

Transportation Research Board Instructions for Paper Reviewers

Peer review is essential in the conduct and dissemination of research. TRB's volunteers review approximately 5,500 research and practical papers each year. The information in this document will serve as a reminder for experienced reviewers and as an introduction for new reviewers.

Your Review Is Critical

The care and thoroughness of your review are the foundations for the quality of TRB's Annual Meeting and the *Transportation Research Record* (TRR) series. A good review requires fairness in judgment, expertise in the field, and carefully crafted comments that help authors improve their papers and work. In your review, please take the time and effort required to serve the authors and TRB well.

Review Process Goal

The goal of the paper review process is to determine if submitted papers, perhaps with moderate recommended improvements from reviewers, merit presentation at the TRB Annual Meeting and/or publication in the TRR. The two separate decisions—to present and to publish—are ultimately made by TRB, which has the ultimate responsibility for the Annual Meeting and the TRR. The input of reviewers and of the relevant TRB standing technical committees are essential to making these decisions.

Approximately 60 percent of the papers submitted each year are selected for presentation at the Annual Meeting, with approximately three-quarters of those presented in poster sessions and one-quarter in podium sessions or other types of events. The 60 percent presentation limit is approximate and is governed by the space available at the Annual Meeting. Publication in the TRR series is limited to approximately 20 percent of the papers submitted. The publication limit is adjusted slightly to account for the different number of paper submissions each year and then is strictly enforced. As a reviewer, you are a critical part of the process of selecting the best papers for presentation and publication.

Ethical Requirements for Reviewers

For the peer review process to be effective, it is crucial that reviewers be as objective as possible and seek to advance the best work represented among the submitted papers. While everyone has biases based on experience and expertise, it is necessary to assess whether any bias would lead to an actual or perceived lack of objectivity in the review. Even more serious is the issue of conflict of interest, which typically relates to a reviewer's direct financial (or similar) relationship to the content or author(s) of a paper. This section provides general guidelines for you to assess the ethical appropriateness of your conducting a review of a given paper. If you determine that it is not appropriate for you to review a paper, please let your review coordinator know immediately so that she or he can identify another reviewer. This section will also deal with the ethical issue of confidentiality.

Please keep in mind that if you determine that you have an undue bias or a conflict of interest with respect to a given paper, **this is not a negative ethical judgment of you personally. On the contrary, it is evidence of utmost ethical sensitivity** and protects you, the review process, the author, and TRB from any suspicion of unfairness.

Conflict of interest: Your first step should be to consider your relationship with the paper authors. To ensure the equity of the process, reviewers should not have a conflict of interest with the authors they review. Conflicts of interest in this context are situations where the outcome of the review would influence your job, your financial situation, or your employer's finances. (Note that if someone with whom you share financial wellbeing, such as a spouse, would have a conflict of interest with a given paper, then you also have a conflict of interest.) The following are examples of conflict of interest:

- You have a close personal or professional relationship with the author.
- The paper author or coauthor is one of your students.
- The paper author or coauthor is a client.

In these situations, or any others that you are concerned about, you should contact the paper review coordinator and ask for advice. Depending on the degree of real or apparent conflict, it may be necessary to reassign the review to another reviewer or to add reviewers to balance any concern.

Bias: We all have our biases; they are part of the perspective we bring to any endeavor and can be developed as a result of experience and expertise. These may be considered "normal" biases. "Undue" bias refers to bias that is excessive, inappropriate, or unusual due to specific circumstances. Undue bias could come from personal animosity or a bad experience with a particular author. If you are involved in a public debate on an issue in which you are well-known to favor

a different approach from the author's or even specifically disfavor the author's approach, you can be perceived to have a bias. Beyond the "normal" bias derived from technical expertise, the public nature of a debate can subtly influence a reviewer's desire to defend himself at the expense of an objective review. Biases tend to be more subjective than conflicts of interest and therefore require a greater degree of self-knowledge and humility. Bias does not necessarily preclude a person reviewing a particular paper. However, in the interest of a balanced peer review, you should disclose significant "normal" or any "undue" bias you may perceive.

Confidentiality: The TRB paper review process is a "single-blind" process: the authors are never told who reviewed their papers, but the reviewers know who authored the paper. This process is used for a number of reasons, the two most important being that the reviewers are free to be honest without fear of affecting their careers and that the reviewers are able to identify conflicts of interest and biases since they know the identities of the authors. To maintain the validity of this process, reviewers should never contact the authors about the paper under review

The contents of the papers cannot be used, referenced, or included in future work by the reviewers until the review, presentation, and publication processes are complete. Until then, the information in the papers should be treated as confidential and may not be used for any purpose not related to the review process. Even after the paper review process is complete, reviewers should only reference papers that have been included in the Annual Meeting Online compendium of papers or published in the TRR Journal, never the review version of the paper. Reviewers should never share the reviewed version of the paper, review findings, reviewer comments on papers, or deliberations on the review decisions with anyone other than the review coordinator and TRB staff. This information must be kept in the strictest confidence even after the review process is complete.

