

Transport Canada and the National Highway Traffic Safety Administration co-host

28th International Technical Conference on the Enhanced Safety of Vehicles (ESV)

Toronto Exhibition Place | May 12-15, 2026



GUIDELINES FOR WRITING YOUR ESV TECHNICAL PAPER

GENERAL GUIDELINES

- Final papers are received electronically via the NHTSA ESV website located at [NHTSA.gov/ESV#submissions](https://www.nhtsa.gov/ESV#submissions).
- Technical papers must be written in English and should list the main author, co-authors, affiliation, and their country.
- The quality of your paper's appearance in the ESV Proceedings largely depends on the care you take in preparing it. Please proofread your final paper, check for typographical errors and omissions before you submit it.
- Final papers cannot be replaced, or pages corrected after the deadline on December 19, 2025.

FILE EXTENSIONS AND ACCESSIBILITY CHECKING

Final papers submitted through NHTSA.gov must be in **PDF format** and accessible to all audiences. If producing the paper in Word, before saving as PDF: Go to the “Review” tab on the ribbon, click “Check Accessibility” in the “Accessibility” group. Review the “Accessibility Checker” pane and address any issues. Manually check the document for proper [heading](#) and [structure](#) and styles by clicking “View,” “Navigation Pane.” All images and tables must include [alternative text](#). Once done, click “File,” “Save as PDF.” To further check your PDF for accessibility, you can run “Accessibility Checker” in Adobe Acrobat by going to “Tools,” “Accessibility,” “Full Check.”

LANGUAGE

English should be used for the preparation of all manuscripts. It is recommended that all authors who are not native English speakers ask a native English speaker, English-department personnel, or a professional language-editing service to review their manuscript before submission. The names of potential editing services can be provided upon request.

PREPARATION OF MANUSCRIPT

Authors should refer to the detailed information on style conventions and figure preparation when preparing their manuscript.

The Chicago Manual of Style, 17th Edition, should be followed for any style points not covered here. All manuscripts must be free of commercialism. All studies involving human subjects must show Institutional Review Board (IRB) approval.

General Document Format

The table below provides the general guidelines for document formatting. The specifics related to figure resolution, etc., are provided in the **PREPARATION DETAILS** section of this document.

General Specifications	
Item	Requirement
Margins	1-inch all
Typeface	Times New Roman
Type size	10 point
Columns	1 for the paper body
Line spacing	Single
Footer	Last name of (main) author and page number, in the bottom right corner of every page
Target word limit	10,000
Target figure and table limit	16
Number of pages in appendices	10
Minimum number of references	15

Document Structure

Divide your manuscript into clearly defined sections and be consistent in style for the various subhead levels. Make sure all figures and tables are referenced in the text, and that they follow in order of reference. Large gaps of space should be avoided.

Your **FIRST-LEVEL TEXT HEADINGS** should be left justified and in **bold**, and in all CAPs.

Your **Second-Level Text Headings** should be left justified and in **bold**, with each word Capitalized. Start your text on the next line.

Your **Third-level text headings** should be in **bold** with the first word Capitalized. The heading should be underlined. These headings start a paragraph, so there should be no line below the heading/before starting the text (just one space).

Your *Fourth-level text headings* should be in *italics* and underlined with the first word capitalized. Like for the third-level headings, these headings should start a paragraph, so there should be no line below the heading/before starting the text (just one space).

Paper Title

PAPER TITLE Be concise, accurate, and informative. The paper title should accurately but briefly describe the focus of the work presented. Avoid abbreviations and formulae where possible. The title should be single column, and left justified in **bold** using all CAPs.

Author Names and Affiliations

Include the main author(s) and co-author(s) name(s) –First name last name, left justify, in bold, initial caps. Include affiliation name and country as a superscript after each last name. Affiliations follow below the author list. Left justify, in initial caps beginning directly below the author list.

Paper Number

Paper number should follow the author and affiliation list and precede the Abstract.

Abstract

ABSTRACT This is a concise statement (maximum 300 words) of the aims of the research, the work carried out, and the conclusions. The abstract must be self-contained. Do not include general or background information, which should appear in the introduction, abbreviations, or references. Do not include figures or tables. Use keywords from the title and for the subject area to improve online searchability.

Keywords

Keywords: Include up to 10 keywords for the article, below the abstract, separated by commas. Keywords should describe the content of the article and include key phrases for the subject area. Avoid general terms.

Introduction

INTRODUCTION This should be a summary of current knowledge, *including a literature survey* of previous work in the field, and a statement of the aims, motivation, and general approach of the present work.

