#### TRANSPORTATION RESEARCH BOARD

# Four Databases with a Common Goal: Promoting Transportation

Thursday, March 21, 2019 1:00-2:30 PM ET

#### **Purpose**

Highlight four transportation research tools: TRB's RIP database, DOT's Research Hub, DOT's ROSA-P database, and TRB's TRID database.

#### **Learning Objectives**

At the end of this webinar, you will be able to:

- Determine the appropriate research tool from TRB and U.S. DOT for identifying ongoing and published transportation research:
  - Research in Progress (RIP)
  - U.S. DOT Research Hub
  - U.S. DOT's Repository and Open Access Portal (ROSA-P)
  - Transport Research International Documentation (TRID)
- Describe how these tools relate to one another
- Submit and/or maintain research in each database

### TRANSPORTATION RESEARCH BOARD

# Research in Progress (RIP) Database

Janet Daly Indexing Manager March 21, 2019

# Research in Progress (RIP)

- Produced/maintained by TRB
- Records represent projects
  - Proposed
  - Current
  - Recently completed
- Sources:
  - USDOT
  - State DOTs
  - Universities
  - Other research orgs.
- URL: rip.trb.org
- 14,000+ records
- Publicly available







# Why Use RIP?

- Prevent duplication of research
- Connect researchers
- Identify experts
- Highlight research
- Wide exposure since RIP records also in TRID
- Required for UTCs and federally funded projects





#### How to Search RIP



#### **Research in Progress**

Search by keyword...

... or add additional filters

**RiP** The Transportation Research Board's Research in Progress (RIP) Database contains information on more than 13,000 current or recently completed transportation research projects. RIP records primarily are projects funded by the U.S. Department of Transportation and State Departments of Transportation. University transportation research also is included in the database.

#### Records by Location



Find projects sponsored or performed by state DOTs



Find projects sponsored or performed by University Transportation Centers

#### Recent Records by Topic

#### Design & Construction

- · Bridges & Other Structures
- Construction
- Design
- Geotechnology
- Hydraulics & Hydrology
- Materials
- Pavements

#### Operations & Preservation

Maintenance & Preservation

#### Policy & Organization

- · Administration & Management
- Data & Information Technology
- · Education & Training
- Finance
- History
- <u>Law</u>
- Policy
- Research
- Transportation (general)

Safety, System Components, and Users

Authorized Users Login

#### Recent Records by Mode

| All Modes                  |  |
|----------------------------|--|
| Aviation                   |  |
| Highway                    |  |
| Marine Transportation      |  |
| Motor Carriers             |  |
| Pedestrians and Bicyclists |  |
| Pipelines                  |  |
| Public Transportation      |  |
| Railroads                  |  |
|                            |  |

#### Subscribe

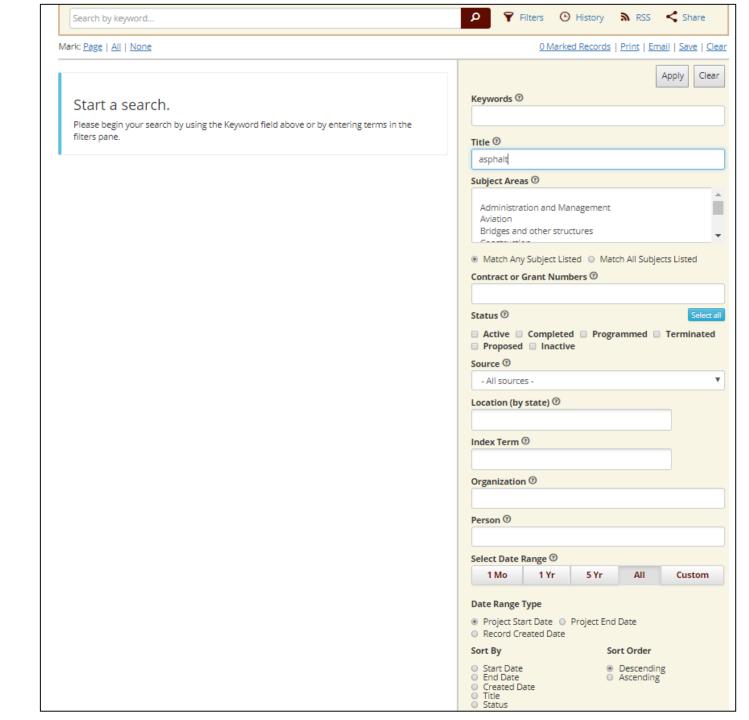
Stay informed of new research!

Receive a monthly email with new research projects in your area(s) of interest.

