



12 December 2013

*Implementing a Minimal Cataloging Standard at the National Transportation Library*  
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*Transportation Library*

# National Transportation Library: Minimal Cataloging

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12 December 2013

Transportation Librarians Roundtable

# Our Vision

*The National Transportation Library (NTL) is a dynamic Federal gateway that responds to the research needs of the greater transportation community by providing leadership, access to both print and electronic transportation resources, and utilizing partnerships and collaboration to offer premier research and knowledge management services.*



# Services-Mandate

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MAP 21 (49 USC 6304) expands NTL's role

- 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

# White House OSTP Memo on Public Access

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Increasing Access to the Results of Federally Funded Scientific Research ([text of memo](#)):

- The direct results of federally funded science, including peer-reviewed publications and digital data, will be made freely accessible to the public to the greatest extent possible, consistent with law and other objectives, including the continued availability of peer review.
- Each Federal agency with over \$100M in annual research expenditures will develop a plan for public access, after consultation with stakeholders including researchers, universities, libraries, publishers, and representatives of other potential users.
- NTL Digital Repository identified as the solution for long-term access to publications

# NTL Digital Services

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- Collections and Resources
  - 50,000-item digital repository
  - 100,000+ item physical collection (technical and law)
  - 100 electronic databases
  - 300 journal subscriptions
  - Data archive and Data portal
  - NTL website
  
- Consultation
  - Information architecture
  - Digitization

- Networking and Outreach Activities
  - Transportation Knowledge Networks
  - Transportation Librarians Roundtable
  - Transportation Research Thesaurus
  - Science.gov

# NTL Digital Services – Repository Details

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- Digital Repository
  - Homegrown OAI-PMH compliant repository
  - Purpose: serve as central clearinghouse and archive for public access transportation information
  - Special features: access to specialized collections and integration of USDOT repositories in our platform
  
- USDOT Research Hub
  - First research investment database at the project level for the Department
  - Requires DOT operating administrations to submit final reports and other research products for each investment, which go into the repository
  
- NTL Discovery Layer (future plan)
  - Integrate repository, catalog, commercial databases, external partner resources
  - Enables team to focus on content acquisition and management, not interface design
  
- National Transportation Data Archive (future plan)
  - Accompanies existing NTL Data portal
  
- Digitization Activities & Ensuring Perpetual Access

# NTL Adoption of Minimal Level Cataloging

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- Drivers
  - Searchable full text repository
  - Reduced staffing level due to sequestration
  - Government mandates
  - Opportunity to leverage existing bibliographic tools (TRID, TRT)
  
- Goal: Improve cataloging efficiency while maintaining consistent and accurate metadata in NTL's digital collections
  - Identify minimum requirements for functionality and interoperability amongst NTL's user interfaces and digital content platforms (current and future)
  - Meet our legislative mandates
  - Eliminate duplication of effort
  - Develop new cataloging guidelines for NTL's digital repository

# NTL Adoption of Minimal Level Cataloging

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- Benchmark – National Agriculture Library
  - Staff reductions required changes to workflow
  - Developed new minimal metadata guidelines
  - Implemented automated indexing
  
- Review of available standards
  - National standards for minimal level cataloging from the Library of Congress  
<http://www.loc.gov/marc/bibliographic/nlr/>
  - OCLC guidelines for K level (minimal level) records  
<http://www.oclc.org/bibformats/en/onlinecataloging.html#BCGGBAFC>
  
- NTL internal review
  - Assessed impact on findability
  - Work flow impact
  - Informal feedback gathering with several Transportation libraries
  - Trial period, training and evaluation

# Abbreviated-Level Cataloging Guidelines

LCCN	010	R	
ISBN	020	R	
ISSN	022	R	
Music Publisher Number	028	R	
Cataloging Source	040	SS	
Authentication Code	042	R	Omit (unless created from Dublin Core record, in which case use code <i>dc</i> ).
Main or Added Entry	1XX /7XX	R	Include one 7xx field if applicable and if 1xx is not applicable. For some data from non-MARC sources, field 720 may be appropriate.

Key: M=Mandatory; R=Required if applicable; SS=System-supplied

Title	245	M: ‡a; R: ‡b, ‡c, ‡h	
Varying Form of Title	246	R	Emphasize varying titles, such as those containing symbols or numbers.
Edition	250	R	
Publication Information	260	R: ‡a, ‡b, ‡c	
Physical Description	300	R: ‡a	
Series Statement	490	R	Transcribe series, if present, in 490, untraced, with 1st indicator 0.
Electronic Location and Access	856	R: ‡u	Other subfields are optional.