Article Body

The body of the paper should include a detailed and structured description of the work performed, including (as appropriate) methodology, assumptions, hardware, observations, analyses, and a comparison of results with prior work. The information presented must be self-contained, and provide an appropriate level of detail for the intended audience. Define all terms at first usage and apply them consistently. The body comprises multiple sections and subsections titled using topical headings in the aforementioned four-level structure. The primary sections of the paper body should have **FIRST-LEVEL TEXT HEADINGS**. Sections to include in the manuscript are **METHODS**, **RESULTS**, **DISCUSSION**, and **LIMITATIONS**. All sections should be clear, concise, and thorough. Use the **DISCUSSION** section to analyze your results and put them into bigger context, and to compare/contrast with other studies in the literature.

Conclusions

CONCLUSIONS Give a concise summary of the important findings. The conclusions must follow from the results of the paper. The conclusions must not contain information that does not appear elsewhere in the paper.

Disclaimer

DISCLAIMER For your submission, include any necessary disclaimers or declare conflict(s) of interest.

Acknowledgments

ACKNOWLEDGMENTS The section should provide details of individuals and institutions who have contributed to the work and information required by funding bodies, etc. The acknowledgements may also include copyright information that is too extensive to include elsewhere and other information. For studies involving human subjects, IRB information that is not present in the body of the paper should be included here (approving body, protocol approval number, etc.). This is the end of your manuscript body.

References

REFERENCES Provide a complete list of the literature cited in the paper. Numbered references should always be used, numbered consecutively throughout the article and placed in full-sized brackets [x] and not superscripts. The format for various types of references provided in the **PREPARATION DETAILS** section should be followed.

Appendices

APPENDIX X Use these to provide additional information, tables, or mathematical derivations. References in appendices should be combined with those in the main text into a single list. Tables and figures within an Appendix are to be numbered A1, A2, A3, ... The target limit for the appendices is 10 pages.

PREPARATION DETAILS

The following elements are important to the successful formatting and subsequent review of your manuscript draft. Pay particular attention to items pertaining to figures, tables, image formatting, and references.

Figure Captions and Table Titles/Captions

Make sure that each figure has a caption and each table has a title and a caption. Both should be numbered consecutively in accordance with their order of appearance in the text. Figures and tables should appear shortly after they are first mentioned in the text. Captions and titles should be centered on the page.

For figure captions, type the word “Figure” in ***bold italics***, followed by the figure number and a period. The body of the caption text should be in ***bold italics*** also, followed by a period. Captions should be placed below the figure. Caption text should be descriptive, but try to keep it to a minimum, instead using the text of the paper for figure explanation (including all symbols and abbreviations used, and not presented in the legend). Do NOT include the section number within the numbering unless it is for an appendix (e.g., ***Figure A1***). If a figure is reproduced or adapted from another work, this must be made clear in the caption with a reference cited, together with any other acknowledgements requested by the copyright holder.

For table titles, the title (e.g., ***Table 1.***) should be positioned above the table with the caption immediately below. Table titles and captions should be in ***bold italics***. There should be no period after the caption. Table titles and captions should be centered on the page. Tables should not be supplied as image files. Table titles should not include subhead numbering unless used in an appendix (e.g., ***Table 1A.***).

Figure Picture/Plot Formatting

Graphics should be embedded directly in the document as a TIFF, JPEG, or GIF. Image resolution should be at least 300 dpi. Images should not be less than 3.25-inches in width. Do not save your document using default or low resolution for the images. Color imagery is encouraged. Black and white halftones (photographs) should be supplied as greyscale images. Images should not be manipulated to mislead the reader. However, PMHS and human identities should be obfuscated. No identifying traits should be visible.

For data plots, make sure that curves are easily distinguished using a combination of color, line type, and symbols. Include a legend, or label individual curves.

Ensure the labelling on figures will be legible. Lettering should be approximately 8 pt in size at final width. AI-generated figures are not accepted.

Equations

Equations should be left justified. Equations should be numbered and referenced and presented in order. Each equation should be labeled as “Equation” followed by the equation number in parentheses (e.g., Equation (x)). The equation label should be placed to the right of the equation.

Variables, Functions, and Symbols

Variables appear in *italic* type: “pressure *P* and temperature *T*.” Mathematical functions [exp, log, f(x), sin] appear in roman type. Do not use the same symbols for more than one variable: use upper- and lowercase or script characters as alternatives.