Select topics & subscribe

#### Contact

## Search Using Filters



#### 0 Marked Records | Print | Email | Save | Clear

### Search Results

Mark: Page | All | None Showing 1 - 25 of 716 records of 29 pages 🕨 1. PROJECT: Development of Superpave 5 Asphalt Mix Designs for Minnesota Pavements Minnesota Department of Transportation, 2019, Programmed 2. PROJECT: Optimizing Asphalt Mixture Designs for Low-Volume Roads of Minnesota 2019-07-01 Minnesota Department of Transportation, 2019, Programmed 3. PROJECT: A Calibrated and Validated National Performance-Related Specification for Emulsified Asphalt Binder Transportation Research Board, \$500000, 2019, Proposed 2019-04-01 4. PROJECT: Airfield Pavement Markings - Effective Techniques for Removal and Temporary Applications Transportation Research Board, \$450000, 2019, Proposed 2019-03-05 PROJECT: SPR-4325: Development of Volumetric Acceptance and Percent Within Limits (PWL) Criteria for Stone Matrix Asphalt (SMA) Mixtures in Indiana Indiana Department of Transportation, \$219662, 2019, Active 2019-03-01 6. PROJECT: Design and Performance of Open-Graded Friction Course (OGFC) Mixtures Containing Epoxy Asphalt Florida Department of Transportation, \$240000, 2019, Active 2019-02-18 7. PROJECT: Development of Quality Standards for Inclusion of High Recycled Asphalt Pavement Content in Asphalt Mixtures TR-770 lowa Department of Transportation, \$247480, 2019, Active 2019-02-01 8. PROJECT: Use of the IDEAL-CT Test for Pavement Cracking to Achieve a Balanced Asphalt Mix Design Mountain-Plains Consortium, \$174000, 2019, Active 2019-01-12 PROJECT: LTPP Data Analysis: Feasibility of Using LTPP Data to Improve Use of FWD and Longitudinal Profile Measurements Transportation Research Board, \$100000, 2019, Proposed 2019-01-08 10. PROJECT: Measuring Adhesion Between Binders and Aggregates Using Particle Probe Scanning Force Microscopy at Low Temperatures Transportation Infrastructure Durability Center, \$179377, 2019, Active 2019-01-01 11. PROJECT: Drop-Off Utilizing Readily Available Maintenance of Roadway Edge Materials Louisiana Transportation Research Center, \$102307, 2019, Active 2019-01-01 12. PROJECT: SPR-4335: Environmentally Tuning Asphalt Pavements Using Phase Change Materials Indiana Department of Transportation, \$216226, 2019, Active 2019-01-01 13. PROJECT: Constructing High Performance Asphalt Pavements by Improving In-Place Pavement Density Oregon Department of Transportation, \$175000, 2018, Active 2018-12-31 14. PROJECT: Evaluating the Effectiveness of Fly Ashes to Mitigate ASR and Using Recycled Concrete Aggregate as an Aggregate Source

Wyoming Department of Transportation, \$65975, 2018, Completed

Oregon Department of Transportation, \$285008, 2018, Active

15. PROJECT: Improving Constructability and Durability of Concrete Pavements

16. PROJECT: Full Depth Reclamation with Thin Surface Treatment for Low Volume Road

#### Development of Superpave 5 Asphalt Mix Designs for Minnesota Pavements

The objective is to build upon the preliminary results of a current project, in which the compaction process of HMA is investigated through a combined experimental and computational approach, and develop Superpave 5 mix designs for various traffic levels using local aggregates specific to Minnesota projects. It is expected that at the end of the project, a number of Superpave mix design will be developed for implementation in new construction projects including test sections at MnROAD facility.

Language

English

Project

Status: Programmed Contract Numbers: 1003325 WO#106 Sponsor Organizations:

Minnesota Department of Transportation

395 John Ireland Boulevard

St Paul, MN United States 55155

Performing Organizations:

University of Minnesota Department of Civil, Environmental

and Geo-Engineering 500 Pillsbury Drive SE

Minneapolis, MN United States 55455

Principal Investigators: Marasteanu, Mihai Start Date: 20190701

Expected Completion Date: 0 Actual Completion Date: 0

TRT Terms: Hot mix asphalt; Pavements; Superpave

Subject Areas: Materials; Pavements;

Filing Info

Accession Number: 01691199

Source Agency: Minnesota Department of Transportation

Contract Numbers: 1003325 WO#106

Files: RiP, STATEDOT

Subject/Index Terms

2018-12-31

2018-12-03

Record Type: Research project

Created Date: Jan 23 2019 2:50PM

# How to Enter Projects

- Primarily entered by DOT or UTC staff
- Password required
- Record updated as project progresses
- Record deleted when project is completed and final report is in TRID
- Federally-funded projects imported into USDOT ResearchHub







### Want to learn more?

August 22, 2018 webinar:

Research in Progress Database: Entering Projects and Searching Records.

