



U.S. Department
of Transportation

Office of Pipeline Safety

Presentation on

Peer Reviews



U.S. Department
of Transportation

Peer Reviews

Why are they important?

To ensure that the quality of published information meets the standards of the scientific community.

Peer review typically evaluates the clarity of hypotheses, the validity of the research design, the quality of the data collection procedures, the robustness of the methods employed, the appropriateness of the methods for the hypotheses being tested, the extent to which the conclusions follow from the analysis, and the strengths and limitations of the overall product.

SOURCE: Carnegie Commission on Science, Technology, and Government, Risk and the Environment: Improving Regulatory Decision Making, Carnegie Commission, New York, 1993: 75.



U.S. Department
of Transportation

Peer Reviews

What are the government requirements?

Under revisions to the Information Quality Act, the Government has legal authority to conduct Peer Reviews

- Peer reviews must be performed on “Influential” & “Highly Influential” research
- A panel must be formed and preside over the peer review
 - Expertise
 - Balanced
 - Independence
- Reviews should be held earlier vs. later in the research timeline
- Reviews must address the merit of the research
- Reviews must have transparency to the public
- Agency must officially comment and denote acceptance of the panel’s findings



U.S. Department
of Transportation

Peer Reviews

How does OPS define them?

OPS defines “Peer Reviews” as...

A process of independent reviews and evaluations which provide feedback for adjusting program management and to accomplish the following: raising program efficiency, funding projects which provide relevance to the mission and vision, assuring high quality project outputs and outcomes with effective performance.



Peer Reviews

How does OPS define them (cont.)?

Peer Reviews:

Pre-Award	Post-Award
<ul style="list-style-type: none">• Merit review panel formed• Evaluation criteria used• Merit review panel make award recommendations	<ul style="list-style-type: none">• Panel of experts formed• Review criteria used• Panel reports quality rating of projects reviewed



U.S. Department
of Transportation

Post Award Peer Reviews

What does OPS propose?

- Peer reviews will occur annually
- All extramural OPS funded research will be peer reviewed
- Reviews will be conducted in Washington, DC
- Existing contracts will be modified and new contracts will factor in costs
- Panel of experts will receive Per Diem and an Honoraria
- Panel's findings will be available on the OPS R&D Website



U.S. Department
of Transportation

Post Award Peer Reviews

How will OPS measure quality?

- Researcher prepares a focused presentation addressing the criteria below
- Expert Panel will evaluate the researcher's performance using the criteria

A Project Peer Review process has been drafted and the evaluation criteria used in this peer review process will include:

1. Relevance of projects to the pipeline safety mission.
2. Soundness of the technical approach and design of the project.
3. Effectiveness and efficiency of project management.
4. Appropriateness of the plan for technology transfer.
5. Coordination of the project with related efforts.
6. Quality of the results.



U.S. Department
of Transportation

Post Award Peer Reviews

How will the researcher be rated?

- A numeric system will be utilized during the reviews
- A qualitative equivalent will be released to the public

Possible Qualitative Scores

“Very Effective”

“Effective”

“Moderately Effective”

“Ineffective”



U.S. Department
of Transportation

Panel of Experts

OPS needs your help!

How can they be identified?

Lets discuss...