: annual review of formats
- Trusted Digital Repository Status



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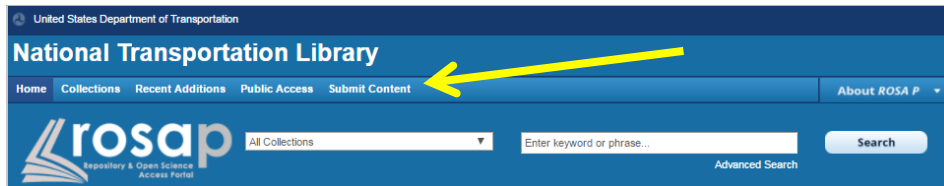
Leighton

Preservation and Backups

In order to protect digital information and data from loss, NTL employs the “3-2-1” backup rule². This means that NTL will maintain three (3) copies of the electronic files ; stored on two (2) different kinds of storage media; with at least one (1) copy stored offsite.

Data Seal of Approval and Peer Federal agency review

Behind the Curtain: Submission Process



Federally Funded Research under Public Access Policy?

<http://ntl.bts.gov/publicaccess/howtocomply.html>

Other Content?

NTLDigitalSubmissions@dot.gov



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Behind the Curtain: Persistent IDs

- Persistent Identifiers for People and Things
 - DOIs to our landing pages: 1 URL FOREVER!
 - ORCiDs for creators
 - Future: FundRef IDs for funding orgs?



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And ROSA P is responsive to devices and screens!!

Behind the Curtain: Feedback

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The Future

- Improvements to Come
 - Fixity hash
 - Trusted repository status
 - Change Control Board
- User testing (TBD)
- Public Launch (TBD)



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Mary

Questions or comments?

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Thank you for attending!
Join us June 8



Title: *Smart Growth and Complete Streets*
SPEAKERS: Emiko Atherton & Debra Alvarez

For Past Episodes, Visit the TLR Archive at:
<https://ntl.bts.gov/networking/tlrarchive/index.html>