Recording at <a href="https://vimeo.com/286334516">https://vimeo.com/286334516</a>

Janet Daly jdaly@nas.edu



# **USDOT** Research Hub

OST-R Office of Research Development and Technology

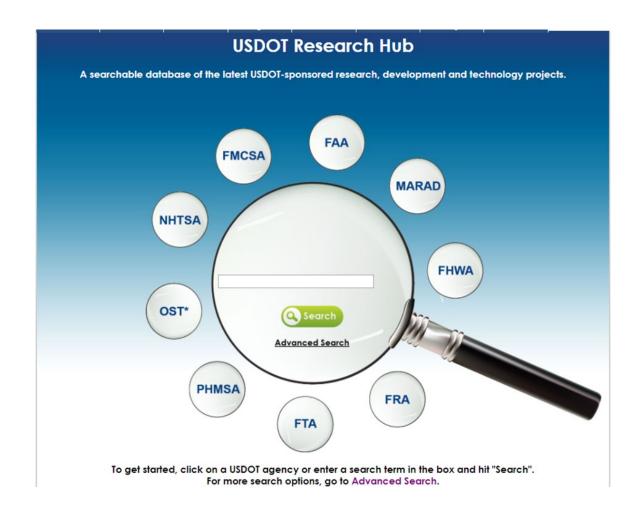
Research Coordination Director: Alasdair Cain

Research Hub Program Manager: Beyan Johnson

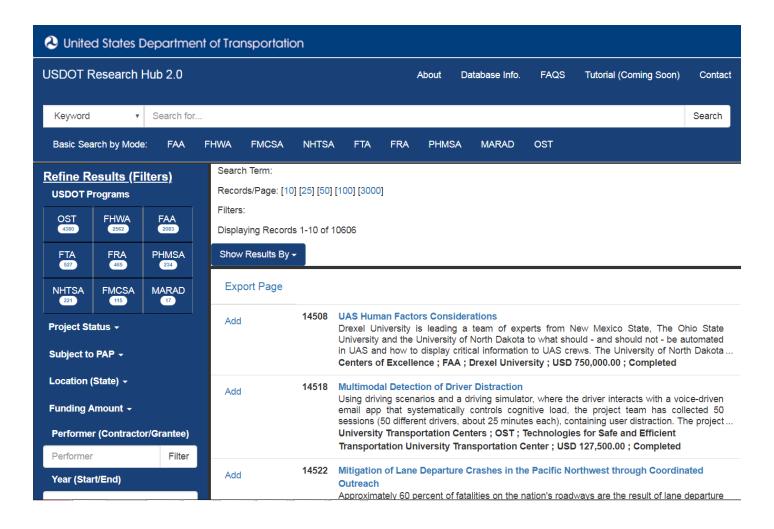
# Background

- Launched in 2012
- USDOT Funded Research
- Project records date back to 2008
- Policies and Legislation
  - Public Access Plan (<a href="https://ntl.bts.gov/public-access">https://ntl.bts.gov/public-access</a>)
    - "Once the Public Access Plan is implemented, the USDOT Research Hub will serve as the linking mechanism for scientific publications and their underlying research data by requiring that links to digital data sets (as referenced in the DOT Public Data Listing) are submitted along with other project deliverables as part of the project close-out process"
  - Fixing America Surface Transportation Act
    - "SEC. 6502. CONSOLIDATED RESEARCH DATABASE"

