

Improvement of Research Report Distribution and Access and Promotion of More Effective Use of Technical Report Documentation Page, USDOT Form 1700.7

September 30, 2014

Submitted to:

Maggie Sacco
HS InFocus, LLC
800 K Street NE
Washington, DC 20002

Submitted by:

Lawrence E. Decina, MS LIS, BS
Tia Mastromatto, MA, BA
Sandra Tucker, MS LIS, MA, BA



336 West Broad Street
Quakertown, PA 18951

TECHNICAL REPORT DOCUMENTATION PAGE.

1. Report No.: "eo t37/225	2. Government Accession No.:	3. Recipient's Catalog No.:	
4. Title and Subtitle: Improvement of research report distribution and access and promotion of more effective use of Technical Report Documentation Page, USDOT Form 1700.7		5. Report Date: September 30, 2014	
7. Author(s): Lawrence E. Decina, MS LIS, Tia Mastromatto, MA, & Sandra Tucker, MS LIS, MA		6. Performing Organization Code:	
9. Performing Organization Name and Address: TransAnalytics, LLC 336 West Broad Street Quakertown, Pa 18951		8. Performing Organization Report No.:	
12. Sponsoring Agency Name and Address: Missouri Department of Transportation Research, Development and Technology PO Box 270, Jefferson City, MO 65102		10. Work Unit No.:	
		11. Contract or Grant No.: TPF-5(237) ; TRyy1127	
		13. Type of Report and Period Covered: Final Report (March 2014-September 2014)	
		14. Sponsoring Agency Code:	
15. Supplementary Notes: Research conducted as part of Transportation Library Connectivity and Development Pooled Fund Study			
16. Abstract: This report covers two studies: (Part A) Improvement of research report distribution and access process improvement of State Planning and Research (SPR) funded reports; and (Part B) Promotion of more effective use of the Technical Report Documentation page (TRDP) (USDOT Form 1700.7). Research methodology for Part A involved: telephone survey to SPR report recipients on FHWA directive list concerning what they receive and their practices; an electronic survey to State DOT Libraries concerning their distribution and publishing practices; and the development of distribution instructions for State DOT librarians. Part B involved: literature review documenting origins of TRDP and similar documentation pages; a canvass of State DOT and transportation subject database librarians on current practices regarding the TRDP; and a random selection of published TRDPs from TRID and NTL to identify current TRDP practices. Results for Part A concluded that all State DOT libraries surveyed (n=21) distribute SPR reports to TRID and NTL. Most distribute to NTIS; but only half distribute to the remaining recipients on the FHWA directive letter. The majority of the State DOT Libraries surveyed have an alert system; catalog SPR-funded reports from their DOT; use group email distribution lists; and store SPR-funded reports on an internal server. About half of the libraries assign a permanent URL. Results for Part B identified that the 1972 TRDP and 1975 instructions are the current information available for completing the TRDP. The most populated fields on the TRDP are: title, author, abstract, keyword, report date and number, performing and sponsoring organization. There is inconsistency regarding the completion of all other fields. Recommendations for Part A: State DOT libraries should continue to distribute SPR-funded reports to TRID, NTL, and NTIS to maintain discovery and preservation of transportation research. State DOT libraries should maintain their current distribution and preservation practices, and make reports available to researchers and practitioners within three months of report completion and approval. Recommendations for Part B: A universal TRDP with an instruction sheet should be made available at a central and easily accessible location. This will improve consistency in completion of page. Updating the current 1975 instructions is recommended to clarify ambiguity in certain fields. Inclusion of URLs and use of Transportation Research Thesaurus are recommended with reservations.			
17. Key Words: report distribution; report access; technical report documentation page; Form DOT F 1700.7		18. Distribution Statement:	
19. Security Classification (of this report): Unclassified	20. Security Classification (of this page): Unclassified	21. No of Pages: 100	22. Price:

Table of Contents

PART A

INTRODUCTION.....A-1

1. REPORT DISTRIBUTION (TASK A.1)A-2

Research MethodologyA-2

Characteristics of Recipient OrganizationsA-3

Summary: Discussions with Recipient OrganizationsA-6

2. REPORT DISTRIBUTION REQUIREMENTS, REPORT ACCESS, ARCHIVAL, AND ALERT SYSTEM CHARACTERISTICS (TASKS A.2 - A.5)A-8

Research MethodologyA-8

ResultsA-9

Participants.....A-9

Receipt and Editing of Reports.....A-9

Practices and Requirements Related to the Technical Report Documentation Page (Form DOT F 1700.7).....A-10

Format of Reports Received.....A-13

FHWA Distribution List Requirement Practices.....A-13

Distribution to Other OrganizationsA-14

Distribution DelayA-14

Alert Systems.....A-15

Maintenance (Collecting, Cataloging, and Maintenance)A-16

Archival ProceduresA-16

Summary of Results (Tasks A.2 - A.5)A-17

3. INTERPRETATION OF RESULTS AND RECOMMENDATIONS FOR BEST PRACTICES A-19

Interviews with the Eight Organizations That Receive Reports by FHWA DirectiveA-19

Survey of State DOTs Concerning Distribution, Collection, and Maintenance of Reports ...A-20

PART B

1. INTRODUCTION AND BACKGROUND..... B-1

2. RESEARCH METHODS..... B-2

3. RESULTS B-3

3.1 Federal Requirements for Completing the Technical Report Documentation Page (Form DOT F 1700.7) B-3

3.2 Other Similar Forms..... B-10

3.2.1 Standard Form 298 B-10

3.2.2 GPO Style Manual and ANSI/NISO Standard B-17

3.2.3 Modified Versions of the Technical Report Documentation Page (Form DOT F 1700.7) B-17

3.3 Practices and Requirements Related to the Technical Report Documentation Page (Form DOT F 1700.7) B-18

3.3.1 State DOT Library Survey (Part A)..... B-18

3.3.2 Sampling of Published Technical Report Documentation Pages in TRID and NTL... B-21

3.3.3 Follow-Up Questions to State DOT Libraries/Research Centers B-24

3.4 Conclusions B-28

4. RECOMMENDATIONS FOR MORE EFFECTIVE USE OF THE TECHNICAL DOCUMENTATION PAGE B-29

PART A

Improvement of Research Report Distribution and Access Process Improvement of State Planning and Research (SPR)-Funded Reports

Table of Contents

INTRODUCTION.....A-1

1. REPORT DISTRIBUTION (TASK A.1).....A-2

Research MethodologyA-2

Characteristics of Recipient OrganizationsA-3

Summary: Discussions with Recipient OrganizationsA-6

2. REPORT DISTRIBUTION REQUIREMENTS, REPORT ACCESS, ARCHIVAL, AND ALERT SYSTEM CHARACTERISTICS (TASKS A.2 - A.5)A-8

Research MethodologyA-8

ResultsA-9

Participants.....A-9

Receipt and Editing of Reports.....A-9

Practices and Requirements Related to the Technical Report Documentation Page (Form DOT F 1700.7).....A-10

Format of Reports Received.....A-13

FHWA Distribution List Requirement Practices.....A-13

Distribution to Other OrganizationsA-14

Distribution DelayA-14

Alert Systems.....A-15

Maintenance (Collecting, Cataloging, and Maintenance)A-16

Archival ProceduresA-16

Summary of Results (Tasks A.2 - A.5)A-17

3. INTERPRETATION OF RESULTS AND RECOMMENDATIONS FOR BEST PRACTICESA-19

Interviews with the Eight Organizations That Receive Reports by FHWA DirectiveA-19

Survey of State DOTs Concerning Distribution, Collection, and Maintenance of Reports ...A-20

List of Tables

Table 1. Eight Recipients.....A-2
Table 2. Results of Discussion with Eight Recipient OrganizationsA-7

List of Figures

Figure 1. Reported Requirements for Technical Documentation PageA-12
Figure 2. Distribution of Responses to Question 29, Average Distribution DelayA-15
Figure 3. Recommend Instruction Sheet for Providing Access to Transportation ResearchA-21

Appendix

- Appendix A – FHWA Directive Letter**
- Appendix B – Survey Instrument (Attachment)**
- Appendix C – Survey Contact List**

INTRODUCTION

This report provides the findings from the five task studies of Part A of the Transportation Library Connectivity and Development Pooled Fund Study TPF-5 (237). The first chapter covers Task A.1 – Report Distribution. The second chapter covers the combined Tasks A.2 – Report Distribution Requirements, A.3 – Submittal Process, A.4 – Recipient Access Characteristics, and A.5 – Systematic Alert Systems. The third chapter provides suggested recommendations.

In more detail, Chapter 1 covers Task A.1 activities, including research methodology, characteristics of recipient organizations, and a summary of the discussions with the recipient organizations. The chapter includes two tables: Table 1 identifies the eight recipients on the FHWA letter directive; Table 2 summarizes the results of discussions with these recipients.

Chapter 2 covers the Task A.2 through Task A.5 activities that were included in the State DOT Library survey. Research methodology, results of survey responses, and summary of results are presented. Survey topics include: editing and distribution of State Planning and Research (SPR)-funded reports and updating/correcting reports that have been distributed; the requirements for the Technical Report Documentation Page (Form DOT F 1700.7); report formats/media accepted; systems to alert users when new reports are available; practices for collecting, cataloging, and maintaining/archiving reports; and other state-specific requirements. Two figures are included in the chapter: Figure 1 presents responses to Survey Question 10, Reported Requirements for Technical Report Documentation Page; Figure 2 presents the distribution of responses to Survey Question 29, Average Distribution Delay.

Chapter 3 provides an interpretation of findings from the task activities and suggests a course of action based on the best practices for distributing, providing access to, and archiving transportation research.

1. REPORT DISTRIBUTION (TASK A.1)

By the directive of a letter signed June 22, 2011, by Michael Trentacoste, Associate Administrator of the Federal Highway Administration (FHWA), reports produced under the State Planning and Research (SPR) Program may be distributed in electronic form and must be distributed to specified recipients. The required recipients are listed below in Table 1. (See Appendix A for a copy of this letter.)

Table 1. Eight Recipients

Federal Highway Administration (FHWA) Research Library	Turner-Fairbank Highway Research Center 6300 Georgetown Pike McLean, VA 22101-2296 fhwalibrary@dot.gov [font]
FHWA, Office of Corporate Research, Technology, and Innovation Management, HRTM-10	Turner-Fairbank Highway Research Center, Room T-305 6300 Georgetown Pike McLean, VA 22101-2296 john.moulden@dot.gov
National Transportation Library (NTL)	NTL Headquarters, W12-300 1200 New Jersey Avenue SE Washington DC 20590 NTLDigitalSubmissions@dot.gov
National Technical Information Services (NTIS)	U.S. Department of Commerce 5301 Shawnee Rd Alexandria, VA 22312 input@ntis.gov
Transportation Research Board (TRB)	Transportation Research Board Library (TRID) 500 Fifth Street, NW Washington, DC 20001 http://trid.trb.org/submit.aspx
Volpe, The National Transportation Systems Center	Kendall Square Technical Reference Center Cambridge, MA 02142 Susan.dresley@dot.com
Northwestern University Transportation Library	1935 Sheridan Road Evanston, IL 60208 r-sarmiento@northwestern.edu
University of California, Berkeley (UC, Berkeley)	TRI-NET Repository, Institute of Transportation Studies Library 412 Mc Laughlin Hall Berkeley, CA 94720 revans@library.berkeley.edu

Research Methodology

The objective of Task A.1 was to identify and understand how these recipients process the SPR-funded reports they receive from State DOTs and/or the DOT contractors. To meet the objectives, the scope of work involved a discussion with appropriate contacts for each of the eight recipient organizations, covering the following topics:

- a. Do you maintain a list of all SPR-funded reports you receive?
- b. Do you add them all to your collection?
- c. What criteria do you use for selecting them for your collection? Topic? Final reports only?
- d. Do you catalog them?

- e. Are your catalog records in OCLC (previously Online Computer Library Center, Inc., and Ohio College Library Center)?
- f. Where do you store the electronic copies that you retain and catalog?
- g. Do your catalog records include a permanent URL, URI, DOI?
- h. Do you have a strategy for long-term preservation of the reports, including periodic checks of file integrity and migration?
- i. Who do you think should be responsible for long-term maintenance and preservation of the electronic SPR-funded reports?
- j. Do you collect paper copies of reports in addition to the electronic copies?

The appropriate contact for each agency was identified through the FHWA directive letter and through inquiries to the agencies and institutions. Discussions were held with the following representatives in May, June, and early July 2014. Follow-up telephone calls were made and emails were sent to obtain further clarification regarding topics from the initial conversations. The contacts are listed below:

1. Deena Adelman, Reference and Interlibrary Loan Librarian, FHWA Library, deena.adelman.CTR@dot.gov 202-493-3058
2. John Moulden, Manager, RD&T National Partnership Program, FHWA, Office of Corporate Research, Technology, and Innovation Management, john.moulden@dot.gov. 202-493-3470
3. Mary Moulton, Digital Librarian, NTL, mary.moulton@dot.gov 202-366-0303
4. Cari Lawson, Program Analyst, NTIS, clawson@ntis.gov 703-605-6099
5. Lisa Loyo, Manager, Information Services, TRB, lloyo@nas.edu 202-334-2990
6. Susan Dresley, Librarian, Volpe, volpelibrary@dot.gov 617-494-2117
7. Roberto Sarmiento, Director, NWUTL, r-sarmiento@northwestern.edu 847-491-2913
8. Rita Evans, Director, UC, Berkeley, ITS Library, rita.evans@berkeley.edu 510-643-3564

Characteristics of Recipient Organizations

The following is a description of each of the eight recipient organizations on the FHWA directive letter, and includes the agency affiliation, mission statement and authorizing language (if applicable).

FHWA Library – Serves the information needs of U.S. DOT’s FHWA employees; will answer questions from the public. The library collects books, reports, technical reports, technical standards, and periodicals. The library provides reference and research services and inter-library borrowing services to FHWA employees.
(www.fhwa.dot.gov/research/library/reportsources.cfm)

FHWA, Office of Corporate Research, Technology, and Innovation Management – Supports U.S. DOT’s FHWA agency and their employees at Turner-Fairbanks Highway Research Center. The office develops and executes policy, budget, program management, and

administrative mechanisms to enable a nationwide FHWA research, development, and technology (RD&T) program to be carried out in cooperation with its partners.¹
(www.fhwa.dot.gov/research/tfhrc/offices/corporateresearch/)

National Transportation Library (NTL) – NTL is a repository of U.S. DOT transportation information, serves as a portal of transportation data, and provides library services to U.S. DOT employees. NTL was established by Transportation Equity Act for the 21st century (TEA-21) and its role expanded in 2012’s Moving Ahead for Progress in the 21st Century (MAP-21 H.R. 4348-486, § 6304). NTL’s mission is to maintain and facilitate access to statistical and other information needed for transportation decision-making at the Federal, State, and local levels, and to coordinate with public and private transportation libraries and information providers to improve information sharing within the transportation community. The NTL’s Selection Statement states, “All items of relevance to the transportation field and received by the library are to be added to the NTL Digital Repository. All items are held permanently in the Digital Repository. No items of relevance to the transportation field are to be excluded.” The NTL creates catalog records for items in the Digital Repository. A NTL catalog record contains: Title, ID, Authors, Corporate Author, Publisher, Year, URL, and Database (NTL Digital Repository).
(www.ntl.bts.gov/policies/colldev.html)

National Technical Information Service (NTIS) – NTIS is in the U.S. Department of Commerce and serves as the largest central resource for government-funded scientific, technical, engineering, and business related information available today. NTIS seeks to promote American innovation and economic growth by collecting and disseminating scientific, technical, and engineering information to the public and industry, by providing information management solutions to other federal agencies, and by doing all without appropriated funding. NTIS receives no appropriations. Its revenue comes from two sources: 1) the sale of technical reports and 2) services to Federal agencies that help them communicate more effectively with their employees and constituents. Title 15 U.S.C. § 3704b-2 (a) Transfer of Federal scientific and technical information, states, “The head of each Federal executive department or agency shall transfer in a timely manner to the National Technical Information Service unclassified scientific, technical, and engineering information which results from federally funded research and developmental activities for dissemination to the private sector, academia, State and local governments, and Federal agencies.”

A NTIS record contains: Accession Number, Title, Publication Date, Media count (pages), Abstract, Keywords, Source Agency, NTIS Subject Category, Corporate Author, Document Type, Title Note (e.g., Final Report), NTIS Issue Number, Contract Number. Record provides purchase cost per media type (electronic document, customized CD, and paper copy).
(www.ntis.gov)

TRB – The Transportation Research Board creates, hosts, and maintains TRID, an integrated database that combines the records from TRB’s Transportation Research Information Services (TRIS) database and the Organization of Economic Co-Operative and Development (OECD)’s Joint Transport Research Center’s International Transport Research Documentation (ITRD) Database. TRID provides access to more than one million records of transportation research

¹ SPR funds are sent to the States by FHWA and their use is overseen by the FHWA Division Office in each State. States are required to produce an annual work plan that is approved by the Division Office.

worldwide. In regards to conditions for approval of FHWA planning and research funds for RD&T activities, Title 23 CFR 420.209 states, “As a condition for approval of FHWA planning and research funds for RD&T activities, a State DOT must develop, establish, and implement a management process that identifies and results in implementation of RD&T activities expected to address high priority transportation issues. Title 23 CFR 420.209 (a) (4) states the management process for RD&T activity must include “Support and use of the TRIS database for program development, reporting of active RD&T activities, and input of the final report information.”

A TRID record contains: Title, Accession Number, Record Type, Record URL, Availability, Abstract, Report Numbers, Contract Numbers, Language, Corporate Authors, Pagination, Publication Date, Media Type, Features, TRT Terms, Identifier Terms, Subject Areas, Files, and Last Modified (Date). Most records also have a full document view attachment. TRB is one of six major divisions of the National Research Council – a private, nonprofit institution that is the principal operating agency of the National Academies in providing services to the government, the public, and the scientific and engineering communities.
(www.trid.trb.org)

Volpe, The National Transportation Systems Center – Volpe is an agency within the U.S. DOT. Its mission is to improve transportation by anticipating and addressing emerging issues and advancing technical, operational, and institutional innovations across all modes. It is funded by sponsor projects and partners with public and private organizations to assess the needs of the transportation community, evaluate research and development endeavors, assist in the deployment of state-of-the-art transportation technologies, and inform decision-and policy-making through comprehensive analyses.
(www.volpe.dot.gov)

Transportation Library, Northwestern University (NWU-TL)² – One of the largest transportation information centers in the world, encompassing information on all transportation modalities. It includes a significant collection on law enforcement, police management, and traffic enforcement. The NWU-TL collection of environmental impact statements is one of the most comprehensive world-wide. The library contains over 500,000 items. It produces TRANweb, a web based periodical index of transportation and law enforcement articles and conference proceedings.
(www.library.nortwestern.edu)

Institute of Transportation Studies Library, University of California, Berkeley (UC Berkeley, TRISNET)³ – This library houses one of the pre-eminent transportation collections in the United States. It serves the research needs of the Institute of Transportation Studies and the University of California system. OskiCat is the catalog for all UC Berkeley libraries. B/TRIS is a database started in 2001 that provides bibliographic records to TRIS on CALTRANS-sponsored research and TRB annual meeting papers³.
(www.its.berkeley.edu)

² Recommendations were made in the mid-1970's to have a national network of Transportation Research Information Services (TRISNET) include a series of regional centers to provide local access to the network and loans and photocopies of transportation documents cited in TRIS (now TRID). [Rath, G.J. (1975). The Effectiveness and Feasibility of a TRISNET Regional Center Information Transfer. DOT-TST-76-36, USDOT]

³ Evans, R (2007). The Role of Large Academic Libraries in Transportation Research. Presentation at the SLA Annual Conference, 2007.