# Minimal Cataloging

Descriptive Metadata							
NTL Display Name	Simple Dublin Core	NTL Extended Dublin Core	Repeatable?	Encoding Scheme	Notes	NTL Minimal	OCLC K-Level
<b>Title</b>	title	title	No			Yes	Yes
<b>Alternate Title</b>	title	title.alternative	Yes			No	
<b>Conference Title</b>	source	source	No			No	
<b>Journal Title</b>	source	source	No			No	
<b>Creator (Personal)</b>	creator	creator.creatorPersonal*	Yes			Yes	Yes
<b>Corporate Creator</b>	creator	creator.creatorGroup*	Yes			Yes	Yes
<b>Classification</b>	subject	subject	Yes	Encoding scheme - NTL classification scheme		No	
<b>TRT Keywords</b>	subject	subject	Yes	Encoding scheme - TRT		Yes	
<b>General Subjects</b>	subject	subject	Yes			No	
<b>Abstract</b>	description	description.abstract	No			Yes	
<b>Table of Contents</b>	description	description.tableofContents	No			No	
<b>Notes</b>	description	description.notes*	No			No	
<b>Publisher (Personal)</b>	publisher	publisher.publisherPersonal*	Yes			No	
<b>Corporate Publisher</b>	publisher	publisher.publisherCorporate*	Yes			Yes	Yes
<b>Contributor (Personal)</b>	contributor	contributor.contributorPersonal*	Yes			No	
<b>Corporate Contributor</b>	contributor	contributor.contributorCorporate*	Yes			Yes	
<b>Contracting Officer's Technical Representative</b>	contributor	contributor.contributorCotr*	Yes			No	

# Minimal Cataloging

Descriptive Metadata							
NTL Display Name	Simple Dublin Core	NTL Extended Dublin Core	Repeatable?	Encoding Scheme	Notes	NTL Minimal	OCLC K-Level
Publication Date	date	date.created	No	Encoding scheme - ISO 8601	Document creation /production date – Not metadata record creation	Yes	Yes
Copyright	date	date.copyrighted	No	Encoding scheme - ISO 8601		Yes - as needed	
Resource Type	type	type	Yes		Uses controlled list	Yes - autofill Tech Rep	
Format	format	format	Yes	Encoding scheme - IMT (DCMI Media Types)		Yes - autofill PDF	Yes
Physical Description	format	format.extent	Yes		Includes file size, number of pages, volume information, map information	No	
Resource Identifier	identifier	identifier	Yes	Encoding Scheme - URL		Yes - auto	Yes
NTL Record ID	identifier	identifier	No	Encoding Scheme – SYSTEM	System assigned number	Yes - auto	
Report Number	identifier	identifier	Yes	Encoding Scheme - REPORT		Yes	



# Minimal Cataloging

Descriptive Metadata							
NTL Display Name	Simple Dublin Core	NTL Extended Dublin Core	Repeatable?	Encoding Scheme	Notes	NTL Minimal	OCLC K-Level
NTIS Number	identifier	identifier	No	Encoding Scheme - NTIS		No	
TRIS Accession Number	identifier	identifier	No	Encoding Scheme - TRIS		No	
OCLC Number	identifier	identifier	No	Encoding Scheme - OCLC		No	
ISBN	identifier	identifier	No	Encoding Scheme - ISBN		No	
ISSN	identifier	identifier	No	Encoding Scheme - ISSN		No	
Contract Number	identifier	identifier	Yes	Encoding Scheme - CONTRACT		No	
Digital Object Identifier	identifier	identifier	No	Encoding Scheme - DOI		No	
Language	language	language	Yes	Encoding Scheme - ISO 639-2/B		Yes - autofill English	
isVersionOf	relation	relation.isVersionOf	Yes		incl. version, edition, or adaptation	No	
isPartOf	relation	relation.isPartOf	Yes			No	
Contains	relation	relation.hasPart	Yes			No	
isFormatOf	relation	relation.isFormatOf	Yes			No	
hasFormat	relation	relation.hasFormat	Yes			No	
Requires	relation	relation.requires	Yes			No	
isRequiredBy	relation	relation.isRequiredBy	Yes			No	
References	relation	relation.references	Yes			No	
Succeeding Entry	relation	relation.isReplacedBy	Yes			No	
Preceding Entry	relation	relation.replaces	Yes			No	
Period Covered	coverage	coverage.temporal	Yes	Encoding scheme - ISO 8601		No	
Geographical Coverage	coverage	coverage.spatial	Yes		Use controlled geographical list	Yes	
Copyright Info	rights	rights	No		copyright info, etc.	Yes - as needed	