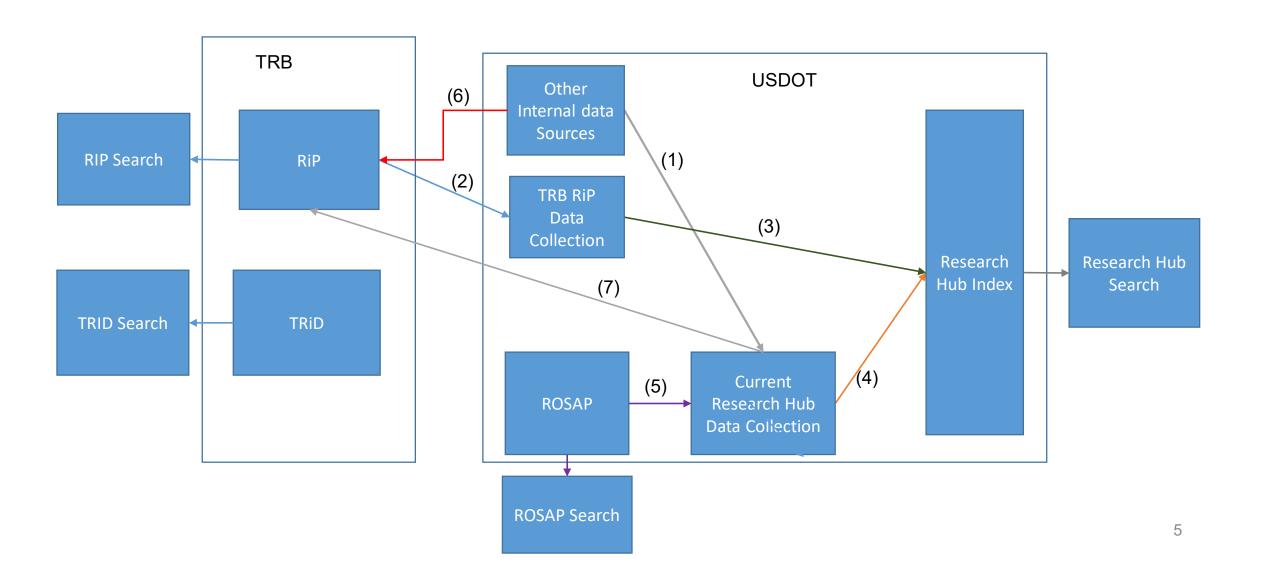
### 1<sup>st</sup> Generation



# 2<sup>nd</sup> Generation (Current)



### Research Hub Connections



### Research Hub Data Connections

- NTL Database (5)
  - https://rosap.ntl.bts.gov/welcome
  - Link to Publications
- Transportation Research Board Research in Progress (RiP) database (2)(3)(6)(7):
  - https://rip.trb.org/
  - Weekly download
  - University Transportation Center (UTC) Records
  - New USDOT projects as mentioned in USDOT Public Access Plan
  - Cooperative Research Programs
- Research Hub Annual Refresh (1)(6)(7):
  - Performed Annually
  - Various data sources
  - Modal partners submit updates

# Next Steps

• What's next for the Research Hub?

# Thank you

Questions/Comments?



# National Transportation Library: ROSA P

Mary Moulton, Digital Librarian 0000-0002-1791-068X US DOT National Transportation Library

TRB Webinar

Four Databases with a Common Goal: Promoting Transportation Research March 21, 2019

#### ROSA P: Repository and Open Science Access Portal



ROSA P honors the role public transportation played in the civil rights movement, and also one of the important figures, Rosa Parks

ROSA P: https://rosap.ntl.bts.gov/

LOC Prints and Photographs Division: http://www.loc.gov/rr/print/list/083 afr.html#ParksR Fair use: https://en.wikipedia.org/w/index.php?curid=3034067



# About the National Transportation Library

- Established in 1998 by the Transportation Equity
   Act for the 21st Century (TEA-21; P.L. 105-178)
- Administered by the Bureau of Transportation Statistics
- NTL provides access and support to:
  - Digital collections
  - Data services
  - Reference and research services
  - Transportation knowledge networks

## NTL and MAP-21 [49 USC 6304]

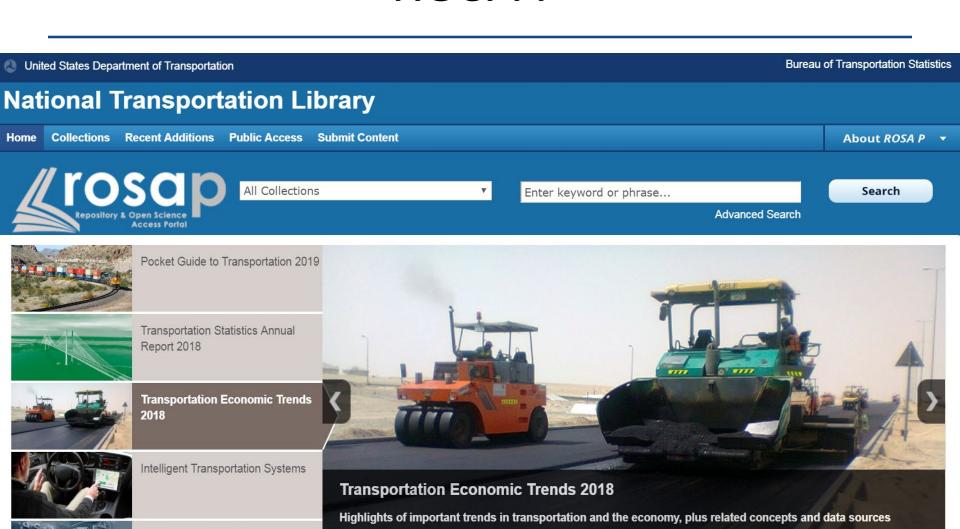
- NTL's authorized role is expanded and more in line with the 4 other national libraries
- National Transportation Library functions:
  - Services to DOT, other Federal agencies, public and private organizations, and individuals within the U.S. and internationally
  - Set specific requirements for the 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**

- White House Office of Science and Technology Policy memo (2013) requires 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
- NTL leads implementation of US DOT's Public Access Plan https://ntl.bts.gov/public-access
- We are an open access digital repository. All items are in the public domain and available for reuse without restriction.