Summary: Discussions with Recipient Organizations

Federal law requires the US DOT/FHWA to support and use the TRID database and to use NTL as a repository for all FHWA planning and research funds for RD&T activities. The US Commerce agency NTIS is required to collect and disseminate all federally-funded research and development activities to government, academia, and the private sector.

The FHWA library serves the information needs of the FHWA employees and is not required to be a repository for all FHWA funded research. Volpe's library is a repository of primarily Volpe-authored reports, of which over 4,300 are in the NTL. Many of the older Volpe reports are not available in electronic full text. Volpe is not required to be a repository for all FHWA-funded research.

The two university-affiliated transportation libraries (Northwestern University, Evanston, IL and University of California, Berkeley, CA) are not required by federal law to be repositories for reports from SPR-funded research. The distribution of research reports from State DOTs to these universities began in the pre-internet days when it was felt that these institutions could best serve TRIS (now TRID) by collecting these reports and helping TRIS (now TRID) in building the bibliographic database³.

The discussions with contacts from the eight recipient institutions and agencies revealed that the State DOTs are distributing the SPR-funded reports to one or more institutions specified in the FHWA directive letter. The Transportation Research Board (TRB) indexes the reports in the TRID database. The NTL creates catalog records for the reports and adds the reports in electronic form to its Digital Repository. TRB and the NTL collaborate to add NTL URLs to the TRID database. The FHWA library periodically checks with the NTL to confirm that the NTL is receiving all FHWA-funded reports that have been published. The University recipients archive electronic copies of reports, as well as paper and other electronic media (CD, USB flash drive, etc.), but there is no systematic effort on their part to preserve all of the reports.

All of the contacts felt that NTL should be the designated repository for all FHWA-funded reports (including SPR-funded reports); most felt that TRID should be the bibliographic database for all FHWA reports. The Universities felt that each State DOT should also be a repository for reports it produces with FHWA funds.

It is important to note that none of the eight recipients pro-actively searches for studies being managed by the State DOTs to determine if a final deliverable (report) has been submitted.

Table 2 summarizes the results of the discussions with the contacts from the eight recipient organizations.

Table 2. Results of Discussion with Eight Recipient Organizations

	FHWA OCRT&IM	FHWA Library	NTL	TRID	NTIS	VOLPE	UC Berkeley	NWU-TL
Maintains a list of all SPR-funded reports received	NO	YES	YES	YES	YES	NO	NO	NO
Adds all SPR-funded reports to collection	NO	YES	YES	YES	YES	NO	NO	NO
Criteria for adding SPR-funded reports to collection	NO	ALL	ALL (accepts CD, URL, and PDF formats)	ALL	ALL	VOLPE- Relevant	CADOT Reports and Select Others	NWU-Specific and Select Others
Catalogs SPR-funded reports	N/A	NO	YES	YES	NO	NO	YES	YES
Catalog records of SPR-funded reports in OCLC	N/A	NO	YES	NO	NO	NO	YES	YES
Storage location of electronic copies of SPR-funded reports	N/A	Internal Server	Internal Server	Internal Server (Bibliographic Records)	Internal Server	NO	Internal Server	Internal Server
Catalog records for SPR-funded reports include permanent URL, URI, and/or DOI	N/A	NO	YES	YES	YES	N/A	YES	YES
Long-term preservation strategy for SPR-funded reports	N/A	NO	YES	YES	YES	N/A	YES	YES
Preferred repository for SPR-funded reports	NTL and TRID	NTL	NTL	NTL	N/A	NTL, TRID, and FHWA Library	NTL and State Repository	NTL and State Repository
Collects paper copies of SPR-funded reports	N/A	NO	NO	NO	YES	NO	YES	YES
Pro-active search for SPR-funded reports	N/A	NO	NO	NO	NO	NO	NO	NO
Other Comments	Receives all SP&R reports	There needs to be a check of 508 compliance. Cannot identify funding source on many State DOT reports received.	Currently working on a new archival system. Monthly receipt of SPR-funded reports shared with TRID.	PDF downloads of full reports are in many of the bibliographic records. Monthly receipt of SPR-funded reports shared with NTL.	Charges a document delivery fee.			Many State DOT reports arrive without proper identification.

2. REPORT DISTRIBUTION REQUIREMENTS, REPORT ACCESS, ARCHIVAL, AND ALERT SYSTEM CHARACTERISTICS (TASKS A.2 - A.5)

There are internal requirements and practices within the State DOTs regarding how they are to distribute the SPR-funded reports across the transportation information and research community. Variation in State DOT information practices is recognized in the community and has warranted this research to understand the differences.

Research Methodology

In order to identify the distribution requirements and processes of the State DOTs, the following measures were employed:

- (1) Review of original RFP, TransAnalytics (TA) proposal, and TA's approved action plan;
- (2) Identification of State DOT libraries (Minnesota DOT's website list of State DOT Libraries);
- (3) Connection with each State DOT Library to identify appropriate individual that would participate in the survey;
- (4) Development of survey (drafts were reviewed by TA consultant and other project review committee members);
- (5) Pilot testing of survey with selected State DOT Libraries (AZ, ID, MN, NJ, and WI);
- (6) Distribution of final version of survey (via Survey Monkey) with two follow-up emails;
- (7) Collection of data;
- (8) Summarization and analysis of data; and
- (9) Preparation of report.

(Appendix B provides the survey instrument.)

Results

Below is a summary of responses to the survey questions. Each header identifies the questions discussed in the subsection that follows.

Participants

(Survey Questions 1-2)

Thirty-nine (39) State DOT Libraries/Research Centers were sent the survey on July 3, 2014. (See Appendix C for list of recipients.) Several recipients mentioned that they needed the assistance of others to complete the survey and requested printable versions; therefore, on July 7, 2014, TA sent a printable, interactive PDF version of the survey to all recipients. A reminder was sent July 24, 2014 specifying a closing date of August 1, 2014 to complete the survey. One recipient sent the responses electronically via interactive PDF, and one sent the responses as a Word document. In these cases, TA entered the responses into the electronic survey.

Overall, 21⁴ agencies (54%), representing the following 20 States, completed the survey in its entirety: AZ, CA (CALTRANS, UC Berkeley), CT, ID, IA, KS, KY, ME, MD, MN, MI, MO, MT, NJ, NV, NY, OH, VA, WA, and WI.

Most (76.2%) of the State DOT respondents held a librarian position (i.e., Librarian, Head Librarian, Library Director or Administrator, etc.). Five of the respondents held non-library-specific job titles: Deputy Director of Policy and Research, Outreach and Communications Specialist, Technology Transfer Coordinator, Research Director, and Senior Research Analyst. *Question 2.*

Over half (52.4%) of the respondents noted that their library was part of the Research Center of the State DOT. Only 14.3% of the respondents reported that their library was separate from the research center. The remainder (33.3%) of the respondents reported that their library was part of Contracting Services, a separate department in the same division, or was now closed (OH); one respondent noted that the DOT does not have a library (MD). *Question 3.*

Receipt and Editing of Reports

(Survey Questions 4 - 6, 16, 17, 47, 48)

Seven (7) of 10 respondents (70%) receive SPR-funded contractors' reports directly from the DOT Research Center. Only two respondents receive the reports directly from the SPR-funded contractors, and one respondent reported receiving reports from both the Research Center and the contractor. *Question 4.*

Twelve (12) of 20 respondents (60%) reported that their agency edits the SPR-funded reports once they are received from the contractors. Respondents reported that final determination that the SPR-funded report is ready for distribution is made by the Research Program Managers, Research Directors, Project Managers, Deputy Directors, FHWA Division staff, Technical Panels, and Technology Transfer Specialists. *Questions 5 and 6.*

⁴ The survey was designed to skip questions not relevant to certain respondents (based on answers to previous questions). Therefore, not all of the questions have 21 responses.

Thirteen (13) of 15 respondents reported that they faced some obstacles in receiving research reports from SPR-funded projects sponsored by their agency. Timeliness of report deliverables was the most frequently reported obstacle (46.7%). Other commonly reported obstacles included lack of communication between departments (20.0%) and quality of writing (13.3%). *Question 16.*

Eleven (11) of 21 respondents provided additional comments (optional) regarding practices and requirements relating to distribution and maintenance of SPR-funded research reports. These comments related to agency requirements for printed copies, reports being representative of the DOT, contractor distribution rights, responsibilities for completing the technical report documentation page, inserting their DOT report cover and DOT number, and requirements for distribution of reports. *Question 17.*

Sixteen (16) of 19 respondents (84.2%) reported that they rarely receive updates or corrections to SPR-funded reports that their agency has already submitted to the required recipients. Three of the respondents (15.8%) reported that they never receive updates. None of the respondents answered “frequently” or “very frequently” to this question. When asked how their agency handles these updates and/or corrections, 6 of the 15 (40.0%) respondents reported that the agency requires the contractor/researcher/original author to make the changes and then the agency resubmits; 3 respondents (20.0%) reported that they make these changes in house and then resubmit; 3 (20.0%) reported that they submit an addendum or correction (errata) sheet; 1 respondent reported that they do nothing for these updates or corrections; and 1 reported that it depended on the situation. *Questions 47 and 48.*

Practices and Requirements Related to the Technical Report Documentation Page (Form DOT F 1700.7)

(Survey Questions 7 – 10, 52-53)

Sixteen (16) of 19 respondents (84.2%) reported that they edit the Technical Report Documentation Page of received SPR-funded reports. Ten (10) of the 19 respondents (52.6%) reported that they provide instructions to the contractor for filling out the Page. Nine (9) of the 10 respondents (90%) noted that the instructions they provide were developed by their agency; only 1 respondent reported that their agency uses the U.S. DOT Standards for the Preparation and Publication of DOT Scientific and Technical Reports (DOT-TST-75-97). *Questions 7-9.*

Eighteen (18) of the 21 respondents (86%) identified the fields on the technical documentation page that their agency requires to be completed by contractors. The most common fields required (over 75% of respondents) are as follows (in descending order):

Abstract (16.)	100%
Title and Subtitle (4.)	94%
Authors (7.)	94%
Key Words (17.)	94%
Report Date (5.)	89%
Sponsoring Agency Name/Address (12.)	89%
Performing Org. Name/Address (9.)	89%
Report No. (1.)	83%
Type of Report/Period Covered (13.)	78%

Less common fields required (75% to 50% of respondents) are as follows (in descending order):

Distribution Statement (18.)	72%
Number of Pages (21.)	67%
Security Classification (of this report) (19.)	67%
Contract or Grant No. (11.)	61%
Security Classification (of this page) (20.)	56%

The least common fields required (less than 50% of respondents) are as follows (in descending order):

Performing Org. Report Number (8.)	44%
Supplementary Notes (15.)	28%
Sponsoring Agency Code (14.)	22%
Performing Organization Code (6.)	17%
Government Accession Number (2.)	6%
Recipient's Catalog Number (3.)	6%
Price (22.)	6%
Work Unit Number (10.)	0%

Figure 1 identifies the reported requirements of the Technical Report Documentation Page by respondents in order of the fields on the form. *Question 10*.

A more in-depth discussion on findings regarding promoting more effective use of the Technical Report Documentation Page is included in a separate, Part B report⁵.

⁵ Mastromatto, T., Decina, L., & Tucker, S. (2014). Recommendations for More Effective Use of the Technical Report Documentation Page (Form DOT F 1700.7). Final Report.

Q10 What fields on the technical documentation page (Form DOT F 1700.7) does your agency REQUIRE to be completed? Please check all that apply:

Answered: 18 Skipped: 3

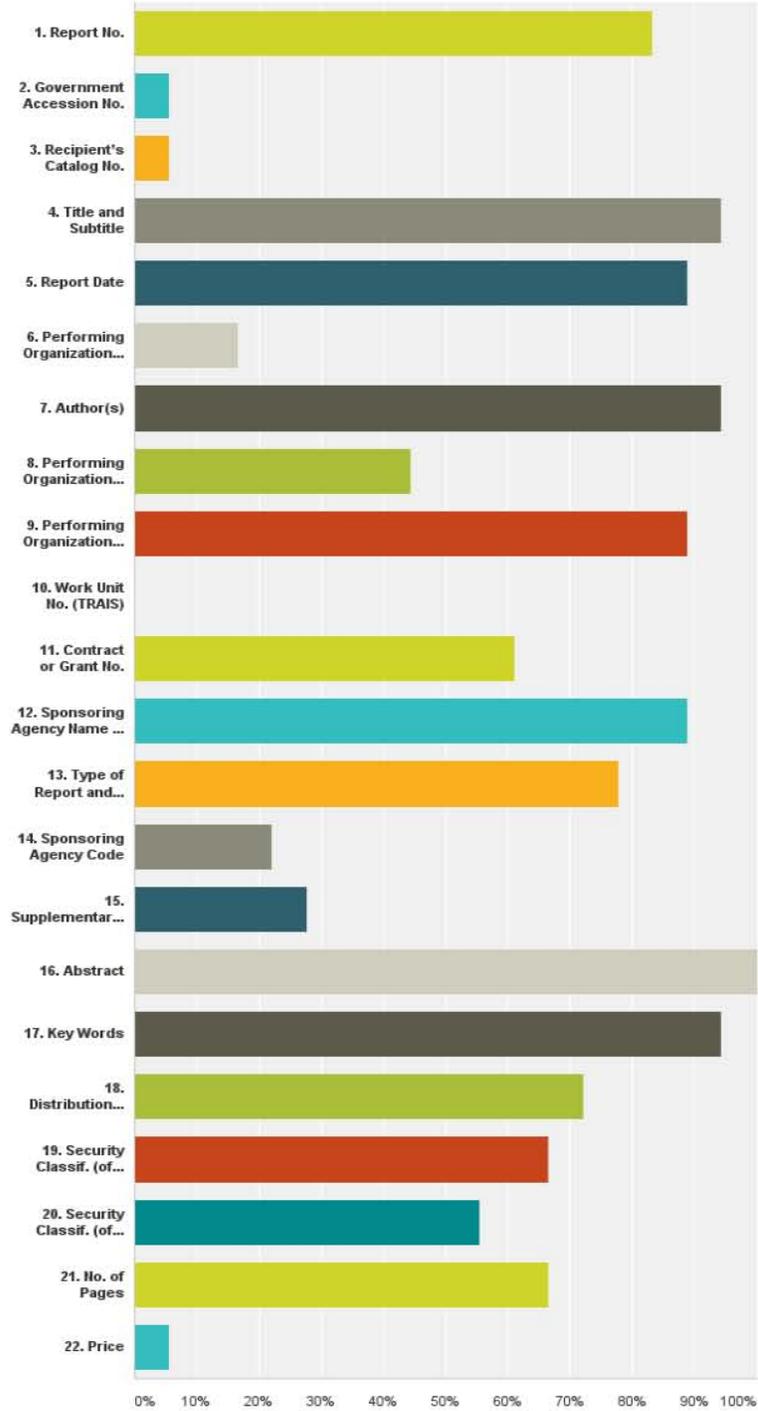


Figure 1. Reported Requirements for Technical Documentation Page

Only 2 of 11 respondents (18.2%) reported that their requirements for the Technical Report Documentation Page specify that a URL be included; one in the Supplementary Notes (15) field and the other in the Distribution Statement (18) field. *Questions 52-53.*

Format of Reports Received

(Survey Questions 11- 12)

Respondents were asked what file formats/media their agency accepts for SPR-funded research reports (respondents were able to select more than one format/media). Nineteen (19) respondents reported as follows:

Electronic PDF	(17) 89%
Electronic Microsoft Word Document	(16) 84%
USB Flash Drive/CD	(11) 58%
Paper	(7) 37%

Of the 7 agencies that reported that they accept paper copies, only 1 reported that they convert these paper copies to electronic format. *Questions 11-12.*

FHWA Distribution List Requirement Practices

(Survey Questions 18, 21-30)

Respondents were asked to select the organizations that their agency is required (by FHWA or State) to send SPR-funded reports to. Nineteen (19) participants responded; the following is the distribution of responses by frequency:

Transportation Research Board (TRID)	100%
National Transportation Library (NTL)	95%
National Technical Information Service (NTIS)	68%
State Library	63%
FHWA Research Library	58%
Turner-Fairbank Highway Research Center	58%
Northwestern University Transportation Library	58%
Volpe National Transportation Systems Center	47%
University of California, Berkeley, Ins. Tr. Studies	32%

Respondents also listed other places that they send SPR-funded reports: Wisconsin Document Depository Fund; Legislative Reference Library Chief Clerk of MN, House Secretary of the MN Senate, APWA; Northeast States Research Engineers, University of Connecticut Technology Transfer Center; University of Kentucky Archives, UKnowledge Repository, UK Libraries. *Question 18.*

Fifty percent (10 of 20) of respondents reported that they do not send SPR-funded reports to all of the eight institutions on the FHWA list. Respondents reported that they do not send SPR-funded reports to: FHWA Research Library; Turner-Fairbank Highway Research Center; Volpe; Northwestern University Transportation Library; and University of California (UC) Berkeley. Some respondents mentioned that they did not know or did not remember they were supposed to

send SPR-funded reports to certain organizations, that a librarian at a FHWA office told them they did not need to submit SPR-funded reports there, and that UC Berkeley asked them to stop sending SPR-funded reports. *Questions 21-22.*

Six (6) of 19 respondents (31.6%) reported that *all* of their recipients are sent electronic PDFs, and 7 of the 19 (36.8%) reported that *some* recipients are sent electronic PDFs. Eighteen (18) respondents (94.7%) reported that *none* of their recipients are sent other electronic versions (i.e. Microsoft Word documents), and 10 respondents (52.6%) reported that *none* of their recipients are sent paper copies of reports. Eight (8) of the 19 respondents (42.1%) reported that *some* of their recipients are sent paper copies (i.e. University of Kentucky Archives; State Libraries/ Document Depositories; Library of Congress; FHWA regional office). *Questions 23-25*

Eleven (11) of the 19 respondents reported that *all* of their recipients are sent URLs pointing to reports housed on a server, and 6 (31.6%) reported that *some* recipients are sent URLs (primarily NTIS, and TRB-TRID). Only 2 respondents (10.5%) reported that *none* of their recipients are sent URLs. Most respondents (88.2%) reported that these URLs point to their agency's own server; 29.4% of respondents reported that these URLs point to their State Library's server; and 17.7% reported that these URLs point to the NTL's server. Note: percent total exceed 100% because 5 of the 9 respondents (29.4%) reported that their reports are housed in more than one location. *Questions 26-27*

Distribution to Other Organizations

(Survey Questions 19, 31-33)

Sixteen (16) of 20 respondents (80%) reported that their agency voluntarily (not required) sends SPR-funded reports to other organizations. Some of these other organizations include: State archives/libraries; other State DOTs and University Transportation Centers (UTCs); State Universities; Library of Congress; and the performing organization. *Questions 19-20.*

Over half of all respondents (57.1%, or 12 of 21) reported that their State has a document depository that their agency submits SPR-funded reports to. Five (5) of the 21 respondents (23.8%) reported that although their State has a document depository, the agency does not send SPR-funded reports there, and 4 respondents (19.1%) reported that their State does not have a document depository. *Question 31.*