Before closing this section, we want to emphasize that review comments should be detailed, specific, and polite. Avoid vague complaints and provide appropriate citations if authors are unaware of relevant work. Even critical reviews can be polite and constructive. Abusive or inappropriate language, disparaging or facetious remarks, etc., are not ethically acceptable in professional peer reviews.

Review Process Overview and Schedule

The paragraphs below provide a general overview of the TRB paper review process. Detailed instructions about how to use TRB's online tool to record and submit your review are available at [\[link to IT instructions\]](#).

By August 1: *Paper submittal.* All papers must be submitted by authors.

By August 18: *Paper review assignments.* Initial paper triage is conducted by TRB staff. Papers are assigned to committees. Committee paper review coordinators verify that committee assignment is appropriate and proceed to assign at least three reviewers to each paper. **Reviewers are urged to look at their papers quickly to ensure that there are no reasons why they should not or cannot conduct the review.** Reasons may be related to reviewer expertise, availability, or ethical considerations. **Reviewers are asked to accept or decline a review from your list of papers within the system.** If you decline the review you will be asked to provide a reason that you cannot review the paper.

By September 15: *Paper review:* Reviewers are asked to complete the online form described below. It is critical that the September 15 due date be met.

By October 1: *Presentation and publication recommendations.* The paper review coordinator works with the committee leadership and TRB staff to make the presentations and publication recommendations. Possible recommendations are:

- For presentation: Accepted or rejected for presentation. This recommendation is made in conjunction with the committee's Annual Meeting session planning effort.
- For publication: Accepted for publication without re-review, request revisions and re-review, or rejected for publication. In the case of a recommendation to publish without re-review, review comments will still be provided to the author but the revised paper does not need to be reviewed again. In the case of requesting revisions and re-review, a paper has a high probability of being accepted for publication but reviewers wish to see the paper after the author makes revisions in response to review.

By October 15: *Notification of authors.* The paper review coordinator then e-mails the recommendations to the authors. Reviewers receive a blind carbon copy of these e-mails—so they know the final recommendations and how their assessment compared with that of the other reviewers. Final decisions and details are then sent out by TRB staff.

By November 15: *Submission of revised papers; re-review when required.* Final manuscripts of papers accepted for publication without re-review are due. Revised papers that need to go through re-review are due.

By January 31: *Remaining publication decisions.* The exact process and schedule for re-review differs somewhat among committees, but ultimately all paper publication decisions must be made by the end of January.

Approach to Paper Review

Paper reviewers have a responsibility to read the paper carefully and then provide the authors with a clear, detailed, diplomatic, and unbiased evaluation. They should assess the composition, accuracy, originality, and interest to TRB community and should offer clear, detailed suggestions for improvement. The review should not include sarcastic, destructive, personal, or offensive comments. Reviewers, in addition to having a responsibility to the author, make a commitment to the committee to produce a timely review and to outline any ethical concerns they might have with the paper. Ethical concerns might include the paper having been published elsewhere, incomplete attribution of material, or plagiarism. Reviewers and their reviews ensure that the presentations at the Annual Meeting and the papers published in the TRR series meet TRB standards of quality and integrity.

TRB accepts a wide range of paper types. Your approach to review and your focus will depend on the type of paper you are reviewing. The following are examples.

- For papers describing fundamental research or data collection: Are the measurements or analysis properly applied and the correct conclusions drawn? Are there hidden factors that may invalidate the conclusions?
- For policy papers: Does the paper offer insight into the policy issues and alternatives? Does it provide well-reasoned critiques of proposals?
- For state-of-the-practice papers: Does the paper cover a unique, creative tool or process that will be of interest to the transportation community? Have the authors overcome a problem that many practitioners are facing? Does the paper describe the innovation clearly?

The task of a paper reviewer is to review the content of the paper, not correct grammar, spelling, sentence structure, or style. The first review question you will be asked relates to the English grammar of the paper, asking if it is good enough to be readily understood. If the answer is yes, TRB editors can correct the small to moderate errors if the paper is accepted for publication. If the answer is no, **the paper can and should be rejected on this basis alone** without answering the remaining review questions or providing substantive comments. TRB editors will not rewrite or substantially edit papers. Authors will come to realize this and begin to submit better-written papers.