### ROSA P



View Archive

View this document >>

NHTSA - Behavioral Safety

Research

# Repository Features

- Open source platform
  - CDC Stacks platform (Islandora/Drupal/Fedora)
- Cloud storage stable and responsive
- Revised metadata accommodates public access documents and linked open data
- Indexed by Google Scholar, TRID, Worldcat, and Science.gov

### **Collection Overview**

- Full-text digital archive for all modes of transportation and related disciplines
- 37,000 digital objects
  - Born digital objects submitted to NTL by content creators or owners
  - Reborn digital copies of physical objects, digitized at the request of NTL
- DOIs minted for every US DOT report and dataset in NTL repository

### Collections



**US Transportation Collection** 



**BTS Products** 



Intelligent Transportation
Systems Joint Program Office



US DOT Public Access
Data Management Plans



FTA 50<sup>th</sup> Anniversary Collection



NHTSA Behavioral Safety Research



Volpe National Transportation Systems Center Library



Transportation Librarians Roundtable



Federal Motor Carrier Safety Administration



Federal Highway Administration



Investigations of Aircraft Accidents 1934-1965



Research and Technology

# Acquisitions

- NTL Digital Submission <a href="https://www.ntldigitalSubmissions@dot.gov">NTL DigitalSubmissions@dot.gov</a>
  - US DOT agencies
  - State, metropolitan, local and tribal agencies
     Federal agencies
  - University transportation centers
  - Professional organizations and private sector sources
- Digitization of legacy print materials
- Archive-It web archiving

# Accessibility

- Wherever possible, digital collections are in non-proprietary open formats
  - Documents that are no longer accessible are migrated to a new format to preserve intellectual content
- NTL follows the final Federal rule (83 FR 2912)
   for the ICT Refresh under ADA Section 508
  - All public facing submissions published on or after
     March 23, 2018 must be accessible

# Searching ROSA P

Cost Effective Wildlife Crossing Structures which Minimize the Highway Barrier Effects on Wildlife and Improve Highway Safety along US 64, Tyrrell County, NC



#### **Final Report**

Produced and Written by

Daniel J. Smith, Ph.D., A.I.C.P., Principal Investigator Research Associate/Adjunct Graduate Faculty

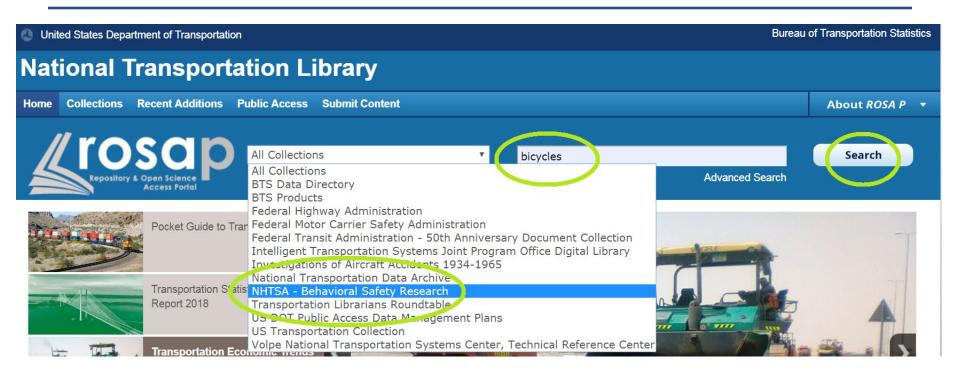
> Department of Biology University of Central Florida 4000 Central Florida Blvd. Orlando, FL 32816

> > April 2011

- Homepage: Basic Search
  - Collections dropdown
  - Keyword or phrase
- Collections: Basic Search
  - 13 distinct collections
  - Scope includes USDOT operating administrations, libraries, and historical collections
- Advanced Search
  - Fielded search of up to 3 categories
  - Limit by date range, collection