Nine (9) of 20 respondents (45.0%) reported that their agency makes SPR-funded reports available before distributing them to the FHWA-required institutions. Of these 9, 6 (66.7%) reported that these reports are made available via website and 3 (33.3%) reported that the reports are available for internal use. *Questions 32-33*

Distribution Delay

(Survey Questions 29-30)

Respondents were asked what the average delay is between when their agency receives the completed SPR-funded report (ready for distribution) and when it is sent to those on the FHWA list. Of the 19 who responded to this question, almost half of the respondents (47.3%, or 9 of 19) reported that the average delay was 0 to 3 months; 21.1% (4 of 19) reported that there was no delay and that these reports were distributed immediately. Only 1 respondent reported an average delay of 3 to 6 months; and only 1 reported over 6 months. Four (4) of the 19 respondents

(21.1%) reported that their average delay did not fit into these pre-defined categories (i.e., less than 1 month, 0-6 months, unsure). Figure 2 presents the distribution of responses concerning average delay. Thirteen (13) respondents cited reasons for delay. Most mentioned internal issues (46.2%) and limited staff resources/heavy workload (38.5%) as the primary reasons for delay. *Questions 29-30.*

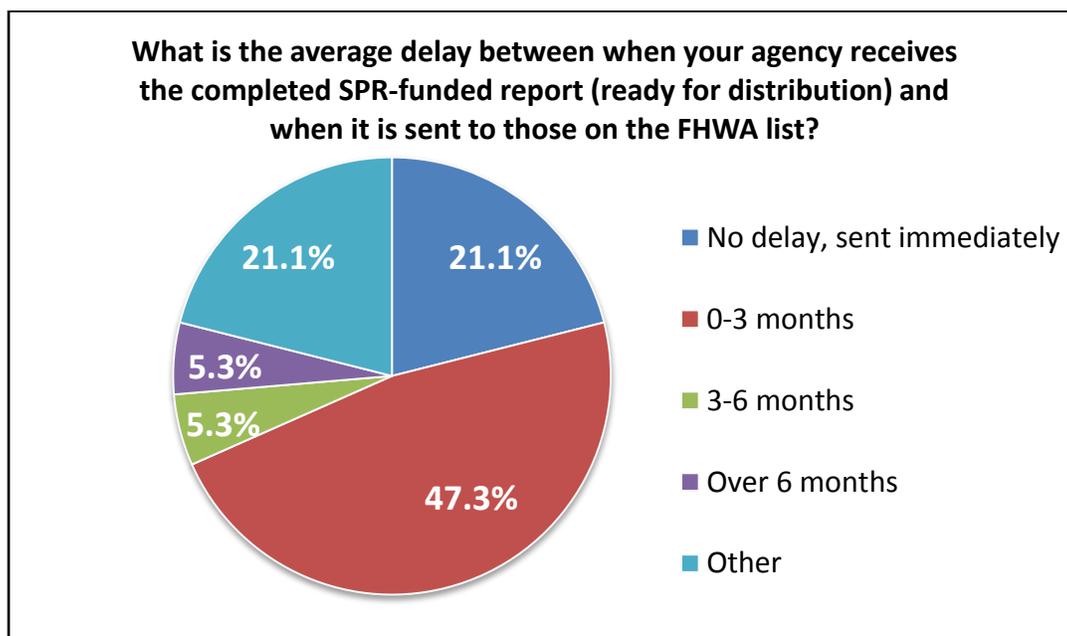


Figure 2. Distribution of Responses to Question 29, Average Distribution Delay

Alert Systems

(*Survey Questions 35-38*),

Respondents were asked if their agency has an alert system to inform users when SPR-funded reports are produced. (The survey provided the example of AASHTO-SCOR/RAC – publications subscription). Thirteen (13) of the 21 respondents (61.9%) stated that they have an alert system. When asked what type(s) of alert system(s) they used, the following were checked (in order of frequency):

Group email distribution list	69%
RSS Feed	31%
Other	23%
Listserv (or other email list service)	15%
Notifications posted on their website	15%

Responses to the *other* category included: ITD Resource Library Connections Newsletter; social media newsletter; and GovDelivery – Research Center News (1100 + subscribers). *Questions 35-36.*

The vast majority of respondents (75% or 9 of 12) reported that their alert system coincides with sending reports to the organizations on the FHWA list. *Question 37.*

Preferences

When asked what type of alert system they would prefer for being notified about reports from other agencies, the majority of respondents (52.9% or 9 of 17) reported that they prefer email (e.g., group email, listserv). Other preferred systems included centralized notifications and electronic-newsletters (11.8% each). *Question 38.*

Maintenance (Collecting, Cataloging, and Maintenance)

(Survey Questions 40-46; 13 to 15)

Nearly all of the respondents (95% or 19 of 20) reported that their agency maintains a collection of research reports from projects sponsored by their State, FHWA, and other State DOT's. The format(s) that each agency collects was reported as follows: both paper and electronic (17 of 21 or 80.9%) and electronic only (2 of 21 or 9.5%). One respondent reported that the agency collects multiple formats, which includes not only both print and electronic, but CD-ROMs, flash drives, and floppy disks as well. Another respondent reported that the format collected depends on the organization the report comes from. The vast majority of respondents (18 of 21 or 85.7%) said maintenance of this collection was the responsibility of a librarian (e.g., Librarian, Senior Librarian, Library Administrator). Other responses included Research Director (1 of 21 or 4.8%), Webmaster (4.8%), and Senior Research Analyst (4.8%). *Questions 40-42.*

All respondents reported that their agency adds all of their State's SPR-funded reports to the report collection. For criteria (e.g., topic specific) used for selecting which reports to add to their collection, most reported they collect just their State DOT reports specifically (9 of 17 or 52.9%). For those that go beyond their State DOT reports, selection is based on topics relevant to their State DOT's interests. Some decisions are based on report format (e.g., print, electronic) as well. *Question 44.*

Nine (9) of 20 (45%) of respondents reported that they use their own local system for cataloging reports; 7 of 20 respondents (35%) reported that they use OCLC and 4 respondents (20%) use the Library of Congress classification. One (1) respondent (5%) reported that they use EOS International to catalog their reports, and 2 respondents reported that they do not catalog (10%). Over half (11 of 20 or 55%) of respondents reported that their agency stores catalog records in both OCLC and in a local catalog, 25% (5 of 20) reported that these records are stored in a local catalog only, and 15% (3 of 20) store their catalog records in OCLC only. *Questions 45-46.*

Thirteen (13) of 21 respondents (61.9%) reported that UTCs send reports to their agency. Of the 21 respondents, 14 (66.6%) reported that they do not actively collect UTC-funded reports on their own. One respondent reported that they receive these reports from a third party (subscription to NTIS database). *Questions 13-15.*

Archival Procedures

(Survey Questions 49 – 58)

Over half of all respondents (11 of 20 or 55%) reported that their agency assigns a permanent URL to each report. When asked where the URLs are stored, all 9 respondents to this question

reported that these URLs point to their State DOT server. When asked what obstacles, if any, they face concerning URLs, most respondents (5 of 9 or 55.6%) reported concerns with server name change and/or other technical issues that are outside their control. Nine (9) of 11 respondents (81.8%) reported that their agency does not require that the URL be specified on the Technical Report Documentation Page (Form DOT F 1700.7). Two (2) respondents reported that the permanent URL is included in both their agency’s local catalog records and in OCLC, 1 respondent reported that this URL is included in the local catalog only. *Questions 49-54.*

All respondents reported that electronic copies of their agency’s SPR-funded reports are stored on an internal server (19 of 19 or 100.0%), and most reported that they were housed by the National Transportation Library (15 of 19 or 42.1%) as well. A majority (11 of 19 or 57.9%) also reported that their SPR-funded reports are stored in their State document depository. The distribution of responses is as follows (totals exceed 100% because each respondent was able to select more than one response). *Question 55*

On an internal server	100.0%
National Transportation Library	78.9%
In the State document depository	57.9%
On an external server	42.1%
In our DOT library database	26.3%
On a librarian’s computer	5.3%

Sixty percent (60%) or 12 of 20 respondents reported that their agency does not have a strategy for long-term preservation of SPR-funded reports that includes periodic checks of file integrity and migration; 20% (4 of 20) reported that their agency does have a preservation strategy, and 20% reported that another organization is responsible for long-term preservation of their SPR-funded reports. Notably, 2 of the 4 respondents who specified that another organization is responsible commented that their agency actually has a long-term preservation strategy for paper copies but not electronic copies. Strategies for preservation include: electronic records management systems, perpetual retention of hard copies (digitally convert to PDF and TIFF files stored on CD-ROM). *Questions 56-57.*

When asked about other comments concerning the archiving of SPR-funded research reports, 2 respondents commented that they hope NTL provides a “stable home” for their documents, and one commented that TRID should create a unique URL for each report.

Summary of Results (Tasks A.2 - A.5)

Most of the State DOT respondents are part of their State’s Research Center, which is responsible for managing and releasing the incoming SPR-funded reports from contractors. Most of the Research Centers and Libraries edit the reports (including the Technical Report Documentation Page—Form DOT F 1700.7) after they receive them from contractors. Generally, the DOT agencies require the following fields to be filled in on the Technical Report Documentation Page: abstract, title, authors, key words, report date, sponsoring agency, performing organization, report number, and type of report/period covered. Most State DOT agencies accept the reports in electronic PDF and Microsoft Word formats; and only about one-

third of the libraries accept paper copies of reports. Over half of the State DOTs receive some non-SPR reports from UTCs, but most do not actively collect these reports.

All of the State DOT agencies reported that they are required to send completed SPR-funded reports to TRB (TRID) and nearly all reported that they are required to send them to the NTL. About two-thirds reported that they were required to send the reports to NTIS and their State Libraries, and a little over half reported that they were required to send them to the FHWA Research Library, FHWA Turner-Fairbanks Highway Research Center, and Northwestern University Transportation Library. Less than half reported that they were required to send these reports to Volpe and the University of California, Berkeley, Institute of Transportation Studies. Most of the respondents voluntarily send reports to other institutions upon request. Over two-thirds of the State DOT agencies reported that the average delay in distributing SPR-funded reports to required recipients was 3 months or less.

Approximately two-thirds of the State DOT agencies have an alert system. Most use a group email distribution list which tends to be the most preferred type of alert among respondents. Three-fourths of the respondents reported that the alert coincides with sending reports to their required recipients.

All of the State DOT agencies add their own SPR-funded reports to their collections; and most catalog using their own internal system and/or OCLC. In general, the State DOT agencies rarely receive updates or corrections to the SPR-funded reports and have varied practices on how they handle report revisions.

Over one-half of the respondents reported that their agency assigns a permanent URL to each report and that the URL points to a State DOT server. Only two respondents reported that their agency requires the URL be specified on the Technical Report Documentation Page of the report. The concern of the majority of respondents regarding URLs relates to server name changes and other technical issues that are out of their control.

Most of the State DOT agencies report storing SPR-funded reports on an internal server and with the NTL. Over half reported that they also store these reports with a State document depository. Notably, the majority of the respondents do not have strategy for the long-term preservation of SPR-funded reports.

3. INTERPRETATION OF RESULTS AND RECOMMENDATIONS FOR BEST PRACTICES

Interviews with the Eight Organizations That Receive Reports by FHWA Directive

The Code of Federal Regulations specifies Transportation Research Board (TRB) involvement in recording report information in the TRID/TRIS database. TRB Information Services creates index records for all reports from FHWA-funded research that TRB receives.

Similarly, the National Transportation Library (NTL) is mandated, by legislation in its case, to maintain and facilitate access to information needed for transportation decision-making. NTL adds reports from FHWA-funded research to the NTL Digital Repository and holds them permanently. Both TRB and NTL report collaborating to ensure that each receives all SPR-funded reports that have been distributed by the State DOTs.

Among the other recipients named in the FHWA directive, NTIS has as its mission to collect and disseminate reports from federally-funded research. Because, however, NTIS deals with a wide range of agencies and because it has limited funding, it is less closely tied to transportation and less likely to collect transportation research more comprehensively than TRB and the NTL.

The other five organizations (FHWA Library, FHWA OCRT&IM, VOLPE, NWU, and UC Berkeley) are not required by law or regulation to collect and maintain reports from FHWA-funded research, and none of them collect such reports comprehensively. *Because redundancy in catalogs and holdings is useful in improving discovery and access, it is worthwhile that these five collect and catalog reports. If, however, any of them would prefer not to receive State DOT reports, FHWA should remove them from the required distribution list – to save work by both the DOT distributors and the recipients.*

One issue that may require attention is ensuring that the State DOTs send full-text electronic copies of their reports or a correct URL linking to the full-text report to the NTL and NTIS, whose missions involve preservation. Although many State DOTs reported that the URLs for reports on their servers may change over time, it has been confirmed that NTL and NTIS will download the full-text of a report from a URL and incorporate it into their respective repository/archive.

Another issue brought to light by personal experience (in the field) of the research team is monitoring the production and distribution of reports from SPR projects, generally, including those for which no report has been finalized. The FHWA Office of Corporate Research, Technology, and Innovation Management and the FHWA Regional Offices could perhaps collaborate in an audit function to encourage completion of all projects and communication of all research results.

It should be noted that TRB's TRID and the NTL Digital Repository are fundamental and critical to discovery and preservation of transportation research. Legislators and the transportation community should continue to provide adequate resources to allow them to prosper. The responses of the eight report recipients reinforce this view. All felt that the NTL should be the designated repository for reports from FHWA-funded research, and most felt that TRID should be the primary bibliographic database.

Survey of State DOTs Concerning Distribution, Collection, and Maintenance of Reports

The research revealed that in addition to the FHWA directive, each of the State DOTs has its own requirements for publishing, distributing, providing access to, and archiving SPR reports from SPR-funded research managed by its own organization.

All of the State DOTs accept SPR-funded reports from their contractors in electronic form. These reports are then reviewed, edited, and revised to meet the DOT's research and readability standards. Findings also show that the survey respondents, most holding library job titles, have a role in completing the Technical Report Documentation Page (Form DOT F 1700.7). (Note: Part B of this project focuses on the Technical Report Documentation Page and uses findings identified from the survey and this report to support analysis in a separate report⁶.)

In addition, findings reveal that upon completion of the approval process, most State DOT agencies distribute the completed reports to their own server and depository systems, announce them to group email distribution lists, and in many cases submit them to their State Library depository; and then distribute them to the national transportation databases and depositories (TRB/TRID and the NTL) without much delay. *The best practice for report distribution is already in place.*

Beyond distribution to TRB and the NTL, there is variation among the State DOTs regarding the other six organizations listed in the FHWA directive; some DOTs use a modified list, consistent with the wishes of the organizations that have requested not to receive reports. *The variation noted underscores the idea that FHWA should revise the directive letter. Required recipients should include NTL, TRB/TRID, NTIS, and an FHWA recipient, possibly the appropriate Regional Office.*

With the access provided by TRID and the NTL, researchers and practitioners in transportation fields can stay current, conduct research, and access information in their fields without incurring any direct cost, as they can download full-text reports from FHWA-funded research. Because a back-up system is practical, the DOTs should continue to distribute the reports to the U.S. Department of Commerce's National Technical Information Service. It was suggested by some FHWA recipients that each DOT should assume responsibility for long-term preservation of its own reports. In addition, as funder, at least one FHWA office, perhaps the appropriate Regional Office, should receive a copy of each SPR reports. Survey findings revealed that the current FHWA recipients do not retain the reports.

It was found that approximately two-thirds of the State DOT agencies have an alert system; and most use a group email distribution list that coincides, for most of the respondents, with sending reports to their required recipients.

There was not much interest/support among participants for using RSS feeds as an alert system, perhaps indicating that RSS is not widely used among survey recipients. Findings show that the preferred alert system is group email, and, thus, the best practice is already in place in most agencies.

A recommended instruction sheet has been developed based on the findings of this research. This sheet is presented in Figure 4 below.

⁶ Mastromatto, T., Decina, L., & Tucker, S. (2014). Recommendations for More Effective Use of the Technical Report Documentation Page (Form DOT F 1700.7). Final Report.

INSTRUCTIONS

FOR PROVIDING ACCESS TO TRANSPORTATION RESEARCH

This sheet provides an overview of instructions for the distribution of Federal Highway Administration (FHWA) reports funded by the State Planning and Research (SPR) program.

Where?

TRID, NTL, and NTIS

Distributing SPR-funded reports to TRID and NTL is a must. These two organizations play a vital role in providing access to the transportation community. A copy of the report should be sent to the appropriate state or DOT archive as well.

Sending to NTIS is required for all federally-funded reports; it is also ideal to serve as a back-up system.

Send to ANYWHERE ELSE that expresses interest in receiving these reports. Redundancy in catalogs and holdings is useful in improving discovery and access.

Who?

Group Email List

Creating a group email list of interested parties to notify when new SPR-funded reports have been made available is ideal. This provides necessary information to those who want it, without the burden and margin of error associated with searching for this information on their own.

What?

URLs or Full Electronic

Send a full-text electronic copy of a report, or a URL, to NTL, TRID, and NTIS for their use in creating records. NTL and NTIS will download the full report from a URL .

Follow your state's procedures to ensure that a full electronic copy is added to the appropriate repository / archive.

When?

0-3 Months

Upon approval, making SPR-funded reports available as soon as possible allows researchers and practitioners in transportation fields to stay current, conduct research, and access information.

This sheet was created as part of Transportation Library Connectivity and Development Pooled Fund Study TFP-5 (237) Research Report Distribution and Access Process Improvement. For more information on the findings of this study, please see: Decina, L., Mastromatto, T., & Tucker, S. (2014). Best Practices for Distributing, Providing Access To, and Archiving Transportation Research. (Final Report).

Figure 3. Recommend Instruction Sheet for Providing Access to Transportation Research

Appendix A: FHWA Directive Letter



U.S. Department
of Transportation
Federal Highway
Administration

Research, Development, and Technology

June 22, 2011

Turner-Fairbank Research Center

June 22, 2011

6300 Georgetown Pike

McLean, VA. 22101

202-493-3399

Fax: 202-493-3478

www.fhwa.dot.gov/research

In Reply Refer To:

HRT-1

Ms. Sandra Q. Larson
c/o Chairman, Research Advisory Committee/AASHTO
Iowa Department of Transportation
800 Lincoln Way
Ames, IA 50021

Dear Ms. Larson:

Consistent with a federal government-wide effort to reduce unnecessary printing costs and environmental impact, I am amending our requirement for the receipt of printed research reports. Currently, the State Planning and Research Guide (SP&R) specifies that two printed copies of SP&R-funded research reports are required to be sent to our FHWA Research Librarian, and five printed or one electronic copy to our Office of Corporate Research, Technology and Innovation Management. From now on, research reports from state departments of transportation need only be submitted in electronic form (in .PDF or Microsoft Word formats). Reports too large to be sent via e-mail may be submitted in CD, DVD, flash drive or other common electronic media.

Please continue to send electronic report copies to the same FHWA recipients as listed below. If your department prefers to send printed copies of research reports, please include one copy in electronic form and only one copy in printed form. The preferred formats for informational copies sent to other recipients are specified below. If there are any questions, please direct them to: John Moulden at (202) 493-3470 or John.Moulden@dot.gov.