# Minimal Cataloging

Administrative Metadata							
NTL Field Name	Simple Dublin Core	NTL Extended Dublin Core	Repeatable?	Encoding Scheme	Notes	NTL Minimal	OCLC K-Level
Record created by		record.createdBy*	No		Staff who created metadata record	Yes - auto	
Record creation date		record.createdDate*	No		Time-stamp of record creation	Yes - auto	
Date item captured		record.captured*	No		Add for portal records, ingested sites, etc.	Yes - auto	
Record modified by		record.modifiedBy*	No		Staff who last edited metadata record	Yes - auto	
Record modification date		record.modified*	No		Time-stamp of most recent edit	Yes - auto	
Collection		record.collection*	No		Collection code	Yes - as needed	
Supplier		record.supplier*	No		Organizational source of digital doc	Yes - as needed	
Staff Notes		record.staffnotes*	No		Notes by/for indexers, tech services staff	No	



# NTL Workroom: Metadata Entry

Data Entry **1** 2 3 4 Overview LC Authority Search

48306 - Approved

Title	Overlooked destinations : suburban nodes, centers, and trips to strips.		
Primary URL	http://ntl.bts.gov/lib/48000/48300/48306/OTREC-RR-12-12_Final_1_.pdf	Ingestion	View
Alternate URL(s)			
Personal Creator(s)	Larco, Nico{29853}	Personal Contributor(s)	
Corp. Creator(s)	University of Oregon{28755}		
Corp. Contributor(s)	United States. Dept. of Transportation. Research and Innovative Technology Administration{21748}		
Classification	NTL - PEDESTRIAN AND BICYCLES - Bicycles{61}; NTL - PEDESTRIAN AND BICYCLES - Pedestrians{62}; NTL - PLANNING AND POLICY - Land Use{97}; NTL - PLANNING AND POLICY - Surveys{91}		
TRT Term(s)	Suburbs{Vwucs}; Residents{Mkhr}; Travel behavior{Bmm}; Commercial strips{Pmrccpc}; Travel surveys{Bks}; Mode choice{Bkm}; Urban design{Euu}; Walking{Aexw};	Subject Keyword(s)	

Next Finish Reset Cancel

# NTL Workroom

Data Entry 1 2 3 4 Overview LC Authority Search

48306 - Approved

Title	Overlooked destinations : suburban nodes, centers, and trips to strips.		
Alternate Title(s)	<input type="text"/>		
Corp. Publisher(s)	Oregon Transportation Research and Education Consortium{1590}		
Personal Publisher(s)	<input type="text"/>		
Publication Date	2013	Aug	select...
Language(s)	English	Geographical Coverage	Oregon{289}
Format	PDF	Resource Type	Tech Report
Source	<input type="text"/>		
Table of Contents	<input type="text"/>		
Abstract	<p>This study looks at travel to typical suburban commercial strips by residents living within one-third of a mile of the strip by focusing on six sites - four in the Portland, OR., metro area and two in the Atlanta, GA., metro area. The study mapped pedsheds around the commercial strips in these sites and found significant increases in network extents when formal and informal pedestrian paths were added to street centerline data. Informal networks such as goat paths through vacant land and cuts in fences were widespread and suggest a pent-up demand for route directness. Travel surveys of residents found significant amounts of walking and biking in these areas - just over one-third of all trips to the commercial strip - with travel distance and walking along or across arterials affecting</p>		