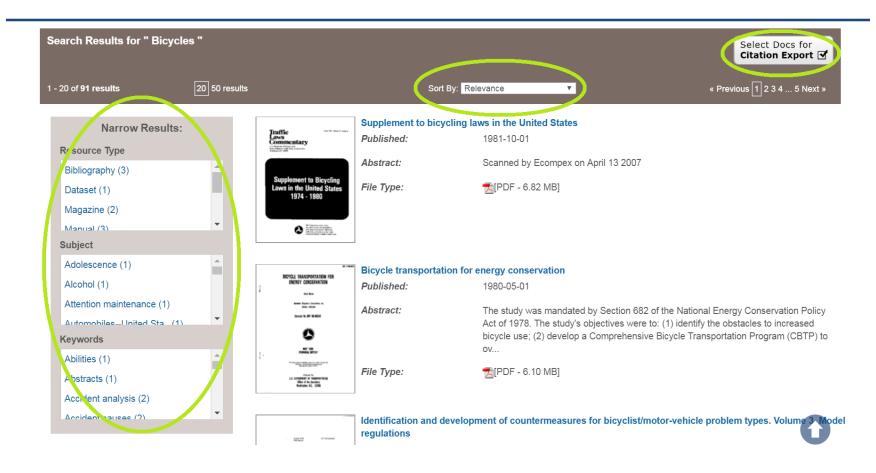
Cost effective wildlife crossing structures which minimize the highway barrier effects on wildlife and improve highway safety along US 64, Tyrrell County, NC. FHWA/NC/2009-26. 2011.

### **Basic Search**



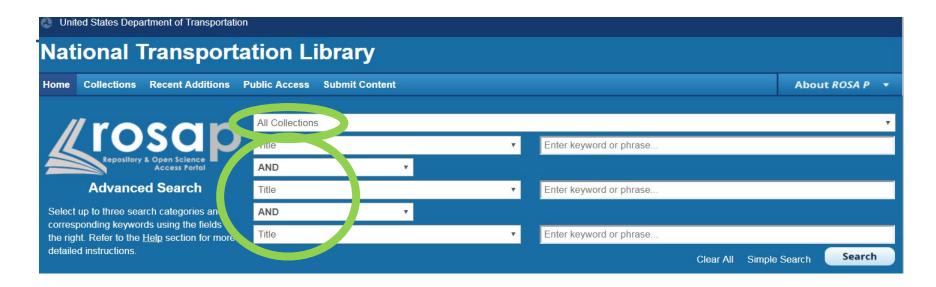
- Choose collection to search
- Enter search term
- Select Search

### **Basic Search Results**



- Refine search results by Resource Type, Subject and keyword
- Sort by Relevance, Date
- Export citations to reference management software

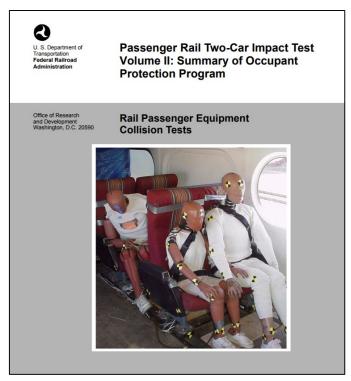
### Advanced Search



- Limit by: Collection
- Select up to 3 Search Categories:
  - Title
  - Abstract
  - Personal Creator
  - Corporate Creator
  - Publication Date

- DOI
- Contract Number
- Report Number
- Keywords

# Advanced Search: Example



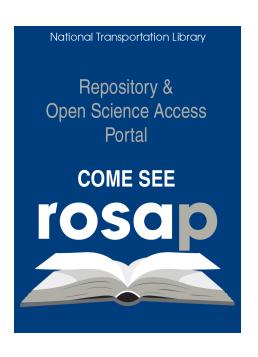
Passenger rail two-car impact test. Volume 2 : summary of occupant protection program. Vanlngem-Dunn, C. 2002.

- Collection: BTS Data Directory
- Title: passenger
   AND
- Publication Date:
   1990 to 2000
- Results: Page 1 11 PDFs
  - Research Papers
  - Tech Reports
  - Journal Articles
  - Datasets

## **Future Improvements**

- ROSA P enhancements
  - Additional citation export formats
  - Audio/video viewer
  - Canned searches
- Metrics dashboard and user generated reports
- Form-based digital submissions
- Semantic indexing

### Questions or comments?



- Mary Moulton
   mary.moulton@dot.gov

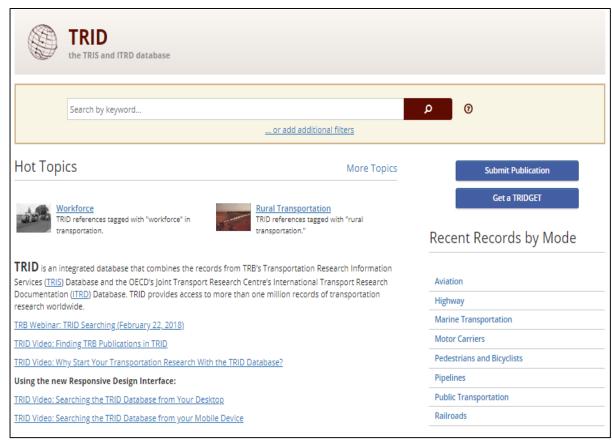
   202-366-0303
- Ask-a-Librarian
   Answers@dot.gov
   1-800-853-1351