Please send electronic copies to the following libraries and offices:

Federal Highway Administration Research Librarian
FHWA Research Library
6300 Georgetown Pike
McLean, VA 22101-2296
fhwalibrary@dot.gov

Office of Corporate Research, Technology, and Innovation Management
Federal Highway Administration, HRTM-10
Turner-Fairbank Highway Research Center, Room T-305
6300 Georgetown Pike
McLean, Virginia 22101
john.moulden@dot.gov

National Transportation Library (NTL)
NTL.DigitalSubmissions@ntl.gov

National Technical Information Service (NTIS)
5101 Springwood Way
Alexandria, VA 22304
ntis@ntis.gov

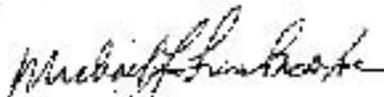
Transportation Research Board Library (TRB)
500 Fifth Street, NW
Washington, DC 20001
<http://trb.tch.org/submit.aspx>

Veipe National Transportation Systems Center
URIS-NEI Repository DITS-930
Kendall Square
Technical Reference Center
Cambridge, MA 02142
scott.dinsley@dot.gov

Robene Sammons
Transportation Library, Northwestern University
1975 Sheridan Road
Evanston, IL 60208
rs.sammons@northwestern.edu

University of California
TRB - NEI Repository, Institute of Transportation Studies Library
612 McLaughlin Hall
Berkeley, CA 94720
trb@lib.berkeley.edu

Sincerely yours,



Michael F. Trembly
Associate Administrator

Appendix B: Survey Instrument

State DOI Report Distribution

As part of a Transportation Library Connectivity and Development Pooled Fund study, this survey concerns research report distribution and access process improvement.

The survey takes around 20-30 minutes; there are approximately 55-60 questions.

After each section of questions you will have the opportunity to provide additional comments, as some questions may not cover unique report processing procedures.

Your time and effort are appreciated,

Lawrence E. Decina, Principal Investigator
Tia Mastromatto, Research Assistant
TransAnalytics, LLC
215-538-3820

State DOT Report Distribution

1. Please provide the following information:

Name:
Agency:
Address:
Address 2:
City/Town:
State:
ZIP:
Country:
Email Address:
Phone Number:

2. What is your State DOT Affiliation (e.g., Senior Librarian, Research Director)?

Distribution and Maintenance Practices and Requirements

The first set of questions addresses your agency's (e.g., library, information center, research center) practices and requirements related to distribution and maintenance of the State Planning and Research (SPR)-funded research reports.

**Note: Throughout this survey, the term "SPR-funded reports" and its variations refer to SPR Part II (Research) reports.*

University Transportation Centers (UTCs) are those funded by the US DOT. Questions concerning UTCs refer to UTC-funded reports.

State DOT Report Distribution

Distribution and Maintenance Practices and Requirements

3. Is your library/information center part of the research center or are they two separate departments?

- Library is part of the research center
- Library is separate from the research center
- Other (please specify)

Distribution and Maintenance Practices and Requirements

4. Do SPR-funded contractors send reports directly to your library/information center or do you get them from your DOT's research center?

Please check all that apply:

- Receive reports directly from contractors
- Receive reports from the research center
- Other (please specify)

5. Does your agency edit SPR-funded reports after they are received from the author/contractor?

- Yes
- No

6. Who (position title) makes the final determination that the SPR-funded report is ready for distribution?

State DOT Report Distribution

7. Does your agency edit the technical documentation page (Form DOT F 1700.7) of received reports (e.g., technical edits to abstract, addition of key words, filling in blank fields, etc.)?

- Yes
 No

8. Does your agency provide instructions to the SPR-funded contractor for filling out the technical documentation page (Form DOT F 1700.7)?

- Yes
 No

Distribution and Maintenance Practices and Requirements

9. Were these instructions developed by your agency or are they from another source?

- Developed in house
 U.S. Dot Standards for the Preparation and Publication of DOT Scientific and Technical Reports (DOT-TST-75-97)
 From another source

State DOT Report Distribution

10. What fields on the technical documentation page (Form DOT F 1700.7) does your agency REQUIRE to be completed?

Please check all that apply:

- 1. Report No.
- 2. Government Accession No.
- 3. Recipient's Catalog No.
- 4. Title and Subtitle
- 5. Report Date
- 6. Performing Organization Code
- 7. Author(s)
- 8. Performing Organization Report No.
- 9. Performing Organization Name and Address
- 10. Work Unit No. (TRAIS)
- 11. Contract or Grant No.
- 12. Sponsoring Agency Name and Address
- 13. Type of Report and Period Covered
- 14. Sponsoring Agency Code
- 15. Supplementary Notes
- 16. Abstract
- 17. Key Words
- 18. Distribution Statement
- 19. Security Classif. (of this report)
- 20. Security Classif. (of this page)
- 21. No. of Pages
- 22. Price

State DOT Report Distribution

11. What file format/media does your agency accept for SPR-funded research reports?

Please check all that apply:

- Electronic PDF
- Electronic Microsoft Word document
- Paper
- USB Flash Drive/CD

Distribution and Maintenance Practices and Requirements

12. If your agency accepts research reports in paper, does the agency convert them to electronic format?

- Not Applicable
- Yes
- No

13. Do any University Transportation Centers (UTCs) send UTC-funded reports to your agency?

- Yes
- No

Distribution and Maintenance Practices and Requirements

14. Please list the UTCs that send reports to your agency:

	-
	-

State DOT Report Distribution

15. Do you actively collect UTC-funded reports on your own?

- Yes
 No
 Receive them from a third party (not the UTC)

16. What obstacles do you face in receiving research reports from SPR projects sponsored by your agency?

Distribution and Maintenance Practices and Requirements

17. Please provide any additional comments regarding practices and requirements related to distribution and maintenance of SPR-funded research reports (optional):

(For example, some DOTs allow contractors to distribute SPR-funded reports)

Distribution to Other Institutions

The next set of questions concerns FHWA's distribution requirements* to other institutions, and other broad distribution practices.

**RAC electronic document distribution letter (signed by Michael Trentacoste, FHWA Assoc. Admin. on June 22, 2011) – FHWA Library; FHWA Office of Corporate Research and Technical*

State DOT Report Distribution

Innovative Management; NTL; NTIS; TRB/TRID; Volpe National Transportation Center; Northwestern Univ./Trans Lib.; and Univ. of CA/TRI-NET Repository, Institute of Transportation Studies Library

Distribution to Other Institutions

18. Please select the organizations that your agency is REQUIRED (by FHWA or State) to send SPR-funded reports to.

Please check all that apply:

- FHWA Research Library
- Turner-Fairbank Highway Research Center
- National Transportation Library (NTL)
- National Technical Information Service (NTIS)
- Transportation Research Board Library (TRID)
- Volpe National Transportation Systems Center
- Northwestern University, Transportation Library
- University of California, TRI – NET Repository, Institute of Transportation Studies Library
- Federal Highway Regional Office
- State Library
- Other (please specify)

19. Does your agency voluntarily send SPR-funded reports to any other organization (not required)?

- Yes
- No

Distribution to Other Institutions

State DOT Report Distribution

20. Please list the organizations your agency voluntarily (not required) sends SPR-funded reports to:

Distribution to Other Institutions

21. Are there any of the eight institutions on the FHWA list that your agency DOES NOT send SPR-funded reports to?

- Yes
 No

Distribution to Other Institutions

22. Which organizations do you NOT send SPR-funded reports to and why?

23. Which recipients are sent electronic PDFs?

- All
 None
 Some (please list)

24. Which recipients are sent other electronic versions (e.g. Microsoft Word)?

- All
 None
 Some (please list)

State DOT Report Distribution

25. Which recipients are sent paper copies?

- All
 None
 Some (please list)

26. Which recipients receive URLs pointing to reports housed on a server?

- All
 None
 Some (please list)

Distribution to Other Institutions

27. On whose server are the linked reports housed (e.g. server at your agency, server of the National Transportation Library)?

28. If you have a preference to limit distribution of your SPR-funded reports, who would you prefer to send them to and why?

State DOT Report Distribution

29. What is the average delay between when your agency receives the completed SPR-funded report (ready for distribution) and when it is sent to those on the FHWA list?

- No delay, sent immediately
- 0-3 months
- 3-6 months
- Over 6 months
- Other (please specify)

Distribution to Other Institutions

30. What are the reasons for delay?

31. Does your State have a document depository for State agency publications, and do you submit SPR-funded reports to this depository?

- Yes, there is a document depository and SPR-funded reports are sent there
- Yes, there is a document depository but SPR-funded reports are NOT sent there
- No, there is not a document depository

32. Does your agency make SPR-funded reports available before distributing them to the FHWA required institutions?

- Yes
- No

Distribution to Other Institutions

State DOT Report Distribution

33. To whom are the SPR-funded reports made available prior to distribution and in what format?

34. Please provide any additional comments concerning the distribution of SPR research reports to other institutions (optional):

Alert Systems

The next set of questions pertains to procedures your agency may or may not use regarding alerting systems.

Alert Systems

35. Does your agency have an alert system to inform users when SPR-funded reports are produced (e.g. AASHTO-SCOR/RAC—Publications Subscription)?

Yes

No

Alert Systems

State DOT Report Distribution

36. What type of alert system do you use?

Please check all that apply:

- RSS Feed
- Listserv (or other email list service)
- Group email distribution list
- Notifications posted on our website
- Other (please specify)

37. Does the alert system coincide with sending reports to the organizations on the FHWA mandated list?

- Yes
- No

38. What type of alert system would you prefer for being notified about reports from other agencies?

Please Describe:

39. Please provide any additional comments regarding alerting systems (optional):

Collecting, Cataloging, and Maintaining

The next set of questions addresses your agency's practices and procedures for collecting, cataloging, and maintaining research reports.

State DOT Report Distribution

Collecting, Cataloging, and Maintaining

40. Does your agency maintain a collection of research reports from projects sponsored by your State, FHWA, and other State DOTs?

- Yes
 No

41. What formats does the agency collect and store?

- Print
 Electronic
 Both
 Other (please specify)

42. Whose (position title) responsibility is it to maintain the collection?

43. Does your agency add ALL of your State's SPR-funded reports to the collection?

- Yes
 No

44. What criteria (e.g., topic specific) does your agency use for selecting which reports to add to your collection?

State DOT Report Distribution

45. How are the reports in this collection (from your agency, from other agencies, and from UTCs) cataloged?

46. Where are the catalog records stored?

- In a local catalog
- In OCLC
- Both
- Other (please specify)

Archival Procedures

The final set of questions addresses your agency's archival procedures for SPR-funded reports.

Archival Procedures

47. How common is it to receive updates or corrections to SPR-funded reports that you have already submitted?

- Never
- Rarely
- Frequently
- Very frequently

Comments (optional)

State DOT Report Distribution

48. How does your agency handle updates and/or corrections to submitted SPR-funded reports?

- Not Applicable
- Make the changes in house and resubmit.
- Require the contractor/researcher/original author to make changes and then we resubmit.
- Submit an addendum or correction sheet.
- Do not do anything for updates or corrections to submitted reports.
- Other (please specify)

49. Does your agency assign a permanent URL to each report?

- Yes
- No

Archival Procedures

50. Where are these URLs stored?

51. What obstacles, if any, do you face concerning URLs (e.g. server name change)?

52. Do your requirements for the technical documentation page (Form DOT F 1700.7) specify that the URL be included?

- Yes
- No

State DOT Report Distribution

Archival Procedures

53. Which field(s) do you require the URL be specified in?

Please check all that apply:

- 1. Report No.
- 2. Government Accession No.
- 3. Recipient's Catalog No.
- 4. Title and Subtitle
- 5. Report Date
- 6. Performing Organization Code
- 7. Author(s)
- 8. Performing Organization Report No.
- 9. Performing Organization Name and Address
- 10. work Unit No. (TRAIS)
- 11. Contract or Grant No.
- 12. Sponsoring Agency Name and Address
- 13. Type of Report and Period Covered
- 14. Sponsoring Agency Code
- 15. Supplementary Notes
- 16. Abstract
- 17. Key Words
- 18. Distribution Statement
- 19. Security Classif. (of this report)
- 20. Security Classif. (of this page)
- 21. No. of Pages
- 22. Price
- Other (please specify)

State DOT Report Distribution

54. Do catalog records include the permanent URL, URI, and/or DOI?

- Yes, local catalog only
- Yes, OCLC only
- Yes, both local catalog and OCLC
- No

Archival Procedures

55. Where are electronic copies of research reports from your agency's SPR projects stored?

Please check all that apply:

- On an internal server
- On an external server
- In our DOT library database
- In the State document depository
- National Transportation Library
- On a librarian's computer
- Do not have an electronic document storage system
- Other (please specify)

State DOT Report Distribution

56. Does your agency have a strategy for long-term preservation of the SPR-funded reports, including periodic checks of file integrity and migration?

Yes

No

Another organization is responsible for the long term preservation of our SPR reports

Archival Procedures

57. Please briefly describe your preservation strategy:

58. Please provide any additional comments concerning the archiving of SPR research reports (optional):

Additional Comments

59. Please provide any additional comments relating to the content of this survey (optional):

Appendix C: Survey Contact List

Agency	Position Title	Survey	
		Date Sent (via Email)	Date Completed
Alaska DOT		7/3/2014	
Arizona DOT	Librarian	7/3/2014	7/11/2014
California DOT	Outreach and Communications Specialist	7/3/2014	8/1/2014
Colorado DOT		7/3/2014	
Connecticut DOT	Librarian	7/3/2014	7/24/2014
Florida DOT		7/3/2014	
Georgia DOT		7/3/2014	
Idaho Transportation Department	Senior Research Analyst	7/3/2014	7/3/2014
Illinois DOT		7/3/2014	
Iowa DOT	Director of Library	7/3/2014	7/8/2014
Kansas DOT	Librarian	7/3/2014	7/9/2014
Kentucky Transportation Center	Librarian	7/3/2014	7/30/2014
Louisiana Transportation Research Center, TTEC		7/3/2014	
Maine DOT	Research Director	7/3/2014	7/7/2014
Maryland State Highway Administration		7/3/2014	
Maryland State Highway Administration	Deputy Director, Policy & Research	7/3/2014	7/3/2014
Massachusetts State Transportation Library		7/3/2014	
Michigan DOT	Librarian	7/3/2014	7/7/2014
Minnesota DOT	Library Director	7/3/2014	7/23/2014
Mississippi DOT		7/3/2014	
Missouri DOT	Transportation Librarian	7/3/2014	7/16/2014
Montana DOT	Librarian	7/3/2014	7/3/2014
Nebraska Department of Roads		7/3/2014	
Nevada DOT	Research Librarian	7/3/2014	7/24/2014
New Jersey DOT	Librarian	7/3/2014	7/3/2014
New Jersey DOT		7/3/2014	
New Mexico DOT		7/3/2014	
New York State DOT	Senior Librarian	7/3/2014	7/16/2014
North Carolina DOT		7/3/2014	
North Dakota DOT		7/3/2014	
Ohio DOT	Library Administrator	7/3/2014	7/17/2014
Oklahoma DOT		7/3/2014	
Oregon DOT		7/3/2014	
Pennsylvania DOT		7/3/2014	
South Dakota DOT		7/3/2014	

Agency	Position Title	Survey	
		Date Sent (via Email)	Date Completed
University of California, Berkeley: Institute of Transportation Studies	Library Director	7/16/2014	7/16/2014
Utah DOT		7/3/2014	
Vermont Agency of Transportation		7/3/2014	
Virginia DOT	Associate Director, VDOT Research Library	7/3/2014	7/31/2014
Washington State DOT	Head Librarian	7/3/2014	7/28/2014
Wisconsin DOT	Technology Transfer Coordinator, Research & Library Unit	7/3/2014	7/10/2014

PART B

**Promotion of more effective use of the Technical
Report Documentation page (Form DOT F 1700.7)**

Table of Contents

1. INTRODUCTION AND BACKGROUND.....	B-1
2. RESEARCH METHODS.....	B-2
3. RESULTS	B-3
3.1 Federal Requirements for Completing the Technical Documentation Page (Form DOT F 1700.7).....	B-3
3.2 Other Similar Forms	B-10
3.2.1 Standard Form 298.....	B-10
3.2.2 GPO Style Manual and ANSI/NISO Standard	B-17
3.2.3 Modified Technical Report Documentation Pages (Form DOT F 1700.7)	B-17
3.3 Practices and Requirements Related to the Technical Report Documentation Page (Form DOT F 1700.7).....	B-18
3.3.1 State DOT Library Survey (Part A).....	B-18
3.3.2 Sampling of Published Technical Report Documentation Pages in TRID and NTL.....	B-21
3.3.3 Follow-Up Questions to State DOT Libraries/Research Centers	B-24
3.4 Conclusions.....	B-28
4. RECOMMENDATIONS FOR MORE EFFECTIVE USE OF THE TECHNICAL DOCUMENTATION PAGE	B-29

List of Tables

Table 1. Comparison of Fields on Standard Form 298 and Form DOT F 1700.7.....	B-12
Table 2. Responses To Follow-Up Questions.....	B-26

List of Figures

Figure 1. Technical Report Documentation Page-Form DOT F 1700.7 (8-72) B-4

Figure 2. Sample, Completed Technical Report Documentation Page, Figure 2A from the *Standards for the Preparation and Publication of DOT Scientific and Technical Reports* B-6

Figure 3. Instructions for Completing the Technical Report Documentation Page, Figure 2B from the *Standards for the Preparation and Publication of DOT Scientific and Technical Reports* B-7

Figure 4. Standard Form 298 (8-98)..... B-11

Figure 5. Previous Standard Form 298 (2-89)..... B-14

Figure 6. Back of Current Standard Form 298 (8-98) -Instructions for Completing B-15

Figure 7. Back of Previous Standard Form 298 (2-89)-Instructions for Completing B-16

Figure 8. Sample of Modified Technical Report Documentation Pages B-18

Figure 9. Reported Requirements for Technical Report Documentation Page B-20

Figure 10. Percent Completed Form DOT F 1700.7 Fields: TRID and NTL Searches..... B-23

Figure 11. Responses to Selected Questions from Follow-Up to State DOT Survey Respondents. B-27

Figure 12. Comparison of Proposed Updated Form DOT F 1700.7 Instructions and Current U.S. DOT Instructions..... B-30

Figure 13. Proposed Revised Form B-32

Figure 14. Proposed Instructions for Proposed Revised Form..... B-33

Appendix

Appendix A: Incomplete Fields, Form F DOT 1700.7 in Published Reports

Appendix B: Universal Form DOT 1700.7 with Recommended Instructions

Appendix C: Proposed Revised Technical Report Documentation Page with Instructions

1. INTRODUCTION AND BACKGROUND

Research reports that are derived from US DOT funds, which include Federal Highway Administration (FHWA) administered State Planning & Research (SPR) funds to the State Departments of Transportation (DOTs), must include the Technical Report Documentation Page Form DOT F 1700.7 (see Figure 1 for a copy of this form). This page is meant to provide a standardized, one-page format for readers, researchers, librarians, and other knowledge management professionals to quickly and easily identify the title, authors, dates, and key data contained in the report.

State DOTs and others have expressed concern about various factors that have led to ineffective use of the form, including:

- Form DOT F 1700.7 has not been changed since 1972. The form and its fields may be outdated and not reflect current and future knowledge management techniques and needs.
- There is inconsistency in instructions to State DOTs, University Transportation Centers (UTCs), researchers and even federal agencies on accurately completing the form in a way that will benefit future readers.
- There appears to be a lack of consistency in who completes the form and at what stage of a research project.
- The information provided in the form may not be easily deciphered by knowledge management professionals, leading to ineffective cataloging or retrieval from repositories. Eventually, the inability to retrieve reports prevents practitioners from accessing information needed to most effectively perform transportation work.