Quotation Marks

Use double quotation marks in the first instance and single quotation marks for quotes within quotes. Periods and commas should be placed inside quotation marks, and semi-colons and colons are placed outside quotation marks. Direct quotations from other sources must retain the original text, spelling, and punctuation.

Abbreviations

Abbreviations, contractions, and acronyms can be helpful but can break the flow if the reader is not familiar with them. Restrict their use where possible. Do not use abbreviations (other than chemical symbols) in the title, abstract, or conclusions. Always define an abbreviation on first use.

Trade Names/Registered Trademarks

Use initial capitals for trade names (e.g., Inconel, Carbolite, Kevlar, not INCONEL, CARBOLITE, KEVLAR). The registered trade name®/trademark™ symbols should be used, but are used only on first mention.

References

If available, the Digital Object Identifier (DOI) should be included. Full names should be included, rather than initials, if provided in the citation. If a title is not in English, please provide the translated title in English within parentheses. Examples of reference types and how to cite them are provided in the table on the next page.

Sample Paper Outline

A sample paper outline is provided after the reference formatting guide.

Reference Formatting Samples	
Reference type	Sample
SAE Technical Paper	Otsuki, S., Oie, T., and Ishida, K., “Hydrocarbons Speciation of Automotive Emissions Using High Speed Gas Chromatography,” SAE Technical Paper 950513, 1995, doi:10.4271/950513.
Conference paper with no paper	Saha, P., Pan, J., and Veen, J., “Thoughts Behind Developing a Small Reverberation Room-Based Sound Absorption Test Method for the Automotive Industry,” Paper presented at NOISE-CON

number or DOI	2008, Dearborn, MI, July 28-31, 2008.
Journal article with DOI	Miles, P., Collin, R., Hildingsson, L., Hultqvist, A. et al., "Combined Measurements of Flow Structure, Partially Oxidized Fuel, and Soot in a HighSpeed, Direct-Injection Diesel Engine," Proceedings of the Combustion Institute 31, no. 2 (2007): 2963-2970, doi:10.1016/j.proci.2006.07.231.
Presentation	Alger, T., "SwRI's HEDGE™ Concept – High-Efficiency Dilute Gasoline Engines for Automotive, Medium Duty, and Off-Road Applications," Panel Presentation at SAE International 2009 Powertrains, Fuels, and Lubricants Meeting, November 2009.
Preprint	Devidas, R., and Babu, J., "Smart Transportation Methods: Optimizing Efficiency in Urban Commute," SAE MobilityRxiv® Preprint, submitted March 15, 2021, https://doi.org/10.47953/SAE-PP-00107 .
Magazine articles	Veen, J., Pan, J., and Saha, P., "Standardized Test Procedures for Small Reverberation Room," Sound and Vibration, December 2005, 18-20.
Standards	SAE International Surface Vehicle Recommended Practice, "Laboratory Measurement of the Composite Vibration Damping Properties of Material on a Supporting Steel Bar," SAE Standard J1637, Revised August 2007.
Book	Richards, P., Automotive Fuels Reference Book, 3rd ed. (Warrendale: SAE International, 2014), 69-73, doi:10.4271/R-297. NOTE: If no DOI is available insert ISBN in its place.
Personal communication	Smith, R., General Motors Corporation, personal communication, February 2007.
Patent	Wilkinson, J., Nonlinear resonant circuit devices. US Patent 3,624,124, July 16, 1990.
Internet reference	SAE International, "UNS on the Web; Metals and Alloys in the Unified Numbering System," SAE International, accessed August 2009, http://www.sae.org/uns .
Thesis/Dissertation	Mathuria, P., "Transfer Path Analysis of Diesel Engine Noise Using Statistical Energy Analysis," PhD thesis, Indian Institute of Technology, 2000.
Software	The Interactive Tester (Version 4.0), computer software, Psytek Services, Westminster, CA, 1993.
CD-ROM	Acoustics Testing Laboratory of the NASA Glenn Research Center. (Distributor), Auditory Demonstrations II: Challenges in Speech Communication and Music Listening, CD-ROM available from NASA Glenn Research Center Acoustical Testing Laboratory 04 from http://acousticaltest.grc.nasa.gov , December 2003.
Video	SAE International, How Does SAE World Congress Enable Industry Networking and Relationship-Building? SAE Video 10943, accessed November 11, 2011.