### TRANSPORTATION RESEARCH BOARD

# Transport Research International Documentation (TRID) Database

Bill McLeod Manager, Transportation Research Information Services March 21, 2019

### **TRID**



1. Free on TRB's web site at: trid.trb.org

Free to access/search Free to export records

- 2. The world's largest, most comprehensive bibliographic resource on transportation research with almost 1.2 million records
- 3. Authoritative: all content is curated for its relevance to transportation
- 4. Maintained by the Transportation Research Board (TRB)





### RIP and TRID

- Project records submitted in RIP are automatically searchable through TRID
- Searchers can limit TRID to project records
- TRID searches both publications and projects by default

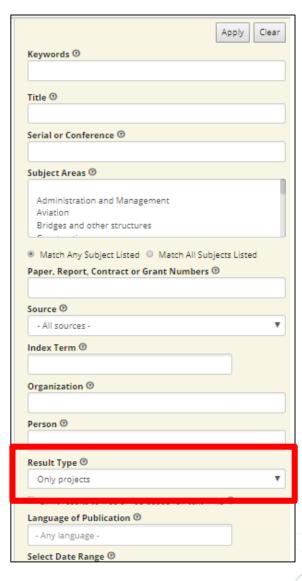






# Limiting to project records

- Click 'add additional filters' on the TRID home page to access advanced search features.
- Use the Result Type dropdown to select 'Only projects'







# Adding final reports to TRID

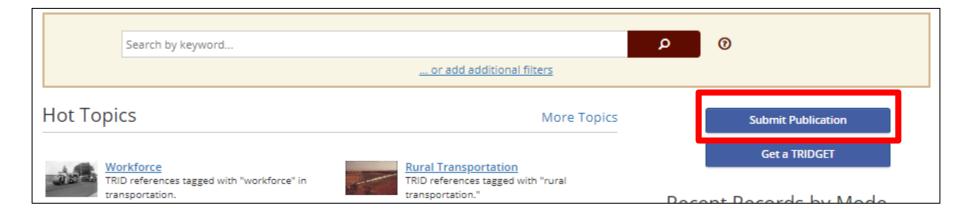
- As agencies publish reports from federally funded projects, they should notify TRIS (<u>tris-trb@nas.edu</u>)
- Be sure to consult the Research Report Distribution Guidance on AASHTO's Report Guidelines and Requirements page:

<a href="https://research.transportation.org/Report-Guidelines-and-Requirements/">https://research.transportation.org/Report-Guidelines-and-Requirements/</a>



# Adding final reports to TRID

# Or use the 'Submit Publication' form from the TRID home page:

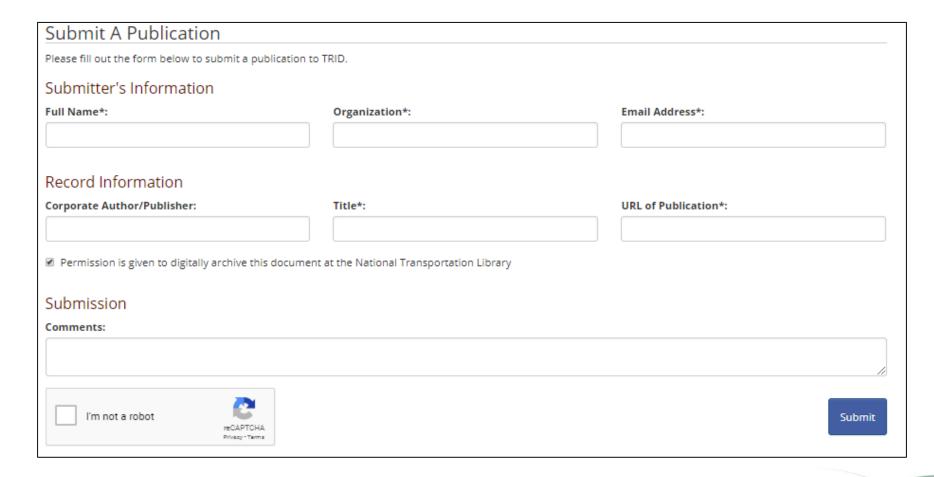








## Submit Publication form in TRID





### TRID and ROSA-P

- All report submissions from State DOTs and University
   Transportation Centers are shared with NTL for ingestion in ROSA-P: <a href="https://rosap.ntl.bts.gov/">https://rosap.ntl.bts.gov/</a>
- We later add the ROSA-P link to the record for each publication we forwarded to NTL
  - NTL shares a weekly spreadsheet with TRIS comprised of new additions to ROSA-P
  - Not everything in ROSA-P gets indexed in TRID