2. RESEARCH METHODS

The AASHTO Research Advisory Committee, Transportation Knowledge Networks (TKN) Task Force Report Distribution Subcommittee Group proposed that research be conducted to document the current state of practice regarding the use of Form DOT F 1700.7, and to identify best practices or methods that will encourage more effective use of the form.

To meet the objectives, the following research methodology was used:

- Research and document the federal requirements related to the form, especially as they relate to research conducted by the State DOTs.
- Identify the definitions and instruction for each field on the form.
- Research activities included: information search in subject databases, corresponding with government transportation libraries, and reviewing government style and report preparation manuals.
- Canvass State DOT Libraries and Research Centers to establish the current state of practice and existing concerns about the form. This was accomplished through the Part A State DOT Library survey to the participating State DOT libraries⁷ and follow-up email questions. For both survey and follow-up emails, topic questions covered the following:
 - party responsible for completing the form and at what stage of the research or publishing process;
 - other forms, databases, catalogs, etc. that draw directly from the information/metadata required on the form;
 - other forms, databases, catalogs, etc. that already capture or duplicate the information/metadata required on the form;
 - problems associated with structure of form;
 - fields on the form routinely left blank;
 - indication that fields are required or optional;
 - fields associated with specific agencies;
 - information needed by agencies or knowledge management professionals that is not currently captured by the form (e.g., permanent URL, copyright, intellectual property, alignment with NTIS form, and NTL metadata capture, using the Transportation Research Thesaurus [TRT] terms in addition to or in lieu of keywords); and
 - if the agency developed instructions or guidelines for completing form, the history and reasons.
- Identify fields on DOT Form F 1700.7 commonly completed/left incomplete by selecting a random sample of 100 forms from recently published US DOT reports (50 from TRID and 50 from NTL).

⁷ Decina, L., Mastromatto, T., & Tucker, S. (2014). Best Practices for Distributing, Providing Access To, and Archiving Transportation Research. (Final Report).

3. RESULTS

3.1 Federal Requirements for Completing the Technical Report Documentation Page (Form DOT F 1700.7)

The *Standards for the Preparation and Publication of DOT Scientific and Technical Reports*⁸ states that all U.S. DOT scientific and technical reports are to “include one completed Technical Report Documentation Page as the first right-hand page after the cover.” The standards document provides one of the earliest sets of instructions on how to complete the Technical Report Documentation Page (p. 8). The form referenced in this document is version 8-72, as opposed to the earlier version 8-69. (Note—The research was unable to locate an earlier instruction reference for the 8-69 version of the form.) Figure 1 presents the current FORM DOT F 1700.7.

⁸ U.S. Department of Transportation. (1975). *Standards for the preparation and publication of DOT scientific and technical reports* (DOT-TST-75-97). Washington, DC.

1. Report No.	2. Government Accession No.	3. Recipient's Catalog No.	
4. Title and Subtitle		5. Report Date	
		6. Performing Organization Code	
7. Author(s)		8. Performing Organization Report No.	
9. Performing Organization Name and Address		10. Work Unit No. (TRAIS)	
		11. Contract or Grant No.	
12. Sponsoring Agency Name and Address		13. Type of Report and Period Covered	
		14. Sponsoring Agency Code	
15. Supplementary Notes			
16. Abstract			
17. Key Words		18. Distribution Statement	
19. Security Classification (of this report)	20. Security Classification (of this page)	21. No. of Pages	22. Price

Technical Report Form DOT F 1700.7 (8-72)

Reproduction of completed page authorized

Figure 4. Technical Report Documentation Page-Form DOT F 1700.7 (8-72)

Instructions for completing the Technical Report Documentation Page from the *Standards for the Preparation and Publication of DOT Scientific and Technical Reports* are presented in Figures 2 and 3 below.

1. Report No. FAA-30-74-74.1		2. Government Agency or No.	
3. Title and Subtitle ANALYSIS OF PREDICTED AIRCRAFT WAKE VORTEX TRANSPORT AND COMPARISON WITH EXPERIMENT VOLUME I - Wake Vortex Predictive System Study		3. Report Date April 1974	
4. Author(s) M.A. Traubwasser, M.A. Logan, S.J. Robertson, K.B. Hilder, and G.D. Watkins		4. Performing Organization Name M-76-28	
5. Performing Organization Name and Address Lockheed Missiles & Space Company, Inc., Huntsville Research & Engineering Center 4600 Bradford Drive Huntsville, AL 35891		5. Performing Organization Report No. FA405/PA115	
6. Department of Transportation Federal Aviation Administration Systems Research and Development Service Washington DC 20597		6. Contract or Grant No. DOT-75C-393	
7. Supplementary Notes U. S. Department of Transportation Transportation Systems Center Kendall Square Cambridge MA 02142		7. Type of Reporting Period Covered Final Report April to December 1973	
8. Author(s)		8. Security Agency Code FAA/ARD-200	
9. A unifying wake vortex transport model is developed and applied to a wake vortex predictive system concept. The fundamentals of vortex motion underlying the predictive model are discussed including vortex decay, bursting and instability phenomena. A parametric and sensitivity analysis is presented to establish baseline characteristics in the algorithm to allow meaningful comparison of predicted and measured vortex tracks. A detailed comparison of predicted vortex tracks with photographic and ground-based vortex data is presented. Excellent agreement between prediction and measurement is shown to exist when sufficient wind data are available. Application of the Pasquill class criteria is shown to be an effective technique to describe the wind profile in the absence of detailed wind data. The effects of wind shear and the human spiral on vortex transport are discussed. It is shown that the combination of wind shear and ground plane may be possible mechanisms underlying vortex tilting and a theoretical explanation is advanced that is somewhat supported by comparison with the experimental data. Finally, recommendations for further vortex data collection in the vicinity of an airport are presented. Volume I, 216 pages, contains appendices.			
10. Key Words Vortices Aircraft Wake Wake Turbulence Wind Shear Wake Vortex Predictive System		10. Distribution Statement Document is available to the U.S. public through the National Technical Information Service, Springfield, Virginia 22161.	
11. Security Classification Unclassified		11. No. of Pages 256	

Form DOT F 3720.7 (4-73) Reproduction of form and completed page is authorized.

FIGURE 2A. SAMPLE, COMPLETED TECHNICAL REPORT DOCUMENTATION PAGE

<http://legacy.library.ucsf.edu/vol/17100/p01>

Figure 5. Sample, Completed Technical Report Documentation Page, Figure 2A from the Standards for the Preparation and Publication of DOT Scientific and Technical Reports

2021548014

Make items 1, 4, 5, 7, 9, 10, 13, and 15 agree with the corresponding information on the report cover. Use all capital letters for main title (item 4). Leave items 2, 8, and 11 blank. Complete the remaining items as follows:

3. Recipient's Catalog No. Reserve for use by report recipient.
8. Performing Organization Report No. Insert if performing organization wishes to assign this number.
9. Performing Organization Name and Address (include zip code).
10. Work Unit No. (TRALIS). Use the number code from the applicable research and technology resume which uniquely identifies the work unit in the Transportation Research Activity Information Summary. For Highway Planning and Research (HPAR) Program reports, include the TRC Code assigned in the study.
13. Contract or Grant No. Insert the number of the contract or grant under which the report was prepared. For Highway Planning and Research (HPAR) Program reports, include also the State study number.
15. Supplementary Notes. Enter information not included elsewhere but useful, such as: Prepared in cooperation with..., Translation of (or by).... Presented at conference of.... To be published in.... Other related reports.
16. Abstract. Include a brief text to exceed 200 words' technical summary of the most significant information contained in the report. An abstract should state the purpose, methods, results, and conclusions of the work effort. For the purpose, include a statement of goals/objectives/aims. For methods, include experimental techniques or the means by which the results were obtained. Results (findings) are the most important part of the Abstract and selection should be based on one or several of the following: new and verified events, findings of permanent value, significant findings which contradict previous theories, or findings which the author knows are relevant to a practical problem. Conclusions should deal with the implications of the findings and how they tie in with studies in related fields. Do not repeat title or other items provided on this page. When a report consists of a number of volumes, include the title of each of the other volumes in each abstract.

Reports presenting the results of computerized model development will use the following structure for the preparation of abstracts:
 1. Technical model description. (Name of the model or simulator)
 2. Areas of model application
 3. Special model requirements
 - a. Areas of model application
 - b. Other special considerations.
17. Key Words. Select specific and precise terms or short phrases that identify the principal subjects covered in the report. The sponsoring element may specify that key words shall conform to standard terminology, such as that given in the Department of Defense/Engineers Joint Council Thesaurus of Engineering and Scientific Terms, or a Thesaurus of Terms established by the sponsoring element.
18. Distribution Statement. Enter one of the authorized statements (Paragraph 7b(8)) used to denote releasability to the public or a limitation on dissemination for reasons other than security of defense information. Refer questions on the statements to the sponsoring element.
19. Security Classification (if none). Note: Reports carrying a security classification will require additional markings giving security and downgrading information as specified by the sponsoring element.
20. Security Classification (of this page). Note: Because this page may be used in preparing announcements, bibliographies, and data banks, it should be unclassified, if possible. If a classification is required, identify the classified items on the page by an appropriate symbol.
21. No. of Pages. Insert the number of pages having printed material, including front and inside covers.

2021548015

FIGURE 2B. INSTRUCTIONS FOR COMPLETING TECHNICAL REPORT DOCUMENTATION PAGE.

<http://legacy.library.ucsf.edu/tid/all71f00/pdf>

Figure 6. Instructions for Completing the Technical Report Documentation Page, Figure 2B from the *Standards for the Preparation and Publication of DOT Scientific and Technical Reports*

The 1975 U.S. DOT Standards document identifies the purpose of the form, stating:

Adequate and accurate completion of this page will assist documentation of a report. The documentation page also may be distributed in lieu of copies of the published report. This form is available for DOT operating elements from the DOT Warehouse, Publications, and Forms, TAD-443.1. For contractors and grantees, the documentation page is available from the Contracting Officers of the sponsoring operating elements. The information presented on the documentation page is the basis for input into the TRISNET and the National Technical Information Service (NTIS).

Instructions are provided on what to complete in each field and state: “Make items 1 [report no.], 4 [title and subtitle], 5[report date], 7 [author(s)], 12 [sponsoring agency name and address], 13 [type of report and period covered], and 18 [distribution statement] agree with the corresponding information on the report cover. Use all capital letters for main title (item 4). Leave items 2, 6, and 22 blank.”

The remaining instructions for each field are as follows:

3. Recipient’s Catalog No. *Reserve for use by report recipient.*
8. Performing Organization Report No. *Insert if performing organization wishes to assign this number.*
9. Performing Organization Name and Address *Include zipcode*
10. Work Unit No. (TRAIS)⁹ *Use the number code from the applicable research and technology resume which uniquely identifies the work unit in the Transportation Research Activity Information Service. For Highway Planning and Research (HP&R) Program reports, include the FPC Code assigned in the study.*
11. Contract or Grant No. *Insert the number of the contract or grant under which the report was prepared. For Highway Planning and Research (HP&R) Reports, include also the State study number.*
15. Supplementary Notes. *Enter information not included elsewhere but useful, such as: Prepared in cooperation with..., Translation of (or by)..., presented at conference of..., To be published in..., Other related reports.*
16. Abstract. *Include a brief (not to exceed 200 words) factual summary of the most significant information contained in the report. An abstract should state the purpose, methods, results, and conclusions of the work effort. For the purpose, include a statement of goals (objectives, aims). For methods, include experimental techniques or the means by which the results were obtained. Results (findings) are the most important part of the abstract and selection should be based on one, or several of the following: new and verified events, findings of permanent value, significant findings which*

⁹ The Transportation Research Activity Information Service (TRAIS) was a Highway Research Board (HRB)-initiated project that developed an information system containing records of all U.S. DOT research and development activities; this then became an internal DOT activity. At the time of the last Form DOT F 1700.7 revision (ca. 1972), TRAIS was used as a management tool and a source of useful information among the technical community. However, research on the history of TRAIS yields very few results and it appears that the TRAIS number is no longer relevant. (National Academy of Sciences. (1975). Annual Report-National Academy of Sciences. National Academies.)

contradict previous theories, or findings which the author knows are relevant to a practical problem. Conclusions should deal with the implications of the findings and how they tie in with studies in related fields. Do not repeat title or other items provided on this page. When a report consists of a number of volumes, include the title of each of the other volumes in each abstract.

17. Key Words. *Select specific and precise terms or short phrases that identify the principal subjects covered in the report. The sponsoring element may specify that key words shall conform to standard terminology, such as that given in the Department of Defense/Engineers Joint Council Thesaurus of Engineering and Scientific Terms, or a Thesaurus of Terms established by the sponsoring element.*

18. Distribution Statement. *Enter one of the authorized statements (Paragraph 7b (9)) used to denote releasability to the public or a limitation on dissemination for reasons other than security of defense information. Refer questions on the statements to the sponsoring element.*

19. Security Classification (of report). *Note: Reports carrying a security classification will require additional markings giving security and downgrading information as specified by the sponsoring element.*

20. Security Classification (of this page.) *Note: Because this page may be used in preparing announcements, bibliographies, and data banks, it should be unclassified, if possible. If a classification is required, identify the classified items on the page by an appropriate symbol.*

21. No. of Pages. *Insert the number of pages having printing material, including front and inside covers.*

The *Standards for the Preparation and Publication of DOT Scientific and Technical Reports* does not provide instruction for field 14. Sponsoring Agency Code.

A more recent resource, FHWA's *Communications Reference Guide*¹⁰ provides information to meet the FHWA standards and regulations for those who develop research and technology communication products (contracting officer's technical representatives and their contractors and support staff). Chapter 5, *Preparing a Research Report*, states that the Technical Report Documentation Page (Form DOT F 1700.7) is to be included in the Front Matter section of reports, following the front and inside covers. It is noted that the pagination for the page containing this form is "i" (p. 28). A "completed Form DOT F 1700.7" is also listed as a deliverable for all research reports (p.34). The form (version 8-72) is included in an appendix (Appendix D) of the *Communications Reference Guide* and some guidance is given for filling out the following fields: 1. Report No, 12. Sponsoring Agency Name and Address; 18. Distribution Statement; 19. Security Classification (of this report); and 20. Security Classification (of this page). The guide contains *no* other instructions for completing the form.

Another recent resource, the TMC & HOV Pooled-Fund Study Projects document, *Publication Requirements for Technical Documents* (February, 2004), states that FHWA contractors are to comply with a list of formatting and distribution requirements for the final report; these

¹⁰ Federal Highway Administration. (2004). *Communications Reference Guide* (FHWA-RD-03-074). Office of Research and Technology Services. McLean, VA.

requirements include a completed technical report document page (Form DOT F 1700.7). TMC & HOV Pooled-Fund Study Projects document provides a link (now outdated) to download the form and states that “the contractor must complete this form,” that the form should be on the second page after the disclaimer page, and that the page containing the form “is always unnumbered page i.” This document does not provide any guidance or instructions regarding how to complete the form.

3.2 Other Similar Forms

3.2.1 Standard Form 298

Standard Form 298 (8-98)¹¹ is a report documentation page used by the National Technical Information Service (NTIS), U.S. General Services Administration (GSA), U.S. Department of Defense, and other organizations. The form contains many of the same/similar fields as the USDOT form DOT F 1700.7 (8-72) with some additional fields relating to project and task numbers and contract manager information. Standard Form 298 also includes the form’s OMB approval number (0704-0188). Figure 4, below, provides a copy of Standard form 298 and the following Table 1 provides a comparison of the Standard Form 298 and Technical Report Documentation Page (Form DOT F 1700.7) fields.

¹¹ <http://www.ntis.gov/pdf/rdpform.pdf>

REPORT DOCUMENTATION PAGE			<i>Form Approved</i> <i>OMB No. 0704-0188</i>		
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.					
1. REPORT DATE (DD-MM-YYYY)		2. REPORT TYPE		3. DATES COVERED (From - To)	
4. TITLE AND SUBTITLE			5a. CONTRACT NUMBER		
			5b. GRANT NUMBER		
			5c. PROGRAM ELEMENT NUMBER		
6. AUTHOR(S)			5d. PROJECT NUMBER		
			5e. TASK NUMBER		
			5f. WORK UNIT NUMBER		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)			8. PERFORMING ORGANIZATION REPORT NUMBER		
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)			10. SPONSOR/MONITOR'S ACRONYM(S)		
			11. SPONSOR/MONITOR'S REPORT NUMBER(S)		
12. DISTRIBUTION / AVAILABILITY STATEMENT					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT	b. ABSTRACT	c. THIS PAGE			19b. TELEPHONE NUMBER (include area code)

Standard Form 298 (Rev. 8-98)
Prescribed by ANSI Std. Z39.18

Figure 7. Standard Form 298 (8-98)

Table 3. Comparison of Fields on Standard Form 298 and Form DOT F 1700.7

Standard Form 298 Field Number	Field	Form DOT F 1700.7 Field Number
1	Report Date	5
2	Report Type	13
3	Dates Covered	13
4	Title	4
5a	Contract Number	11
5b	Grand Number	11
5c	Program Element Number	
5d	Project Number	
5e	Task Number	
5f	Work Unit Number	10
6	Authors	7
7	Performing Organization's Name and Address	9
8	Performing Organization Report Number	8
9	Sponsoring/Monitoring Agency Names	12
10	Sponsor/Monitor's Acronym(s)	
11	Sponsor/Monitor's Report Number(s)	1
12	Distribution/Availability Statement	18
13	Supplementary Notes	15
14	Abstract	16
15	Subject Terms (or Key Words)	17
16a	Security Classification of Report	19
16b	Security Classification of Abstract	
16c	Security Classification of this page	20
17	Limitation of Abstract	
18	Number of Pages	21
19a	Name of Responsible Person	
19b	Telephone Number	

An earlier version of the Standard Form 298 (2-89)¹², prescribed by ANSI Std. 239-18, 298-102, and approved by OMB No. 0704-0188 was even more similar to the Form DOT F 1700.7. Figure 3 (below) provides a copy of the previous, 2-89 version of the form. The following is a list of the fields in the previous (no longer in use) Standard Form 298 with the corresponding Form DOT F 1700.7 fields in parentheses, where applicable:

1. Agency Use
2. Report Date (5)
3. Report Type and Dates Covered (13)
4. Title and Subtitle (4)
5. Funding Numbers
6. Authors (7)
7. Reporting Organization Names and Addresses (9)
8. Performing Organization Report Number (6)
9. Sponsoring/Monitoring Agency Names and Addresses (12)
10. Sponsoring/Monitoring Agency Report Number (1)
11. Supplementary Notes (15)
- 12a. Distribution/Availability Statement (18)
- 12b. Distribution Code
13. Abstract (16)
14. Subject Terms (17)
15. Number of Pages
16. Price Code (22-Price)
17. Security Classification of Report (19)
18. Security Classification of this Page (20)
19. Security Classification of Abstract
20. Limitation of Abstract

¹² <http://armypubs.army.mil/eforms/pdf/S298.PDF>

REPORT DOCUMENTATION PAGE			<i>Form Approved</i> <i>OMB No. 0704-0188</i>
<small>Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.</small>			
1. AGENCY USE ONLY <i>(Leave blank)</i>	2. REPORT DATE	3. REPORT TYPE AND DATES COVERED	
4. TITLE AND SUBTITLE		5. FUNDING NUMBERS	
6. AUTHOR(S)			
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)		8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)		10. SPONSORING / MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES			
12a. DISTRIBUTION / AVAILABILITY STATEMENT		12b. DISTRIBUTION CODE	
13. ABSTRACT <i>(Maximum 200 words)</i>			
14. SUBJECT TERMS		15. NUMBER OF PAGES	
		16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT

NSN 7540-01-280-5500

Standard Form 298 (Rev. 2-89)
Prescribed by ANSI Std. Z39-18 298-102

USAPPC V1.00

Figure 8. Previous Standard Form 298 (2-89)

For both versions of Standard Form 298, instructions for completing the form are included with the blank form as the back of the page. Figures 6 and 7 present these included instructions.