-- A Sample Paper Outline Starts on the Next Page --

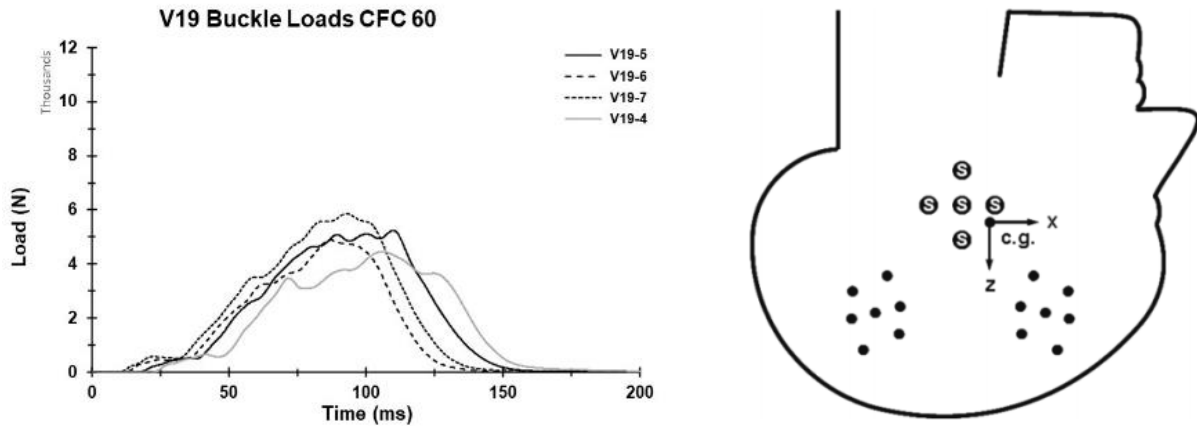


Figure 1. This is the caption for a figure, grayscale data plot (left), and grayscale line drawing (right).

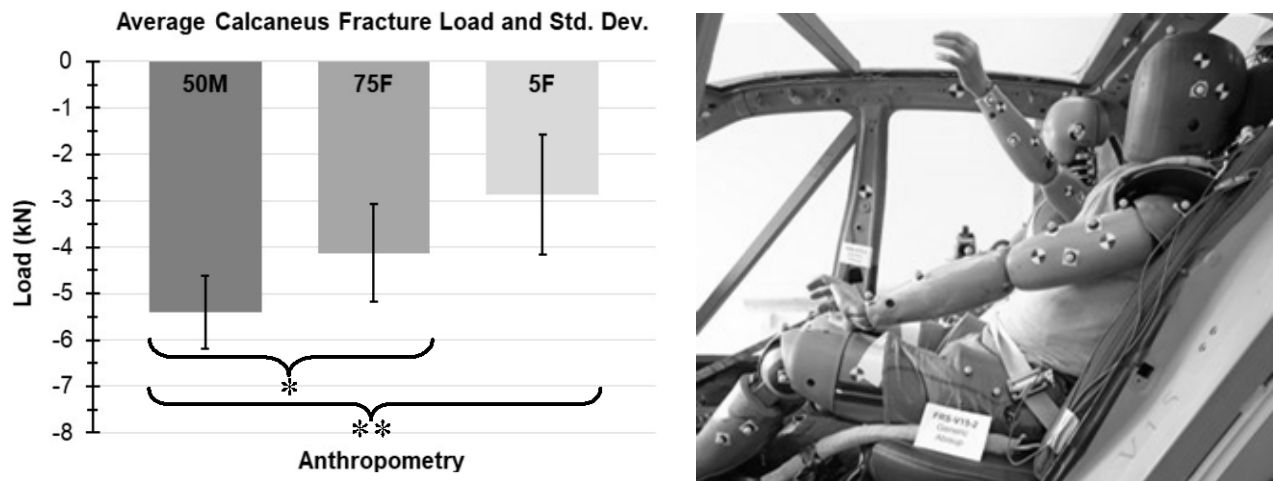


Figure 2. This is the caption for another figure, grayscale bar chart (left), and grayscale picture (right).

LIMITATIONS

The shortcomings of the work in terms of scope, methods, and application.

CONCLUSIONS

Major findings that follow from your results: Demonstrated trends and significance.

DISCLAIMER

Include any necessary disclaimers or declare conflict(s) of interest.

ACKNOWLEDGMENTS

The section should provide details of individuals and institutions who have contributed to the work and information required by funding bodies, etc. For studies involving human subjects, IRB information that is not present in the body of the paper should be included here (approving body, protocol approval number, etc.).

REFERENCES

Follow the provided formatting instructions closely.

APPENDIX X

Start on a separate page.