# Indexing reports in TRID

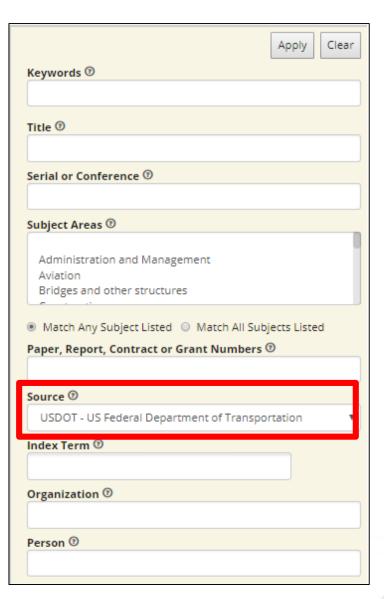
- All report submissions are entered into our TRIS Data Entry system and assigned for indexing within 1 business day of receipt
- It generally takes up to a couple of weeks to publish records depending on volume at any given time
- All publications are professionally indexed
  - TRB Subject areas
  - Usually 4-6 terms from the Transportation Research Thesaurus (TRT): <a href="http://trt.trb.org">http://trt.trb.org</a>



# Limiting to DOT and UTC reports

In search filters use the Source drop-down to limit to:

- UTC University
   Transportation Centers
- USDOT US Federal Department of Transportation





### TRID Gives You a Head Start

### Quality in, quality out

- TRB/HRB publications back to 1922
- AASHTO publications
- Federal/State DOT reports
- University Transportation Center (UTC) reports
- Research in Progress (RIP) project records
- Commercial journal literature: SAE, ASCE, IEEE, Elsevier, Springer, Taylor & Francis, Sage, just to name a few
- Conference proceedings
- International coverage: ITRD (Europe), ATRI (Australia), J-STAGE (Japan)
  - Records in German, French and Spanish

Content is curated, or chosen for academic and intellectual rigor, ensuring high quality information from peer-reviewed journals, conference papers, government publications.



# Benefits of using TRID

### For publishers/producers:

- Wider dissemination of Federal/State/UTC reports
- Long-term access to records

### For searchers/researchers:

- Locate solutions to problems
- Avoid duplication of work and save resources
- Encourages and facilitates cooperation and partnership
- Identify practitioners and experts in specific research areas
- Links to full text (free or fee-based) are included when available: Instant gratification!
- Screens out commercial content
- Authoritative, curated resource devoted entirely to all modes of Transportation Research



# More questions about TRID or RIP?

Check out:

Online Documentation & Training Materials:

http://www.trb.org/InformationServices/ResourcesfortheTRISDatabases.aspx

### Frequently Asked Questions:

https://trid.trb.org/faq

Or email us at: tris-trb@nas.edu



# Today's Speakers

- Elaine Ferrell, TRB, eferrell@nas.edu
- Janet Daly, TRB, jdaly@nas.edu
- Beyan Johnson, USDOT, beyan.johnson@dot.gov
- Mary Moulton, USDOT, mary.moulton@dot.gov
- Bill McLeod, TRB, wmcleod@nas.edu

# Webpages

- TRID: <a href="https://trid.trb.org/">https://trid.trb.org/</a>
- RIP: <a href="https://rip.trb.org/">https://rip.trb.org/</a>
- DOT Research HUB:
  - https://researchhub.bts.gov/search
- ROSA-P: <a href="https://rosap.ntl.bts.gov/">https://rosap.ntl.bts.gov/</a>

### **Get Involved with TRB**

- Getting involved is free!
- Join a Standing Committee (<a href="http://bit.ly/2jYRrF6">http://bit.ly/2jYRrF6</a>)
- Become a Friend of a Committee (<u>http://bit.ly/TRBcommittees</u>)
  - Networking opportunities
  - May provide a path to become a Standing Committee member
- For more information: <u>www.mytrb.org</u>
  - Create your account
  - Update your profile

### TRB turns 100 on November 11, 2020



### Help TRB:

- · Promote the value of transportation research;
- · Recognize, honor, and celebrate the TRB community; and
- · Highlight 100 years of accomplishments.

Learn more at

www.TRB.org/Centennial

MOVING IDEAS: ADVANCING SOCIETY—100 YEARS OF TRANSPORTATION RESEARCH