

Transportation Consortium of South-Central States

Solving Emerging Transportation Resiliency, Sustainability, and Economic Challenges through the Use of Innovative Materials and Construction Methods: From Research to Implementation

Tran-SET Final Report Formatting Guide

Context

This document describes the format of the final report in detail. PIs are required to adhere to the following formatting guidelines and to use the corresponding final report template located on <u>Tran-SET's website</u>.

Required Sections

To provide consistency, each report must include the following sections, and these sections only, in the following order:

- TECHNICAL DOCUMENTATION PAGE;
- TABLE OF CONTENTS:
- LIST OF FIGURES;
- LIST OF TABLES:
- ACRONYMS, ABBREVIATIONS, AND SYMBOLS;
- EXECUTIVE SUMMARY;
- 1. INTRODUCTION:
- 2. OBJECTIVES;
- 3. LITERATURE REVIEW:
- 4. METHODOLOGY;
- 5. ANALYSIS AND FINDINGS;
- 6. CONCLUSIONS; and
- REFERENCES.

Please note: the LIST OF FIGURES or LIST OF TABLES sections may be omitted, but only if the report contains no figures or tables, respectively.

Please note: if appropriate, APPENDIX sections may be added after the REFERENCES section. Each APPENDIX section should be labeled with a letter and descriptive name. Additional APPENDIX sections should be labeled by subsequent letter of the alphabet (e.g., APPENDIX A: A.M. PEAK TRAVEL TIME RESULTS, APPENDIX B: P.M. PEAK TRAVEL TIME RESULTS, etc.).

Please note: Sections that are not numbered, should not contain subsections.

Please note: Sections that are numbered may contain subsections. These subsections are restricted to two sublevels, numerically marked, and with a descriptive name. For example, "4. METHODOLOGY, 4.1. Proposed Solutions and Simulation Scenarios, 4.1.1. Demand-Oriented Solutions". If additional sublevels are needed, do not mark numerically; instead: begin a new paragraph, use the "Normal" font style, capitalize each word in the subsection title, bold the subsection title, place colon after title, and place title in-line with paragraph text. Please see below for an example:

Ramp Metering: This solution involves active traffic management (ATM)

Required MS Word Styles

The PI is required to use the MS Word styles defined in the report template. These styles are summarized in Table 1. A description of its format is included for reference (in case the format is accidently modified).

Table 1. Required MS Word Styles and their Use.

Style Name	When to Use	Format (Font Size Style Color Alignment Spacing)
A_Figure	Title of figures located in the Appendix sections	Times New Roman 9 Bold R:0, G:0, B:0 Left- Aligned Single Before: 0, After: 12
A_Table	Title of tables located in the Appendix sections	Times New Roman 9 Bold R:0, G:0, B:0 Left- Aligned Single Before: 12, After: 3
C-Page	Narrative on the cover page (Project No., Lead University, etc.)	Cambria 10 Bold R: 19, G: 53, B: 121 Justified Single Before: 0, After: 6
Figure	Title of figures located in main report narrative	Times New Roman 9 Bold R:0, G:0, B:0 Left- Aligned Single Before: 0, After: 12
Normal	All main narrative text	Times New Roman 12 None R:0, G:0, B:0 Justified Single Before: 0, After: 8
Table	Title of tables located in main report narrative	Times New Roman 9 Bold R:0, G:0, B:0 Left- Aligned Single Before: 12, After: 3
T-Page_Text	Box text within the TECHNICAL DOCUMENTATION PAGE	Times New Roman 10 None R:0, G:0, B:0 Left- Aligned Single Before: 0, After: 0
T-Page_Title	Box titles within the TECHNICAL DOCUMENTATION PAGE	Times New Roman 10 Bold R:0, G:0, B:0 Left- Aligned Single Before: 0, After: 3
Heading 1	Title of the main report sections	Times New Roman 14 Bold, All Caps R:0, G:0, B:0 Left-Aligned Single Before: 0, After: 6
Heading 2	Title of the first level of subsection (e.g., 4.2.)	Times New Roman 14 Bold R:0, G:0, B:0 Left- Aligned Single Before: 12, After: 3
Heading 3	Title of the second level of subsection (e.g., 4.2.1.)	Times New Roman 13 Bold, Italicized R:0, G:0, B:0 Left-Aligned Single Before: 12, After: 3
Title	Title of report on cover page	Cambria 24 Bold R: 19, G: 53, B: 121 Left- Aligned Single Before: 0, After: 0

Page Numbering

Number pages before section 1. INTRODUCTION with lowercase roman numerals. Start with "i" on the page after the cover page (the Disclaimer/Acknowledgments). Starting with "1" at section 1. INTRODUCTION, number all subsequent pages with Arabic numbers. Continuously number all subsequent pages, including any Appendix sections (i.e., do not restart the page count). Use the report template format.