INSTRUCTIONS FOR COMPLETING SF 298	
<p>1. REPORT DATE. Full publication date, including day, month, if available. Must cite at least the year and be Year 2000 compliant, e.g. 30-06-1998; xx-06-1998; xx-xx-1998.</p> <p>2. REPORT TYPE. State the type of report, such as final, technical, interim, memorandum, master's thesis, progress, quarterly, research, special, group study, etc.</p> <p>3. DATES COVERED. Indicate the time during which the work was performed and the report was written, e.g., Jun 1997 - Jun 1998; 1-10 Jun 1996; May - Nov 1998; Nov 1998.</p> <p>4. TITLE. Enter title and subtitle with volume number and part number, if applicable. On classified documents, enter the title classification in parentheses.</p> <p>5a. CONTRACT NUMBER. Enter all contract numbers as they appear in the report, e.g. F33615-86-C-5169.</p> <p>5b. GRANT NUMBER. Enter all grant numbers as they appear in the report, e.g. AFOSR-82-1234.</p> <p>5c. PROGRAM ELEMENT NUMBER. Enter all program element numbers as they appear in the report, e.g. 61101A.</p> <p>5d. PROJECT NUMBER. Enter all project numbers as they appear in the report, e.g. 1F665702D1257; ILIR.</p> <p>5e. TASK NUMBER. Enter all task numbers as they appear in the report, e.g. 05; RF0330201; T4112.</p> <p>5f. WORK UNIT NUMBER. Enter all work unit numbers as they appear in the report, e.g. 001; AFAPL30480105.</p> <p>6. AUTHOR(S). Enter name(s) of person(s) responsible for writing the report, performing the research, or credited with the content of the report. The form of entry is the last name, first name, middle initial, and additional qualifiers separated by commas, e.g. Smith, Richard, J, Jr.</p> <p>7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES). Self-explanatory.</p>	<p>8. PERFORMING ORGANIZATION REPORT NUMBER. Enter all unique alphanumeric report numbers assigned by the performing organization, e.g. BRL-1234; AFWL-TR-85-4017-Vol-21-PT-2.</p> <p>9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES). Enter the name and address of the organization(s) financially responsible for and monitoring the work.</p> <p>10. SPONSOR/MONITOR'S ACRONYM(S). Enter, if available, e.g. BRL, ARDEC, NADC.</p> <p>11. SPONSOR/MONITOR'S REPORT NUMBER(S). Enter report number as assigned by the sponsoring/ monitoring agency, if available, e.g. BRL-TR-829; -215.</p> <p>12. DISTRIBUTION/AVAILABILITY STATEMENT. Use agency-mandated availability statements to indicate the public availability or distribution limitations of the report. If additional limitations/ restrictions or special markings are indicated, follow agency authorization procedures, e.g. RD/FRD, PROPIN, ITAR, etc. Include copyright information.</p> <p>13. SUPPLEMENTARY NOTES. Enter information not included elsewhere such as: prepared in cooperation with; translation of; report supersedes; old edition number, etc.</p> <p>14. ABSTRACT. A brief (approximately 200 words) factual summary of the most significant information.</p> <p>15. SUBJECT TERMS. Key words or phrases identifying major concepts in the report.</p> <p>16. SECURITY CLASSIFICATION. Enter security classification in accordance with security classification regulations, e.g. U, C, S, etc. If this form contains classified information, stamp classification level on the top and bottom of this page.</p> <p>17. LIMITATION OF ABSTRACT. This block must be completed to assign a distribution limitation to the abstract. Enter UU (Unclassified Unlimited) or SAR (Same as Report). An entry in this block is necessary if the abstract is to be limited.</p>

Standard Form 298 Back (Rev. 8/98)

Figure 9. Back of Current Standard Form 298 (8-98) -Instructions for Completing

GENERAL INSTRUCTIONS FOR COMPLETING SF 298

The Report Documentation Page (RDP) is used in announcing and cataloging reports. It is important that this information be consistent with the rest of the report, particularly the cover and title page. Instructions for filling in each block of the form follow. It is important to **stay within the lines** to meet **optical scanning requirements**.

Block 1. Agency Use Only *(Leave blank)*.

Block 2. Report Date. Full publication date including day, month, and year, if available (e.g. 1 Jan 88). Must cite at least the year.

Block 3. Type of Report and Dates Covered. State whether report is interim, final, etc. If applicable, enter inclusive report dates (e.g. 10 Jun 87 - 30 Jun 88).

Block 4. Title and Subtitle. A title is taken from the part of the report that provides the most meaningful and complete information. When a report is prepared in more than one volume, repeat the primary title, add volume number, and include subtitle for the specific volume. On classified documents enter the title classification in parentheses.

Block 5. Funding Numbers. To include contract and grant numbers; may include program element number(s), project number(s), task number(s), and work unit number(s). Use the following labels:

- C - Contract
- G - Grant
- PE - Program Element
- PR - Project
- TA - Task
- WU - Work Unit
- Accession No.

Block 6. Author(s). Name(s) of person(s) responsible for writing the report, performing the research, or credited with the content of the report. If editor or compiler, this should follow the name(s).

Block 7. Performing Organization Name(s) and Address(es). Self-explanatory.

Block 8. Performing Organization Report Number. Enter the unique alphanumeric report number(s) assigned by the organization performing the report.

Block 9. Sponsoring/Monitoring Agency Name(s) and Address(es). Self-explanatory.

Block 10. Sponsoring/Monitoring Agency Report Number. *(If known)*

Block 11. Supplementary Notes. Enter information not included elsewhere such as: Prepared in cooperation with...; Trans. of ...; To be published in... When a report is revised, include a statement whether the new report supersedes or supplements the older report.

Block 12a. Distribution/Availability Statement.

Denotes public availability or limitations. Cite any availability to the public. Enter additional limitations or special markings in all capitals (e.g. NOFORN, REL, ITARI).

DOD - See DoDD 5230.24, "Distribution Statements on Technical Documents."

DOE - See authorities.

NASA - See Handbook NHB 2200.2.

NTIS - Leave blank.

Block 12b. Distribution Code.

DOD - Leave blank.

DOE - Enter DOE distribution categories from the Standard Distribution for Unclassified Scientific and Technical Reports.

NASA - Leave Blank.

NTIS - Leave Blank.

Block 13. Abstract. Include a brief (*Maximum 200 words*) factual summary of the most significant information contained in the report.

Block 14. Subject Terms. Keywords or phrases identifying major subjects in the report.

Block 15. Number of Pages. Enter the total number of pages.

Block 16. Price Code. Enter appropriate price code *(NTIS only)*.

Blocks 17.-19. Security Classifications. Self-explanatory. Enter U.S. Security Classification in accordance with U.S. Security Regulations (i.e., UNCLASSIFIED). If form contains classified information, stamp classification on the top and bottom of the page.

Block 20. Limitation of Abstract. This block must be completed to assign a limitation to the abstract. Enter either UL (unlimited) or SAR (same as report). An entry in this block is necessary if the abstract is to be limited. If blank, the abstract is assumed to be unlimited.

Figure 10. Back of Previous Standard Form 298 (2-89)-Instructions for Completing

3.2.2 GPO Style Manual and ANSI/NISO Standard

The U.S. Government Printing Office (GPO) Style Manual¹³ does not require the use of a report documentation page/form. It does however require that much of the same information available on the Technical Report Documentation Page be included on the title page of reports (p. 7-8). GPO required information is as follows:

- (a) Title and other title information;
- (b) Report Number;
- (c) Author(s);
- (d) Performing organization;
- (e) Sponsoring department;
- (f) Date of issuance;
- (g) Type of report and period covered;
- (h) Availability (publisher, printer, or other source and address; and
- (i) Superintendent of Documents classification and stock numbers if applicable

The GPO style manual then directs to the ANSI/NISO Standard Z39.18-1995 Scientific and Technical Reports—Elements, Organization, and Design. This ANSI NISO Standard, which has since been revised¹⁴, recognizes the fact that “agencies within the federal government use a report documentation page” and provides Standard Form 298 as an example. The ANSI/NISO Standard (both 1995 and 2005) does not specify which form should be used, and the most recent version (2005) states that the federal agency that requires the Report Documentation Page specifies its location in the report. The 2005 ANSI/NISO Standard includes Standard Form 298 and its instruction page as an appendix, but explicitly states that it is *not* part of the Standard and is included in the appendix for information purposes only.

3.2.3 Modified Versions of the Technical Report Documentation Page (Form DOT F 1700.7)

Some States use a modified Technical Report Documentation Pages to include additional information. Figure 8 presents an example of modified versions of Form DOT F 1700.7 currently in use.

¹³ U.S. Government Printing Office. (2008). *U.S. Government Printing Office Style Manual, an official guide to the form and style of Federal Government printing*. Washington, DC.

¹⁴ National Information Standards Organization. (2005). *Scientific and technical reports—preparation, presentation, and preservation* (ANSI/NISO Z39.18-2005). Bethesda, MD.

1. Report No. RC-	2. Government Accession No.	3. MDOT Project Manager
4. Title and Subtitle	5. Report Date	
	6. Performing Organization Code	
7. Author(s)	8. Performing Org. Report No.	

17. Key Words Select specific and precise terms or phrases that identify principal subjects covered in the report		18. Distribution Statement Document is available to the US public through the National Technical Information Service, Springfield, Virginia, 22161		23. Registrant's Seal
19. Security Classification Unclassified	20. Security Classification Unclassified	21. No. of Pages Leave Blank	22. Price	

Figure 11. Sample of Modified Technical Report Documentation Pages

3.3 Practices and Requirements Related to the Technical Report Documentation Page (Form DOT F 1700.7)

3.3.1 State DOT Library Survey (Part A)

Below is a summary of responses to the Part A State DOT Library Survey questions that relate to current practice and requirement for the Technical Report Documentation Page. (Survey Questions 7 – 10, 52-53)

Sixteen (16) of 19 respondents (84.2%) reported that they edit the Technical Report Documentation Page of received SPR-funded reports. Ten (10) of 19 respondents (52.6%) reported that they provide instructions to the contractor for filling out the technical report documentation page. Nine (9) of 10 respondents (90%) noted that the instructions they provide were developed by their agency; only 1 respondent reported that their agency uses the U.S. DOT Standards for the Preparation and Publication of DOT Scientific and Technical Reports (DOT-TST-75-97). Questions 7-9.

Eighteen (18) of the 21 total respondents (86%) identified the fields on the Technical Report Documentation Page that their agency requires to be completed by contractors. The most common fields required (over 75% of respondents) are as follows (in descending order):

Abstract (16.)	100%
Title and Subtitle (4.)	94%
Authors (7.)	94%
Key Words (17.)	94%
Report Date (5.)	89%
Sponsoring Agency Name/Address (12.)	89%
Performing Org. Name/Address (9.)	89%
Report No. (1.)	83%
Type of Report/Period Covered (13.)	78%

Less common fields required (75% to 50% of respondents) are as follows (in descending order):

Distribution Statement (18.)	72%
Number of Pages (21.)	67%
Security Classification (of this report) (19.)	67%
Contract or Grant No. (11.)	61%
Security Classification (of this page) (20.)	56%

The least common fields required (less than 50% of respondents) are as follows (in descending order):

Performing Org. Report Number (8.)	44%
Supplementary Notes (15.)	28%
Sponsoring Agency Code (14.)	22%
Performing Organization Code (6.)	17%
Government Accession Number (2.)	6%
Recipient's Catalog Number (3.)	6%
Price (22.)	6%
Work Unit Number (10.)	0%

Figure 9 identifies the respondents reported requirements for Form DOT F 1700.7, in order of the fields on the form. *Question 10.*

Only 2 of 11 respondents (18.2%) reported that their requirements for the Technical Report Documentation Page specify that a URL be included; one in the Supplementary Notes (15) field and the other in the Distribution Statement (18) field. *Questions 52-53.*

Q10 What fields on the technical documentation page (Form DOT F 1700.7) does your agency REQUIRE to be completed? Please check all that apply:

Answered: 18 Skipped: 3

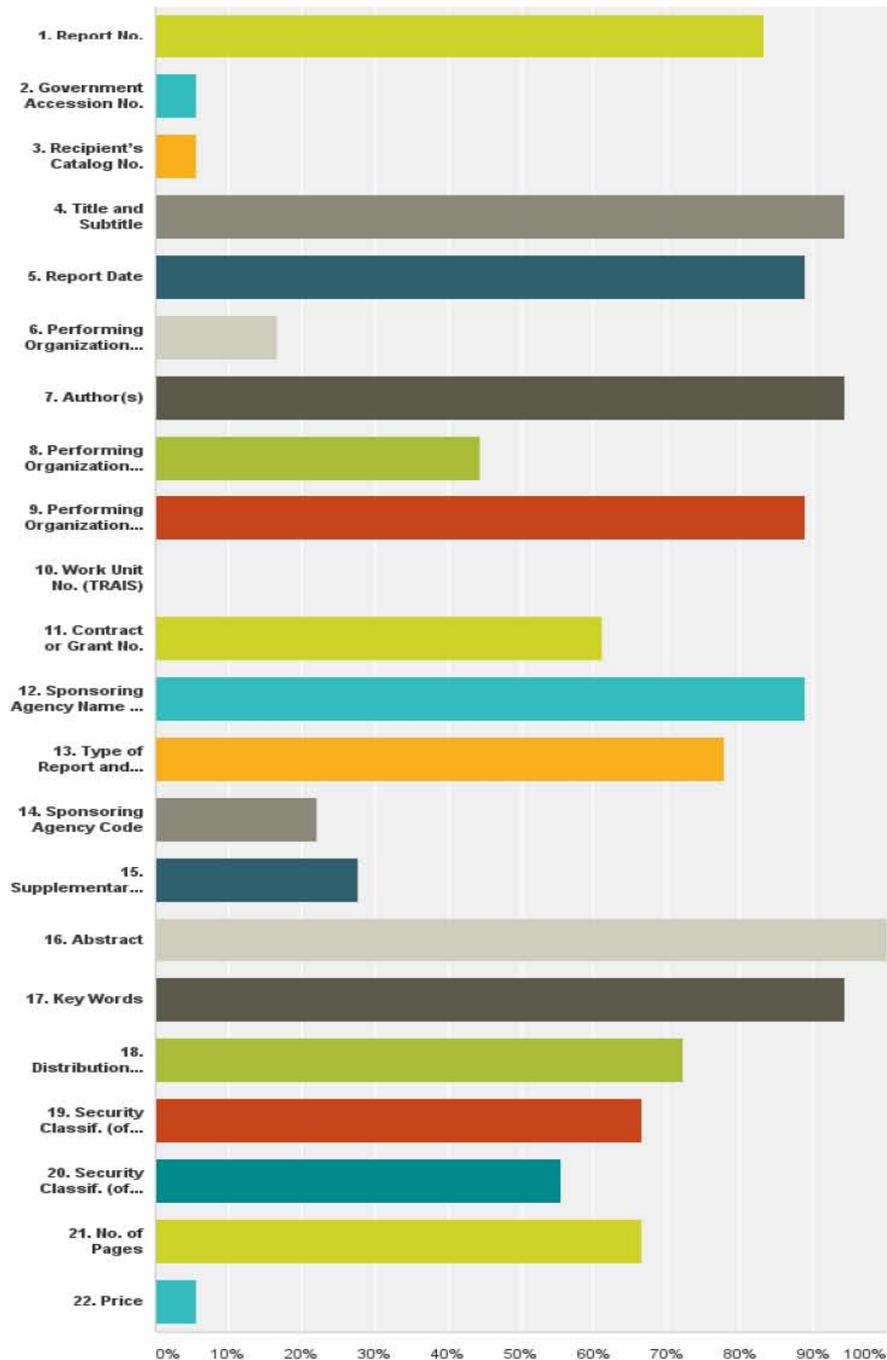


Figure 12. Reported Requirements for Technical Report Documentation Page

3.3.2 Sampling of Published Technical Report Documentation Pages in TRID and NTL

3.3.2.1 Research Methods. Two transportation research databases that cover U.S. DOT-funded reports (TRID and the NTL catalog) were searched in order to identify a random sampling of 100 Technical Report Documentation Pages (Form DOT F 1700.7) published recently. The following search was done in the TRID (Transportation Research International Documentation) database¹⁵:

Search Year(s): 2013-2014

Key Word(s): FHWA

The TRID search yielded a total of 739 hits. Form DOT F 1700.7 was pulled from every 15th record; on those occasions where the record did not have the Form, the next available was pulled for a total of 50 forms.

The following search was done in the RITA (Research and Innovative Technology Administration) NTL (National Transportation Library) catalog:

Key Word(s): 2013 2014

The search yielded a total of 328 hits. Form DOT F 1700.7 was pulled from every third record that was in the appropriate year range (2013-2014) for a total of 50 forms.

A table was created denoting all incomplete fields for each form (see Appendix A). For this analysis, fields completed with “N/A” were considered incomplete.

3.3.2.2 Findings. All 50 of the Technical Report Documentation Pages (Form DOT F 1700.7) from the TRID search had the following fields completed:

- Report No. (1.);
- Title and Subtitle (4.);
- Report Date (5.);
- Authors (7.);
- Performing Organization Name and Address (9.);
- Sponsoring Agency Name and Address (12.);
- Abstract (16.); and
- Key Words (17.).

Most of the forms (92% to 94%) had the following fields completed:

- Distribution Statement (18.);
- Security Classification (of this report) (19.);
- Security Classification (of this page) (20.); and
- No of Pages (21.)

None of the 50 forms from the TRID search had the Government Accession No. (2.) or Recipient’s Catalog No. (3.) fields completed.

¹⁵ A more in-depth description of transportation research databases and organizations is available in the companion Part A report: Decina, L., Mastromatto, T., & Tucker, S. (2014). Best Practices for Distributing, Providing Access To, and Archiving Transportation Research. (Final Report).

All 50 of the Technical Documentation Pages from the NTL search had the following fields completed:

- Title and Subtitle (4.);
- Report Date (5.);
- Authors (7.);
- Performing Organization Name and Address (9.); and
- Abstract (16.).

Most of the forms (90% to 96%) had the following fields completed:

- Key Words (17.);
- Security Classification (of this report) (19.);
- Security Classification (of this page) (20.); and
- No of Pages (21.)

None of the 50 forms from the NTL had the Government Accession No. (2.) or Work Unit No. (10.) fields completed.

The following fields were completed in all 100 (TRID and NTL searches) forms:

- Title and Subtitle (4.);
- Report Date (5.);
- Author(s) (7.);
- Performing Organization Name and Address (9.);
- Sponsoring Agency Name and Address (12.); and
- Abstract (16.)