TRB Review Form

There are four distinct sections to the TRB online Paper Review Form: two sets of rating scales, comments for the author, and a confidential set of comments for the paper review coordinator.

Rating Scales: There are two sets of rating scales on the TRB form—one that the author sees and one that only the paper review coordinator sees. These questions provide the paper review coordinator with a “snapshot” comparison of the papers; however, the text box comments are **always** used to make the final presentation and publication decisions. As you are responding to the rating scale, there may be considerations or special factors with regard to the paper that seem to be missing—you may include these items in one of the comment boxes. Whether you add the comment in the author box or the paper review coordinator box will depend on the type of comment you need to add.

Comments that the author sees: Information entered in Comment Box A is sent to the paper authors and is available to the paper review coordinator. This is where you can most effectively providing guidance to the authors. Please keep your comments polite and constructive. Reviewers should acknowledge positive and negative aspects of the paper and suggest improvements.

Reviewers often begin with an overall assessment of the paper and continue by identifying the prominent strengths and weaknesses. Starting with the “big picture” helps the reviewer frame the subsequent detailed comments. The detailed comments should focus on specific features of the paper and guidance for revision or future research efforts. These detailed comments are critical to the authors and the paper review coordinator. If you have ranked a paper very high or very low in the rating scale section, the detailed comments should offer an explanation for that ranking.

Please do not include your presentation or publication recommendations in this section. Reviewers often disagree, and these differences of opinion are resolved by the paper review coordinator and the committee leadership. Including your recommendations in this section will confuse the authors and disappoint many.

If your review was not positive because of the scope of the paper or because the content did not appear appropriate for the TRR series, recommending another journal for publication may be helpful to authors.

Comments that the review coordinator sees: The second text box is available only to the paper review coordinator. It is acceptable to be more blunt (but still polite) in this text box, if necessary. You will have provided your recommendations on publication and presentation in the second set of check boxes.

Comment Box B is where you elaborate on those recommendations. Paper review coordinators may be responsible for up to 100 papers, so a clear, concise assessment of the paper will be welcome. This text box is also the place to disclose any normal biases that you might have. This will help the paper review coordinator understand the background you bring to your review and help in comparing your review with that of others.

Note: Access to TRRs Online

TRB provides access to the TRR articles online to paper authors during the writing process. This free, but limited access is provided to help improve the quality of the references in our papers. We are not able to provide the same access to the paper reviewers, due to the huge numbers of reviewers working on papers. If you have a particular question about a reference please contact your TRB staff officer for assistance.

In Closing

Please do your best to follow the golden rule—provide the type of review that you would want to receive on a paper you had written. Feel free to contact your paper review coordinator or TRB staff if you have any questions about the paper review process. However, please do not contact authors directly. TRB, your committee, and the transportation community appreciate your efforts.

Suggestions and comments about this document should be sent to bschwartz@nas.edu.

References

This document was improved by similar documents developed by other organizations, particularly the web pages referenced below. Suggestions, ideas, and procedures were also drawn from the Canadian Journal of Administrative Sciences, American Society of Civil Engineers, International Journal of Vehicle Design, International Journal of Pavement Research and Technology, International Journal of Solids and Structures, and the International Journal of Pavement Engineering.

Advances in Physiology Education. "A Personal View - How to Review a Paper." Available from <http://advan.physiology.org/cgi/content/full/27/2/47>. Internet; accessed 15 July 2008.

Journal of Consumer Research. "Instructions to Reviewers." Available from <http://jcr.wisc.edu/instr-revs.htm>. Internet; accessed 15 July 2008.

Council of Science Editors. "CSE's White Paper on Promoting Integrity in Scientific Journal Publications." [The Council of Science Editors \(CSE\)](http://www.councilscienceeditors.org/editorial_policies/whitepaper/2-3_reviewer.cfm). Available from http://www.councilscienceeditors.org/editorial_policies/whitepaper/2-3_reviewer.cfm. Internet; accessed 15 July 2008.

Manufacturing & Service Operations management. "informs." [A Journal of the Institute for Operations Research and the Management Sciences](http://www.informs.org/site/MSOM/index.php?c=15&kat=Instructions+for+Reviewers). Available from <http://www.informs.org/site/MSOM/index.php?c=15&kat=Instructions+for+Reviewers>. Internet; accessed 15 July 2008.

Human Computer Interaction. "Instructions for the HCI Reviewer." [A Journal of Theoretical, Empirical, and Methodological Issues of User Science and of System Design](http://hci-journal.com/editorial/reviewer-instrucitons.html). Available from <http://hci-journal.com/editorial/reviewer-instrucitons.html>. Internet; accessed 15 July 2008.