Figures and Tables

Please note: center each added figure/table.

Please note: Label each figure/table according to the following examples. Please note: sentence capitalization and periods after the figure/table number and after title.

Figure 1. Redesign and construction of exits at Washington Street and Dalrymple Drive.

Figure 2. The study area in: (a) Google Maps and (b) the VISSIM simulation model.

Table 1. Comparison of travel time after model calibration for the: (a) A.M. peak model and (b) P.M. peak model.

Tran-SET suggests using cross-references when adding figures and tables, in order to eliminate errors when referring to figure/table numbers. More information regarding cross-referencing can be found on <u>Microsoft's website</u> and at the <u>University of Michigan Research Guides</u>.

References

Tran-SET has adopted the reference guidelines of the *Journal of the Transportation Research Record*. They are replicated below and can be accessed via the <u>following link</u> (pages 5–7). Ignore all other guidelines in the link.

Please note: the REFERENCES section should list only references that are cited in the text, numbered in the order in which they are first cited.

Please note: denote a reference at the appropriate place in the text with an italicized Arabic number in parentheses. For example: (2), (5-7), (8, 12, 15), etc.

Please note: do not include in the REFERENCES section personal communications or similar material that would not be available to readers. Instead, cite the unpublished work in the text and enclose the author's name along with the term "personal communication" in parentheses.

Please note: do not repeat a reference in the list. If a reference is cited more than once in the text, repeat the number first assigned to the reference.

Please note: defined references should use the "Normal" font style (see Table 1) with a left-tab of 0.25" after the number designation. See the following examples:

Example of TRR Journal Article

1. Dewan, S.A. and R.E. Smith. Creating Asset Management Reports from a Local Agency Pavement System. *Transportation Research Record: Journal of the Transportation Research Board*, 2018. Volume: 10.3141/1853-02.

Example of TRB Presentation Papers

2. Ghiasi, A., J. Ma, F. Zhou, and X. Li. Speed Harmonization Algorithm using Connected Autonomous Vehicles. Presented at 96th Annual Meeting of the Transportation Research Board, Washington, D.C., 2017.

Examples of Other Journals

- 3. Dawley, C.B., B.L. Hogenwiede, and K.O. Anderson. Mitigation of Instability Rutting of Asphalt Concrete Pavements in Canada. *Journal of Association of Asphalt Paving Technologists*, 2018. 59: 481–508.
- 4. Sansalone, M., J.M. Lin, and W.B. Streett. Determining the Depths of Surface-Opening Cracks Using Impact-Generated Stress Waves and Time-of-Flight Techniques. *ACI Materials Journal*, 2018. 95: 168–177.

Example of Book

5. Newland, D.E. Random Vibrations: Spectral and Wavelet Analysis. John Wiley & Sons, Inc., New York, 1998.

Example of Chapter in a Book

6. Shunk, G.A. Urban Transportation Systems. In *Transportation Planning Handbook* (J.D. Edwards, Jr., ed.), Prentice Hall, Englewood Cliffs, N.J., 1992, pp. 88–122.

Example of Government Report

7. Von Quintus, H.L. and A.L. Simpson. *Documentation of the Backcalculation of Layer Parameters for LTPP Test Sections*. Public FHWA-RD-01-113. FHWA, U.S. Department of Transportation, 2002.

Example of Websites

8. Lockridge, D. *Peloton Demonstrates Platoon System in Michigan*. Transportation Topics, Arlington, VA. www.truckinginfo.com/305293/volvo-trucks-fedex-demonstrate-truck-platooning-in-north-carolina. Accessed Feb. 8, 2019.

Equations

List each equation in the report as shown in the example below. All variables should be defined at first use (and first use only).

$$H_e = (1 - \frac{cw_t}{cw_0}) * 100$$
 [1]

where:

 H_e = Healing efficiency (%);

 cw_t = Crack width at time of analysis (mm); and

 cw_0 = Initial crack width (mm).

Please note: the left alignment, no bold text, the 0.5" offset, the left-tab at 5", listing the number in brackets, lowercase "where" with a colon, defining each variable as a list with semicolons, and units in parentheses.