Prev Next Finish Reset Cancel

# NTL Workroom

Data Entry **1** **2** **3** **4** Overview LC Authority Search

48306 - Approved

Title	Overlooked destinations : suburban nodes, centers, and trips to strips.		
TRIS	<input type="text"/>	<input type="button" value="TRIS &gt;&gt; NTL"/>	OCLC <input type="text"/>
ISBN	<input type="text"/>		ISSN <input type="text"/>
Conference Begin Date	<input type="text"/>		Conference End Date <input type="text"/>
Copyright Date	<input type="text"/>		Date Captured 2013-09-11
Copyright	<input type="text"/>		Digital Object Identifier <input type="text"/>
Contract Number(s)	2011-440		Contracting Officer <input type="text"/>
Report Number(s)	OTREC-RR-12-12		Edition <input type="text"/>
Supplier	<input type="text"/>		
Collection(s)	<input type="text"/>		
Staff Notes	<input type="text"/>		
Status	Approved <input type="button" value="v"/>	Status Comment	<input type="text"/>
Date Modified	2013-10-28 12:47:47.0	Modified By	megan.tietjen
Date Created	2013-09-11 11:56:42.0	Created By	megan.tietjen
Comment Date		Comment By	

# Completed NTL Record

Title	Overlooked destinations : suburban nodes, centers, and trips to strips.
Record ID	<a href="#">48306</a>
Personal Name Creator	<a href="#">Larco, Nico</a>
Corporate Creator	<a href="#">University of Oregon</a>
Corporate Contributor	<a href="#">United States. Dept. of Transportation. Research and Innovative Technology Administration</a>
Publisher	<a href="#">Oregon Transportation Research and Education Consortium</a>
Publication Date	20130800
Abstract	This study looks at travel to typical suburban commercial strips by residents living within one-third of a mile of the strip by focusing on six sites – four in the Portland, OR., metro area and two in the Atlanta, GA., metro area. The study mapped pedsheds around the commercial strips in these sites and found significant increases in network extents when formal and informal pedestrian paths were added to street centerline data. Informal networks such as goat paths through vacant land and cuts in fences were widespread and suggest a pent-up demand for route directness. Travel surveys of residents found significant amounts of walking and biking in these areas – just over one-third of all trips to the commercial strip – with travel distance and walking along or across arterials affecting mode choice. This suggests network extent and connectivity to be a critical factor in increasing walking and biking in these suburban areas. Resident motivations behind mode choice included convenience (which mode is easiest); cost (active travel is less expensive than auto travel); and culture (a pattern of driving or active travel, regardless of ease or cost). There was little variation across sites, suggesting that this level of active travel and the motivations behind it are fairly consistent, with a few variations, across income and geography.
TRT Terms	<a href="#">Suburbs</a> ⓘ; <a href="#">Residents</a> ⓘ; <a href="#">Travel behavior</a> ⓘ; <a href="#">Commercial strips</a> ⓘ; <a href="#">Travel surveys</a> ⓘ; <a href="#">Mode choice</a> ⓘ; <a href="#">Urban design</a> ⓘ; <a href="#">Walking</a> ⓘ; <a href="#">Bicycling</a> ⓘ; <a href="#">Land use planning</a> ⓘ
Classification	NTL - PEDESTRIAN AND BICYCLES - <a href="#">Bicycles</a> ; NTL - PEDESTRIAN AND BICYCLES - <a href="#">Pedestrians</a> ; NTL - PLANNING AND POLICY - <a href="#">Land Use</a> ; NTL - PLANNING AND POLICY - <a href="#">Surveys</a>
Geographical Coverage	<a href="#">Oregon</a>
Contract Number	2011-440
Report Number	OTREC-RR-12-12
Resource type	Tech Report
URL	<a href="http://ntl.bts.gov/lib/48000/48300/48306/OTREC-RR-12-12_Final_1_.pdf">http://ntl.bts.gov/lib/48000/48300/48306/OTREC-RR-12-12_Final_1_.pdf</a>
Format	PDF
Language:	English
Database	NTL Digital Repository



# Benefits to Minimal Cataloging

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- Increased workflow
  - Less time spent on cataloging each record
  - Increase in the monthly statistics
  
- Improved management of the digital repository
  - Reduction in the backlog
  - Faster turn around time for submissions
  
- WorldCat Digital Collections Gateway

# NTL Strategies for the Future

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- Implement a National Transportation Digital Archive to supplement our data portal
- Develop automated indexing capability using existing transportation taxonomy and thesauri
- Improved competencies in knowledge management and knowledge sharing- consulting internal and external
- Strengthen role as a leader in information management, sharing, standards, and technologies (i.e. science.gov) for transportation
- Open NTL Digital Repository to OCLC's Worldcat Digital Collections Gateway

THANK YOU!

**Questions/Comments?**

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