Some differences are evident between the two searches. In the TRID search, all 50 of the Forms had the Report No (1.) field completed, where as in the NTL search, only 41 of the 50 (82%) forms had the Report No (1.) field completed. Each of the 50 TRID search forms had the Key Words (17.) field completed, but 2 of the NTL forms did not (96% completed). The Work Unit No (10.) field was completed in 4 of the TRID forms (8% complete) but none of the NTL forms. Notably, the Government Accession No (2.) field was not completed in any of the 100 forms (both TRID and NTL) analyzed.

Figure 2 presents a comparison of the completion frequency for each of the form fields from the TRID and NTL searches.

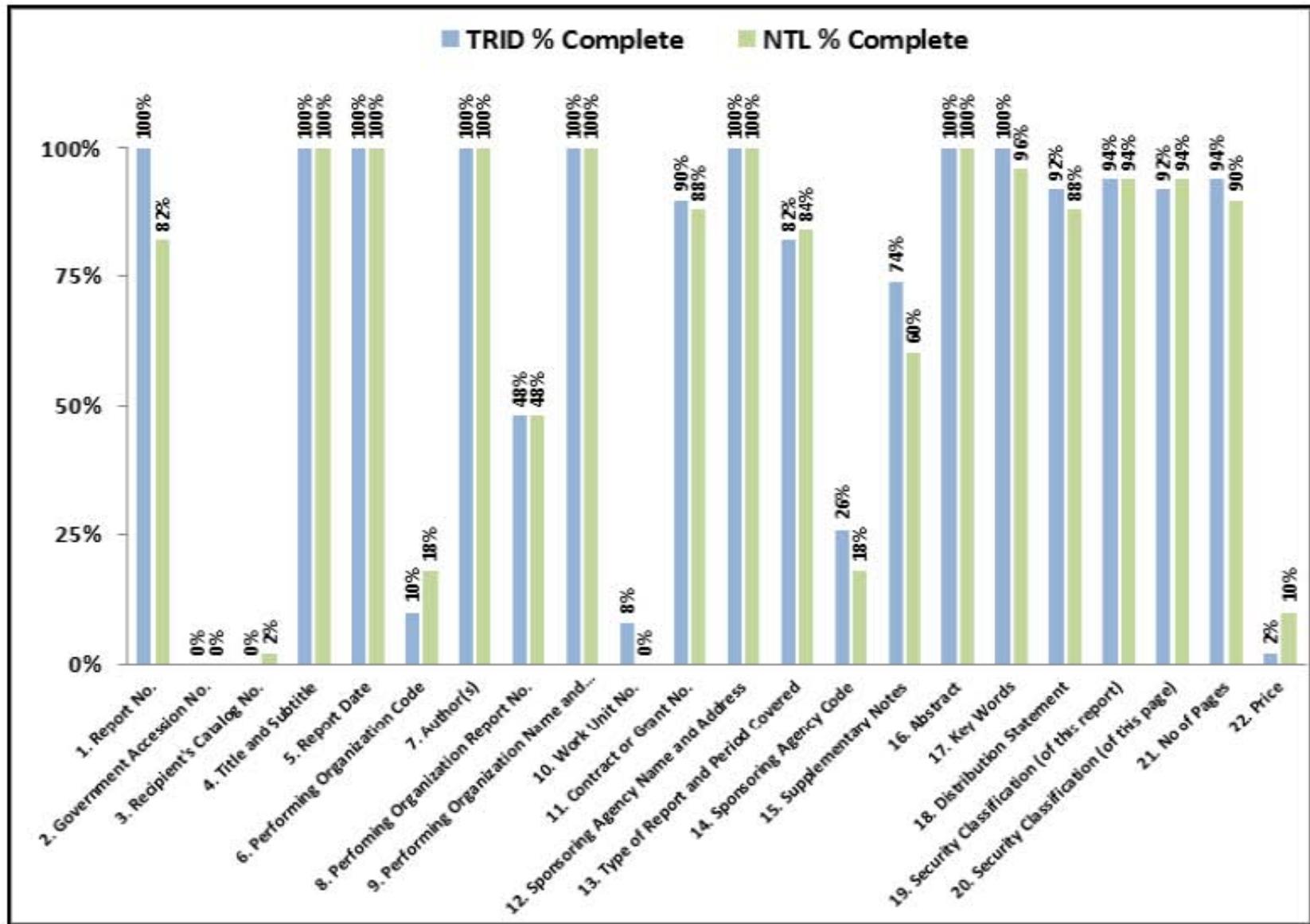


Figure 13. Percent Completed Form DOT F 1700.7 Fields: TRID and NTL Searches

3.3.3 Follow-Up Questions to State DOT Libraries/Research Centers

3.3.3.1 Research Methods. A follow-up email was sent to each of the Part A State DOT survey respondents (20 total¹⁶) to address specific research questions. The following is the questions and instructions as they were presented to the survey respondents:

1. Who typically completes this form (e.g., contractor, DOT Research Center) and at what stage of the research project or publishing process?
2. Does your agency have any other forms, databases, catalogs, etc. that *draw directly from* the information /metadata required on the DOT Form F 1700.7?
3. Does your agency have any other forms, database, catalogs, etc. that *already capture or duplicate* the information on the DOT Form F 1700.7?
4. Are there any problems with the structure of the form? Are all fields clearly understandable? Is there enough space?
5. Is there any information you or your agency needs that is *not* on the form? For example: permanent URL, alignment of fields with NTIS's new form (see attached or <http://www.ntis.gov/pdf/rdpform.pdf>), statement of copyright or intellectual property, etc.

We learned from the survey that many of your agencies have developed their own set of instructions for filling out the Technical Report Documentation Page (DOT Form F 1700.7). If so, could you please send us a copy of or a link to these instructions? We would also like some history on how and why your agency developed these instructions and if applicable, could you send us contact information for someone in the publications office who can provide more information?

Attached is a copy of the DOT Form F 1700.7 and the NTIS Standard Form 298 for your reference.

3.3.3.2 Results. Thirteen (13) of the 20 State DOT survey respondents provided answers to some or all of the follow-up questions. Table 2 provides a summary of the responses. Most (11 of 13 or 84.6%) of the follow-up questions respondents require the contractor (e.g., researcher, author) to fill out the Technical Report Documentation page (Form DOT F 1700.7), and 4 of these 11 or 36.4% assist the contractor in completing the form. Just 2 of the 13 (15.4%) respondents indicated that their agency, and not the contractor, completes the form. Nine (9) of the 13 respondents provided the stage (of the research/publishing process) at which the form is typically complete. All 9 respondents indicated that the form is completed during the final report stage, either with the draft (5 of 9 or 55.6%) or final (4 of 9 or 44.4%) report.

Over half (7 of 12 or 58.6%) of all DOT respondents have another item (forms, databases, catalogs, etc.) that *draws directly from* the Technical Report Documentation Page metadata. These items include: DOT Catalogs; OCLC Catalogs; Internal Databases; DOT Websites; and hyperlinked PDF attachments.

¹⁶ Follow-up questions were sent only to those survey respondents directly affiliated with a State DOT.

Most (9 of 12 or 75%) responded that their agency has another item that *already captures or duplicates* this metadata. These items include: Internal Catalog Records; Online DOT Catalog Records; Internal Databases; and OCLC, NTIS, NTL, and TRID Catalog Records.

Most (9 of 12 or 75%) respondents indicated that there are problems with the current Form DOT F 1700.7, noting that they do not populate all fields (5 of 12 respondents or 41.7%) and that some fields are unclear (6 of 12 respondents or 50.0%). One respondent commented that there is not enough space on the form. Three (3) of the 12 respondents (25%) replied that there were no problems with the current form.

State DOT survey respondents were asked if there was any information they need that is not already on the form, and were given the examples of a permanent URL, alignment of fields with Standard Form 298, and a statement of copyright or intellectual property. Nearly all (10 of 12 or 83.3%) respondents stated that they would like to see the permanent URL on the form, but most (6 of 10 or 60%) had reservations. Reservations regarding including a permanent URL on the form focused on necessitating process changes, as permanent URLs are not created until after the form has been completed, and longevity concerns, as websites are sometimes updated and reports are not re-submitted. Other items that respondents would like to see on the form include: copyright information (3 of the 12 respondents or 25%); publishing agency (1 or 12 or 8.3%); Digital Object Identifier (DOI) (8.3%); and a link to the State DOT Website (8.3%).

Seven (7) of the 13 (53.8%) total respondents replied that their agency has its own set of instructions for filling out the Technical Report Documentation Page. These instructions range from an example Form DOT F 1700.7 to a step step-by-step field list instruction sheet. Two (2) of the 7 respondents whose agency has its own set of instructions provided reasons for creating these instructions; one because of an internal review that found inconsistency with the form, and one because of a 2006 FHWA review that recommended they use the form.

Figure 11 presents an overview of responses to selected questions.

Table 4. Responses To Follow-Up Questions

DOT Library / Research Center	Who typically completes the form?	At what stage of the research project or publishing process is the form typically completed?	Does your agency have any other forms, databases, catalogs etc., that draw directly from this Tech Doc metadata?	Does your agency have any other forms, databases, catalogs etc., that already capture or duplicate the Tech Doc metadata?	Are there problems with structure of the form? Are all fields clearly understandable?	Is there any information you or your agency needs that is not on NTIS's new form, statement of copyright or intellectual property, etc.	Does the agency have their own set of instructions?	History regarding development of agency's instructions for completing the form. (if applicable)	Additional Comments
Idaho	Contractor / DOT Assistance	----	DOT Catalog	Internal Catalog Records	Does not populate all fields	URL	Yes	----	----
Iowa	Contractor / DOT Assistance	Draft Final Report	no	Internal Database	Does not populate all fields	URL (see comments)	Yes	----	Usually contractors are NOT familiar with the form. Including the URLs will change the workflow. Agency would have to move to a permanent URL service OR would need to establish the URL prior to final publication.
Maine	DOT	----	DOT Catalog	no	no	Publishing Agency Copyright Information URL (see comments)	----	----	Longevity concerns with adding URL to form.
Maryland	Contractor	Draft Final Report	no	no	Does not populate all fields Some fields are unclear	URL (see comments)	No	N/A	The information is sufficient but a field for the permanent URL could be helpful.
Michigan	Contractor	----	----	----	----	----	Yes	----	Uses a modified tech doc page (3. MDOT Project Manager)
Minnesota	Contractor	Draft Final Report	Internal Database DOT Catalog	Internal Database Online DOT Catalog	Some fields are unclear	URL (see comments) DOI (digital object identifier)	No	N/A	DOT has been putting URLs in the 'supplementary notes' field but has other information to put there so would like a separate field specifically for URLs.
Missouri	Contractor / DOT Assistance	Final Report	no	Internal Catalog Records OCLC Catalog Records Internal Database	Some fields are unclear	URL (see comments) Copyright Information	----	----	----
Montana	Contractor	Draft Final Report	DOT Catalog OCLC Catalog	no	no	URL (see comments)	Yes	----	Adds hyperlink to their research project page to the 'supplementary notes' field. Permanent URL comes from NTL and is not available until after form is filled out and report is distributed. Supplies TRT terms for the researcher to add to the 'key words' field.
New Jersey	Contractor	Final Report	Hyperlinked pdf attachments	Internal Database	Does not populate all fields	URL (see comments)	Yes	Inconsistency was found upon review of form and guidelines were created for uniformity	Concerning URL-sometimes webpages are updated and they do not re-issue the report.
New York	Contractor	Final Report	DOT Catalog	Internal Database	no	no	Yes	Developed in response to a 2006 FHWA Review that recommended they use the form	Abstract field should be kept brief (200 words).
Virginia	DOT	Draft Final Report	no	Internal Database OCLC, NTIS, NTL, and TRID Catalog Records	Some fields are unclear Not enough space	URL	No	N/A	----
Washington	Contractors / DOT Assistance	Final Report	DOT Website	Internal Spreadsheet	Some fields are unclear	URL (see comments) Website link Copyright Information	Yes	----	Concerning URL-No permanent URL available when form is completed.
Wisconsin	Contractor	----	no	Internal Catalog Records	Does not populate all fields Some fields are unclear	no	----	----	----

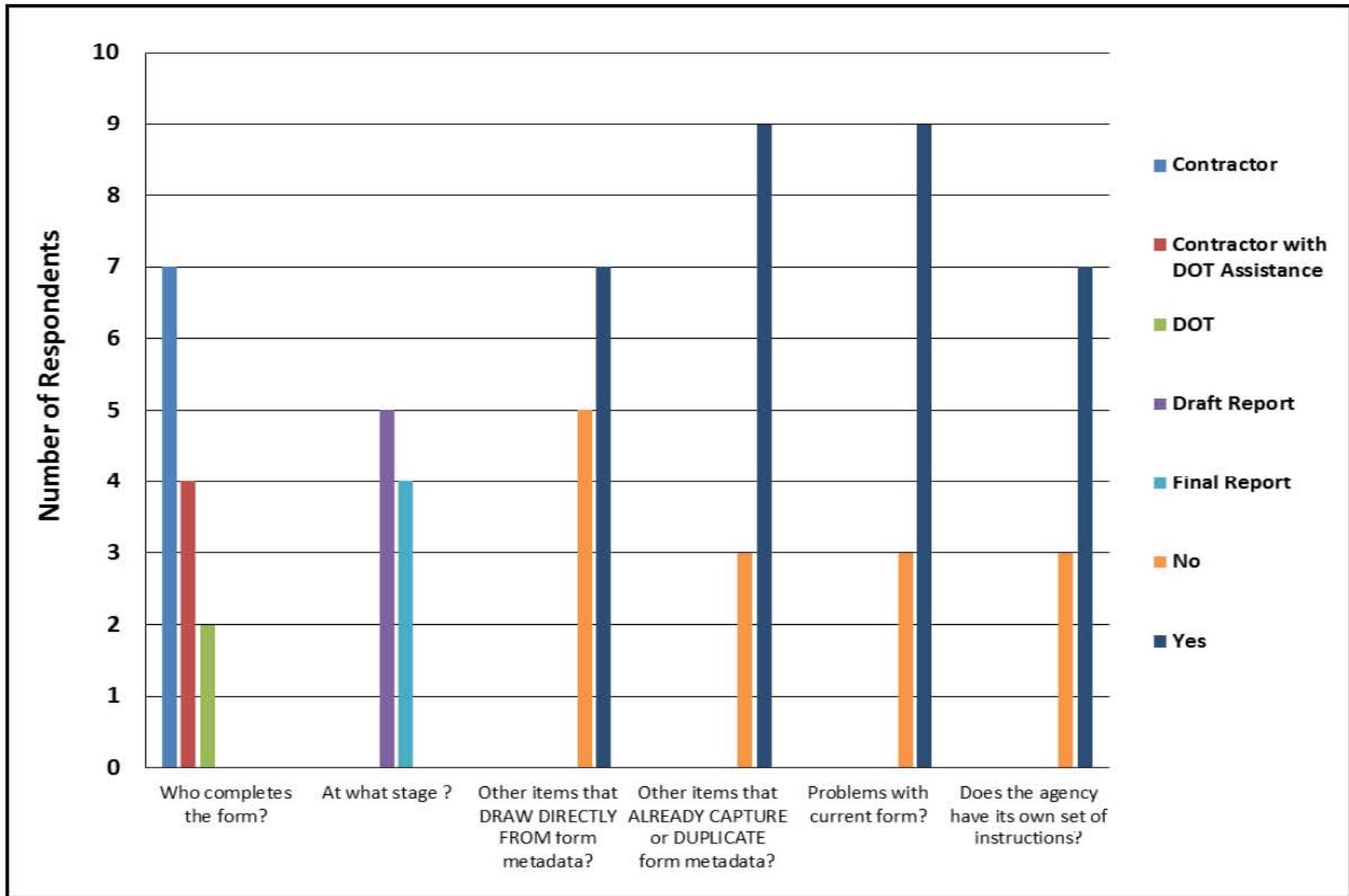


Figure 14. Responses to Selected Questions from Follow-Up to State DOT Survey Respondents

3.4 Conclusions

The research found that the only official U.S. DOT instructions for completing the Technical Report Documentation Page (Form DOT 1700.7) are from 1975, and that the form itself was last revised in 1972. While the instructions are fairly straightforward, the research found that some of the fields may not be relevant today. In addition, inquires to the U.S. DOT¹⁷ confirmed that there is no universal location for retrieving Form DOT F 1700.7 and that it is presumed authors create their own copy of the form using examples from other publications. Many State DOTs make a copy of the form available to contractors, but these versions of the form are not always consistent among State DOTs. In contrast, a similar report documentation page, Standard Form 298 (used as the standard by NTIS) is available for download in a central location (<http://www.ntis.gov/pdf/rdpform.pdf>). An information search revealed that many U.S. DOT report guideline documents require the use of Form DOT F 1700.7 but do not provide much instruction on how to complete the form.

The research activities provided insight into the current practices of what Technical Report Documentation Page information is required by State DOT Libraries/Research Centers. In-depth follow-up questions with State DOT Libraries/Research Centers who participated in the Part A survey revealed that they do not populate all the fields on the form and that they are often unsure what some of the fields mean; a sampling of 100 forms from publications indexed in TRID and NTL further supported this finding. Most State DOT Libraries/ Research Centers require that the contractor fill out the form during the final report phase (with draft or final report submission), but Part A survey results indicated that the DOT Library/Research Center usually edits the form once it is received from the contractor.

The research showed that the State DOT Libraries/Research Centers populate those fields on the Technical Report Documentation Page that are most often used in searching (e.g., advanced search options in online databases) such as title, author, abstract, keywords, report date, report number, performing organization, and sponsoring organization. The majority also include the type of report/period of coverage. However, there is inconsistency regarding the completion of other fields such as distribution statement, number of pages, security classification (report or page), and contract/grant number. In addition, there are several fields that are rarely required and completed such as: government accession no.; recipient's catalog no., performing organization code; work unit no.; sponsoring agency code; and price.

As for adding new information to the Technical Report Documentation Page, most State DOTs expressed interest in including a URL on the form, either in a new field or in the supplementary notes field, but this interest comes with reservations. As evident from the Part A survey findings and confirmed through follow-up questions to the State DOT survey respondents, permanent URLs are established (e.g., by NTL) after the form is completed and the SPR-funded reports are distributed; therefore, including this permanent URL would require a substantial change in workflow. Adding the State DOT internal URL, if applicable, is also problematic, as server changes, which are often out of the library/research center's control, can cause these internal URLs to change over time.

¹⁷ Personal correspondence via email with U.S. Department of Transportation Reference Service (9/12/2014)

4. RECOMMENDATIONS FOR MORE EFFECTIVE USE OF THE TECHNICAL DOCUMENTATION PAGE

It is recommended that a universal Form DOT F 1700.7 with an instruction sheet be made available in a central location that can be easily accessed by those participating in SPR-funded report preparation. This will improve consistency on how contractors and State DOT Libraries/Research Centers complete the form. It will also improve consistency regarding the design of the form, and the number and names of form fields. This recommended document is provided in Appendix B. Requiring the use of this or a similar document may be a solution that AASHTO can easily institute.

Better instructions for and definitions of the Form DOT F 1700.7 fields will lead to less ambiguity and confusion concerning how to complete the form. In the attached recommended universal Form DOT F 1700.7 with instructions, updates were made to the 1975 U.S. DOT instructions for most of the fields. These new instructions were developed by evaluating the 1975 U.S. DOT instructions, the instructions that are included with Standard Form 298 for similar fields, and the instructions provided to contractors by different State DOTs. Figure 12 provides a side-by-side comparison of the recommended instruction revisions and the 1975 U.S. DOT instructions.