When referring to equations in-text, capitalize "Equation" (e.g., "the healing efficiency was calculated as defined in Equation 1").

Section-Specific Formatting Guidance

Disclaimer/Acknowledgements: Adjust the bottom of the text box border according to the length of the narrative. If no acknowledgements are given, delete "Acknowledgements" line and section entirely.

TEHNICAL DOCUMENTATION PAGE: List each author's name in the following format:

[Role]: [First and last name without title prefix] https://orcid.org/[Author ORCID number]

Use the following (and the following only) to define each author's role: PI, Co-PI, GRA, Post-Doc, or Consultant. Ensure the ORCID number is listed as text only and not as a hyperlink. See the following example:

PI: Rohit Albertson https://orcid.org/0000-0001-5180-8190

Co-PI: Rahela Solak https://orcid.org/0000-0003-1958-1581

Post-Doc: Pedro Segers https://orcid.org/0000-0002-2159-2690

GRA: Fred Glen https://orcid.org/0000-0003-1580-9815

If any of the in-kind match of the project came from SP&R funds (such as local or state DOT funds), please include the respective sponsoring agency name and address in Box 12. For example:

Transportation Consortium of South-Central States (Tran-SET)

University Transportation Center for Region 6

3319 Patrick F. Taylor Hall, Louisiana State University, Baton Rouge, LA 70803

New Mexico Department of Transportation (SPR)

Research Bureau

1120 Cerrillos Road, Santa Fe, NM 87504

For Box 21, state the number of pages as the last Arabic page number of the document.

LIST OF FIGURES: To "Insert Table of Figures", click on the "References" tab and then on the "Insert Table of Figures" button. Ensure the settings are those in Figure 1.

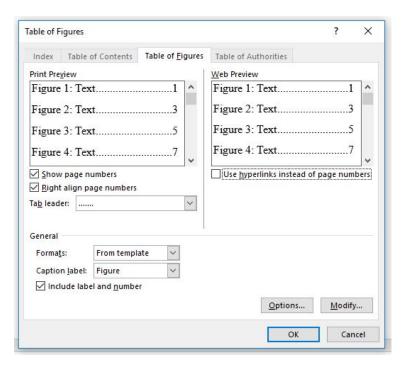


Figure 1. "Table of Figures" Window and Settings.

The list of figures will be built from narrative text in the "Figure" style (see Table 1). Therefore, click on the "Options" button in the same window, and select the "Figure" style from the dropdown (see Figure 2). This will generate a list of all figures in the document that use the "Figure" style.

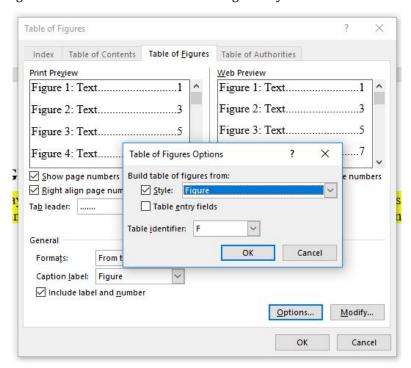


Figure 2. Selecting "Figure" Style from Options.

LIST OF TABLES: To create a list of tables, follow the same procedure for the LIST OF FIGURES, except choose the "Table" style from the dropdown (as in Figure 2).

ACRONYMS, ABBREVIATIONS, AND SYMBOLS: List each acronym, abbreviation, and symbol as in the following example. Please note the left-tab at 2" and capitalization of each term.

ADT Average Daily Traffic

ALPR Automatic License Plate Readers

APPENIDIX: Use the "A_Figure" and "A_Table" styles when denoting the titles of figures and tables, respectively, in the Appendix.

Please note: when labeling figures/tables, use the appropriate Appendix letter in front of the figure/table number. Also, restart the numbering of figures/tables at the beginning of each Appendix section. See the following examples:

Table A1. Reducing percent of local trucks on I-10 EB to 10%.

Table A2. Reducing percent of local truck on I-10 EB to 13%.

Figure A1. Effect of reducing percent of local truck on I-10 EB.

Table B1. Reduction in demand using demand management strategies.

Section 508/Accessibility

PIs are required to submit their final report in a 508 compliant format. Please see Tran-SET's "Section 508/Accessibility Aid" and corresponding video for more information. Both items are located on Tran-SET's website.

Contact

Please feel free to contact Mr. Christopher Melson (at transet@lsu.edu or 225-578-3805) if you have any questions.