In the case of URLs, if an agency can issue a permanent URL before the report is published, it is recommended to enter the URL into the Technical Report Documentation Page (in the supplementary notes field). If the URL available at the time of publication is likely to change over time, it is better to distribute the URL by means other than the Technical Report Documentation Page so that out-of-date information is not entered into a catalog or index record. To ensure that the report can be readily discovered by the Sponsoring Agency long after it is published, it is recommended the permanent URLs (created later by the NTL and/or State repository) be added into the catalog and/or records management system of the DOT.

The Transportation Research Thesaurus (TRT)¹⁸ is a resource that can be used for providing more effective use of the Technical Report Documentation Page. However, the TRT is large and complex enough that it *can be* difficult for someone who is not a professional indexer to use. If the report author is not familiar with using the TRT, it is recommended that they suggest keywords that can later be used for guidance by the indexers who assign the TRT terms in TRID records.

If the workflow for publishing reports and the resources available to the State DOT Library/Research Center allow for it, the Librarian, Research Director, etc. can add TRT terms to the Key Words field. If the TRT terms added by the State DOT are also entered into a local catalog or records-management system, the controlled vocabulary of the TRT will be useful in enhancing local discoverability of the report. An alternate practice would be to enhance the local record with the TRT terms that have been assigned to the TRID record by TRID indexers.

¹⁸ <http://trt.trb.org/>

Proposed Modified Instructions

Instructions for Completing Form DOT F 1700.7

1. **Report No.** Enter the report number assigned by the sponsoring agency
2. **Government Accession No.** Leave blank
3. **Recipient's Catalog No.** Reserve for use by the report recipient
4. **Title and Subtitle.** Enter title and subtitle with volume number and part number, if applicable
5. **Report Date.** Enter full publication date, including month and day, if available. Must cite the full year. Example: June 5, 2014 or June 2014 or 2014
6. **Performing Organization Code.** Enter any/all unique numbers assigned to the performing organization, if applicable
7. **Authors.** Enter name(s) of person(s) responsible for writing the report, performing the research, or credited with the content of the report. Form of entry is first name, middle initial (if applicable), last name, and any additional qualifiers. Primary author is listed first. Example: Jane G. Smith, Ph.D.
8. **Performing Organization Report No.** Enter any/all unique alphanumeric report numbers assigned by the performing organization, if applicable
9. **Performing Organization Name and Address.** Enter the name and address of the organization performing the research.
10. **Work Unit No. (TRAIS).** Leave blank
11. **Contract or Grant No.** Enter the number of the contract or grant under which the report was prepared.
12. **Sponsoring Agency Name and Address.** Enter name and address of the organization(s) financially responsible for the work.
13. **Type of Report and Period Covered.** State the type of report (e.g., final, draft final, interim, quarterly, special, etc.) followed by the dates during which the work was performed. Example: Final Report (June 2012 - June 2014)
14. **Sponsoring Agency Code.** If available, enter the code or acronyms for the sponsoring agency (e.g., FHWA, NHTSA)
15. **Supplementary Notes.** Enter information not included elsewhere, such as: project performed in cooperation with; translation of (or by); report supersedes; old edition number; URL or hyperlink; ORCID identifier, etc.
16. **Abstract.** Enter a brief (approximately 200 words) factual summary of the most significant information, including the purpose, methods, results, and conclusions of the work. When appropriate, the abstract should include advice on how the results of the research can be used.
17. **Key Words.** Enter words, terms, or phrases that identify important topics in the report. When possible, terms should be selected from the Transportation Research Thesaurus (tr.tb.org)
18. **Distribution Statement.** Use agency-mandated distribution statements and state any restrictions. Example: No restrictions. This document is available through the National Technical Information Service, Springfield, Virginia 22161.
19. **Security Classification (of this report).** Enter the security classification of the report (e.g., Unclassified). Reports carrying a security classification will require additional marking giving security and downgrading information as specified by the sponsoring agency.
20. **Security Classification (of this page).** Enter the security classification of the form (e.g., Unclassified). When at all possible, Form DOT F 1700.7 should remain unclassified. If a classification is required, identify the classified items on the page by an appropriate symbol as per instruction from the sponsoring agency.
21. **No. of Pages.** Enter the total number of pages in the report, including both sides of all pages and the front and back covers.
22. **Price.** Leave blank unless applicable

Form DOT F 1700.7 (08/72) Back

U.S. DOT Instructions

Make items 1, 4, 5, 7, 9, 12, 13, and 18 agree with the corresponding information on the report cover. Use all capital letters for main title (item 4). Leave items 2, 6, and 22 blank. Complete the remaining items as follows:

3. **Recipient's Catalog No.** Reserve for use by report recipient.
8. **Performing Organization Report No.** Insert if performing organization wishes to assign this number.
9. **Performing Organization Name and Address** (include zip code).
10. **Work Unit No. (TRAIS).** Use the number code from the applicable research and technology results which uniquely identifies the work unit in the Transportation Research Activity Information Service. For Highway Planning and Research (HP&R) Program reports, include the FPC Code assigned in the study.
11. **Contract or Grant No.** Insert the number of the contract or grant under which the report was prepared. For Highway Planning and Research (HP&R) Program reports, include also the State study number.
15. **Supplementary Notes.** Enter information not included elsewhere but useful, such as: Prepared in cooperation with.... Translation of (or by).... Presented at conference of.... To be published in.... Other related reports.
16. **Abstract.** Include a brief (not to exceed 200 words) factual summary of the most significant information contained in the report. An abstract should state the purpose, methods, results, and conclusions of the work effort. For the purpose, include a statement of goals (objectives, aims). For methods, include experimental techniques or the means by which the results were obtained. Results (findings) are the most important part of the abstract and selection should be based on one, or several of the following: new and verified events, findings of permanent value, significant findings which contradict previous theories, or findings which the author knows are relevant to a practical problem. Conclusions should deal with the implications of the findings and how they tie in with studies in related fields. Do not repeat title or other items provided on this page. When a report consists of a number of volumes, include the title of each of the other volumes in each abstract.

Reports presenting the results of computerized model development will use the following structure for the preparation of abstracts:

1. Technical Model description: (Nature of the model or simulator)
2. Areas of model application
3. Special model requirements
 - a. Areas of model application
 - b. Other special considerations.
17. **Key Words.** Select specific and precise terms or short phrases that identify the principal subjects covered in the report. The sponsoring element may specify that key words shall conform to standard terminology, such as that given in the Department of Defense/Engineers Joint Council Thesaurus of Engineering and Scientific Terms, or a Thesaurus of Terms established by the sponsoring element.
18. **Distribution Statement.** Enter one of the authorized statements (Paragraph 7b(9)) used to denote releasability to the public or a limitation on dissemination for reasons other than security of defense information. Refer questions on the statements to the sponsoring element.
19. **Security Classification (of report).** Note: Reports carrying a security classification will require additional markings giving security and downgrading information as specified by the sponsoring element.
20. **Security Classification (of this page).** Note: Because this page may be used in preparing announcements, bibliographies, and data banks, it should be unclassified, if possible. If a classification is required, identify the classified items on the page by an appropriate symbol.
21. **No. of Pages.** Insert the number of pages having printed material, including front and inside covers.

Figure 15. Comparison of Proposed Updated Form DOT F 1700.7 Instructions and Current U.S. DOT Instructions

Recommendations that are most likely outside of AASHTO's ability involve revising and restructuring the Technical Report Documentation Page into a form with two sections; one for the researchers/contractors to fill out and one for Sponsoring Agency to fill out. It is suggested that the researchers/contractors should complete the following: report title, authors, performing organization and address, Sponsoring Agency name and address, performing organization code and report number, contract number, abstract, keywords, time period, and supplementary notes. The Sponsoring Agency (e.g., State DOT Library/Research Center) should complete the remaining fields that relate to their State DOT mandates in managing research projects. It is recommended that fields 10 (Work Unit No.), 2 (Government Accession Number) be considered for exclusion and that a new, URL field be include. Figure 13 provides an example of this proposed revised form and Figure 14 provides an example of instructions to be included with the revised form. This proposed revised form with instructions is also included in Appendix C.

Another recommendation that may be beyond AASHTO's ability is to have an interactive form created that provides instructions or comments for a particular field when the mouse is hovered over that field (i.e., mouseover, hover text, hover box). It would be ideal that this interactive form not allow the user to continue to the next field until all previous required fields are completed. An example of how to implement this action would be to provide this interactive form via a website link for the user to fill out and allow the user to download the completed form as a PDF (or an editable PDF) to be inserted into the report.

Title and Subtitle:		Period Covered:	
		Contract or Grant No.:	
Author(s):			
Performing Organization Name and Address:		Sponsoring Agency Name and Address:	
Performing Organization Code:		Performing Organization Report No.:	
Supplementary Notes:			
Abstract:			
Key Words:			
This section is reserved for Sponsoring Agency use only.			
Report No.:		Type of Report:	Report Date:
Distribution Statement:			
Sponsoring Agency Code:	Recipient's Catalog No.:	No of Pages:	Price:
Security Classification (of this report):		Security Classification (of this page):	
URL:			

Figure 16. Proposed Revised Form

Instructions for Researchers

Title and Subtitle. Enter title and subtitle with volume number and part number, if applicable

Period Covered. Cite the dates during which the work was performed. Example: June 2012 - June 2014

Contract or Grant No. Enter the number of the contract or grant under which the report was prepared.

Authors. Enter name(s) of person(s) responsible for writing the report, performing the research, or credited with the content of the report. Form of entry is first name, middle initial (if applicable), last name, and any additional qualifiers. Primary author is listed first. Example: Jane G. Smith, Ph.D.

Performing Organization Name and Address. Enter the name and address of the organization performing the research.

Sponsoring Agency Name and Address. Enter name and address of the organization(s) financially responsible for the work.

Performing Organization Code. Enter any/all unique numbers assigned to the performing organization, if applicable

Performing Organization Report No. Enter any/all unique alphanumeric report numbers assigned by the performing organization, if applicable

Supplementary Notes. Enter information not included elsewhere, such as: project performed in cooperation with; translation of (or by); report supersedes; old edition number; ORCID identifier, etc.

Abstract. Enter a brief (approximately 200 words) factual summary of the most significant information, including the purpose, methods, results, and conclusions of the work. When appropriate, the abstract should include a device on how the results of the research can be used

Key Words. Enter words, terms, or phrases that identify important topics in the report. When possible, terms should be selected from the Transportation Research Thesaurus (trt.trb.org)

Instructions for Sponsoring Agencies

Report No. Enter the report number assigned by the sponsoring agency

Type of Report. State the type of report (e.g., final, draft final, interim, quarterly, special, etc.)

Report Date. Enter full publication date, including month and day, if available. Must cite the full year. Example: June 5, 2014 or June 2014 or 2014

Distribution Statement. Use agency-mandated distribution statements and state any restrictions. Example: No restrictions. This document is available through the National Technical Information Service, Springfield, Virginia 22161.

Sponsoring Agency Code. If available, enter the code or acronyms for the sponsoring agency (e.g., FHWA, NHTSA)

Recipient's Catalog No. Reserve for use by the report recipient

No. of Pages. Enter the total number of pages in the report, including both sides of all pages and the front and back covers.

Price. Leave blank unless applicable

Security Classification (of this report). Enter the security classification of the report (e.g., Unclassified). Reports carrying a security classification will require additional marking giving security and downgrading information as specified by the sponsoring agency.

Security Classification (of this page). Enter the security classification of the form (e.g., Unclassified). When at all possible, Form DOT F 1700.7 should remain unclassified. If a classification is required, identify the classified items on the page by an appropriate symbol as per instruction from the sponsoring agency.

URL. Enter the permanent URL for the report

Figure 17. Proposed Instructions for Proposed Revised Form

Record No.*	Sponsoring Agency	1. Report No.	2. Government Accession NO.	3. Recipient's Catalog No.	4. Title and Subtitle	5. Report Date	6. Performing Organization Code	7. Author(s)	8. Performing Organization Report No.	9. Performing Organization Name and Address	10. Work Unit No.	11. Contract or Grant No.	12. Sponsoring Agency Name and Address	13. Type of Report and Period Covered	14. Sponsoring Agency Code	15. Supplementary Notes	16. Abstract	17. Key Words	18. Distribution Statement	19. Security Classification (of this report)	20. Security Classification (of this page)	21. No of Pages	22. Price	
96	Washington DOT		•	•			•		•		•				•							•	•	
97	UTC-Southwest Region		•	•			•				•			•	•								•	•
98	Louisiana Transportation Research Center		•	•				•			•				•			•						•
99	Florida DOT/RITA	•	•	•			•				•				•									•
100	Missouri DOT		•	•			•		•		•			•	•									•

*Record Numbers 1-50 are a result of a search in the TRID database for FHWA and for the years 2013-2014. Record Numbers 51-100 are a result of a search in the NTL database for the years 2013-2014.

Appendix B: Universal Form DOT 1700.7 with Recommended Instructions

TECHNICAL REPORT DOCUMENTATION PAGE.

1. Report No.:	2. Government Accession No.:	3. Recipient's Catalog No.:	
4. Title and Subtitle:		5. Report Date:	
		6. Performing Organization Code:	
7. Author(s):		8. Performing Organization Report No.:	
9. Performing Organization Name and Address:		10. Work Unit No.:	
		11. Contract or Grant No.:	
12. Sponsoring Agency Name and Address:		13. Type of Report and Period Covered:	
		14. Sponsoring Agency Code:	
15. Supplementary Notes:			
16. Abstract:			
17. Key Words:		18. Distribution Statement:	
19. Security Classification (of this report):	20. Security Classification (of this page):	21. No of Pages:	22. Price:

Instructions for Completing Form DOT F 1700.7

1. Report No. Enter the report number assigned by the sponsoring agency

2. Government Accession No. Leave blank

3. Recipient's Catalog No. Reserve for use by the report recipient

4. Title and Subtitle. Enter title and subtitle with volume number and part number, if applicable

5. Report Date. Enter full publication date, including month and day, if available. Must cite the full year. Example: June 5, 2014 or June 2014 or 2014

6. Performing Organization Code. Enter any/all unique numbers assigned to the performing organization, if applicable

7. Authors. Enter name(s) of person(s) responsible for writing the report, performing the research, or credited with the content of the report. Form of entry is first name, middle initial (if applicable), last name, and any additional qualifiers. Primary author is listed first. Example: Jane G. Smith, Ph.D.

8. Performing Organization Report No. Enter any/all unique alphanumeric report numbers assigned by the performing organization, if applicable

9. Performing Organization Name and Address. Enter the name and address of the organization performing the research.

10. Work Unit No. (TRAIS). Leave blank

11. Contract or Grant No. Enter the number of the contract or grant under which the report was prepared.

12. Sponsoring Agency Name and Address. Enter name and address of the organization(s) financially responsible for the work.

13. Type of Report and Period Covered. State the type of report (e.g., final, draft final, interim, quarterly, special, etc.) followed by the dates during which the work was performed. Example: Final Report (June 2012 - June 2014)

14. Sponsoring Agency Code. If available, enter the code or acronyms for the sponsoring agency (e.g., FHWA, NHTSA)

15. Supplementary Notes. Enter information not included elsewhere, such as: project performed in cooperation with; translation of (or by); report supersedes; old edition number; URL or hyperlink; ORCID identifier, etc.

16. Abstract. Enter a brief (approximately 200 words) factual summary of the most significant information, including the purpose, methods, results, and conclusions of the work. When appropriate, the abstract should include advice on how the results of the research can be used.

17. Key Words. Enter words, terms, or phrases that identify important topics in the report. When possible, terms should be selected from the Transportation Research Thesaurus (trt.trb.org)

18. Distribution Statement. Use agency-mandated distribution statements and state any restrictions. Example: No restrictions. This document is available through the National Technical Information Service, Springfield, Virginia 22161.

19. Security Classification (of this report). Enter the security classification of the report (e.g., Unclassified). Reports carrying a security classification will require additional marking giving security and downgrading information as specified by the sponsoring agency.

20. Security Classification (of this page). Enter the security classification of the form (e.g., Unclassified). When at all possible, Form DOT F 1700.7 should remain unclassified. If a classification is required, identify the classified items on the page by an appropriate symbol as per instruction from the sponsoring agency.

21. No. of Pages. Enter the total number of pages in the report, including both sides of all pages and the front and back covers.

22. Price. Leave blank unless applicable

**Appendix C: Proposed Revised Technical Report Documentation Page with
Instructions**

Title and Subtitle:		Period Covered:	
		Contract or Grant No.:	
Author(s):			
Performing Organization Name and Address:		Sponsoring Agency Name and Address:	
Performing Organization Code:		Performing Organization Report No.:	
Supplementary Notes:			
Abstract:			
Key Words:			
This section is reserved for Sponsoring Agency use only.			
Report No.:		Type of Report:	Report Date:
Distribution Statement:			
Sponsoring Agency Code:	Recipient's Catalog No.:	No of Pages:	Price:
Security Classification (of this report):		Security Classification (of this page):	
URL:			

Instructions for Researchers

Title and Subtitle. Enter title and subtitle with volume number and part number, if applicable

Period Covered. Cite the dates during which the work was performed. Example: June 2012 - June 2014

Contract or Grant No. Enter the number of the contract or grant under which the report was prepared.

Authors. Enter name(s) of person(s) responsible for writing the report, performing the research, or credited with the content of the report. Form of entry is first name, middle initial (if applicable), last name, and any additional qualifiers. Primary author is listed first. Example: Jane G. Smith, Ph.D.

Performing Organization Name and Address. Enter the name and address of the organization performing the research.

Sponsoring Agency Name and Address. Enter name and address of the organization(s) financially responsible for the work.

Performing Organization Code. Enter any/all unique numbers assigned to the performing organization, if applicable

Performing Organization Report No. Enter any/all unique alphanumeric report numbers assigned by the performing organization, if applicable

Supplementary Notes. Enter information not included elsewhere, such as: project performed in cooperation with; translation of (or by); report supersedes; old edition number; ORCID identifier, etc.

Abstract. Enter a brief (approximately 200 words) factual summary of the most significant information, including the purpose, methods, results, and conclusions of the work. When appropriate, the abstract should include advice on how the results of the research can be used.

Key Words. Enter words, terms, or phrases that identify important topics in the report. When possible, terms should be selected from the Transportation Research Thesaurus (trt.trb.org)

Instructions for Sponsoring Agencies

Report No. Enter the report number assigned by the sponsoring agency

Type of Report. State the type of report (e.g., final, draft final, interim, quarterly, special, etc.)

Report Date. Enter full publication date, including month and day, if available. Must cite the full year. Example: June 5, 2014 or June 2014 or 2014

Distribution Statement. Use agency-mandated distribution statements and state any restrictions. Example: No restrictions. This document is available through the National Technical Information Service, Springfield, Virginia 22161.

Sponsoring Agency Code. If available, enter the code or acronyms for the sponsoring agency (e.g., FHWA, NHTSA)

Recipient's Catalog No. Reserve for use by the report recipient

No. of Pages. Enter the total number of pages in the report, including both sides of all pages and the front and back covers.

Price. Leave blank unless applicable

Security Classification (of this report). Enter the security classification of the report (e.g., Unclassified). Reports carrying a security classification will require additional marking giving security and downgrading information as specified by the sponsoring agency.

Security Classification (of this page). Enter the security classification of the form (e.g., Unclassified). When at all possible, Form DOT F 1700.7 should remain unclassified. If a classification is required, identify the classified items on the page by an appropriate symbol as per instruction from the sponsoring agency.

URL. Enter the permanent URL for the report

