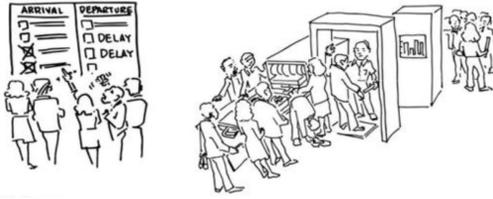


## What Makes a Good ACRP Problem Statement?

What Makes a Good Problem Statement?



The Airport Cooperative Research Program or ACRP is one of the several industry-based programs managed by the Transportation Research Board of the National Academies of Sciences, Engineering, and Medicine. ACRP is a private-not-for-profit, industry driven research program that funds research to find solutions to challenges faced by the airport industry.

Identify → Describe → Justify

ACRP AIRPORT COOPERATIVE RESEARCH PROGRAM

The airport industry develops research ideas and submits them to ACRP in the form of “problem statements.” Problem statements are not grants, proposals, or a way to test/validate/promote a proprietary product or solution. They are brief justifications to conduct research for projects that:

- Identity a problem;
- Describe research; and
- Justify how the research will help the airport industry address the problem.

1. Applicable
2. Achievable
3. Implementable
4. Understandable



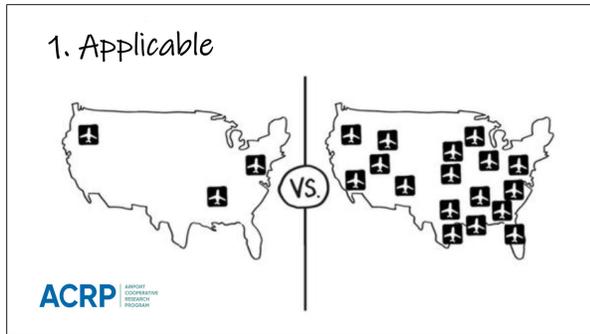
The first step in writing a good problem statement is knowing how they are selected for funding. ACRP’s Oversight Committee, or AOC, reviews and selects problem statements to be funded as projects. It also considers input from airport industry practitioners. Both the AOC and practitioners use four criteria to determine if the proposed research is:

- Applicable;
- Achievable;
- Implementable; and
- Understandable.

Now let’s take a closer look at each of these criteria as this will help you see whether your idea is a good candidate for ACRP.

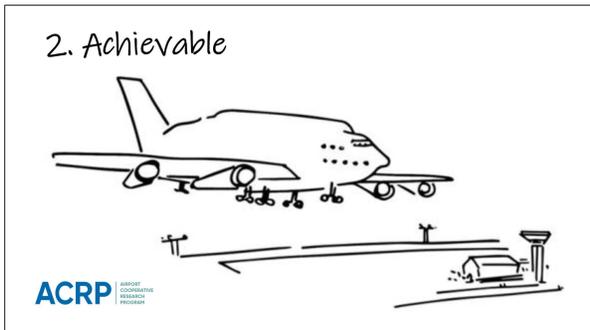
## What Makes a Good ACRP Problem Statement?

### 1. Applicable



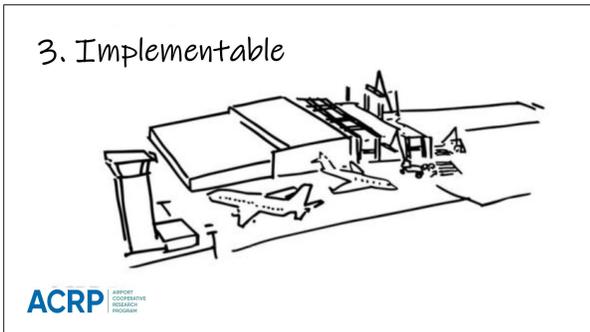
First, consider how applicable the problem is. Does the proposed research apply to many airports, or just a few? The more that will benefit from the research, the better.

### 2. Achievable



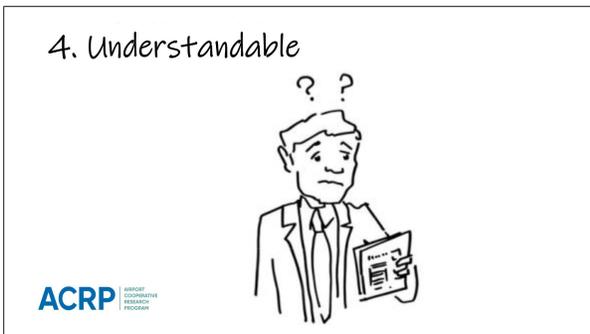
Next, consider how achievable your proposed research is. Can it be realistically and successfully undertaken? ACRP research projects can't take years or millions of dollars to accomplish; it must be realistic to achieve.

### 3. Implementable



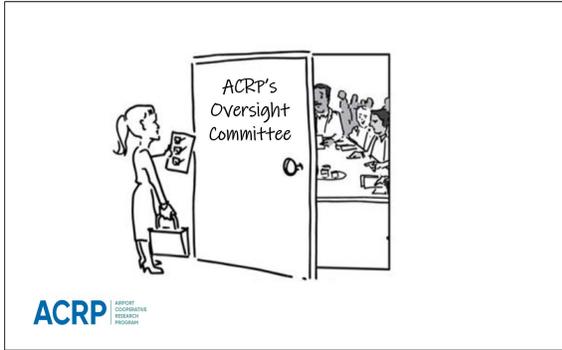
If you've addressed the first two criteria, next ask: Can the results from the research be easily implemented? For example, can airports immediately apply them without having to wait for new technology, changes to regulations, or something else?

### 4. Understandable



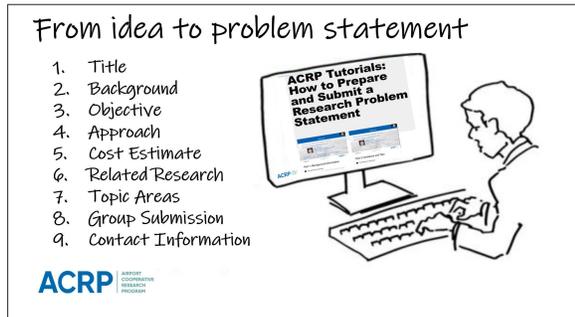
Is the problem statement understandable? The problem statement should be 1-2 pages, clear, concise, and well-written, with all technical issues described. If the problem statement is poorly written, it will have a hard time receiving funding. It is beneficial to have others review your problem statement before submission.

## What Makes a Good ACRP Problem Statement?



Once you've given thought to a problem, you may be wondering how to create a problem statement and submit it to ACRP. To do this, go to the [ACRP problem statement submission page](#). There you will see a link to our online submission form and links to resources. Once in the submission form, you'll be able to either upload a completed problem statement or fill in the required fields directly.

Your first step will be to select a subprogram for your problem statement. Choose "Research Projects" if your idea is to develop a guide, tools, or best practices. Choose "Synthesis Topics" if your idea is limited to a review of current practice. Choose "Legal Aspects" if your idea is focused on the legal issues airports face.



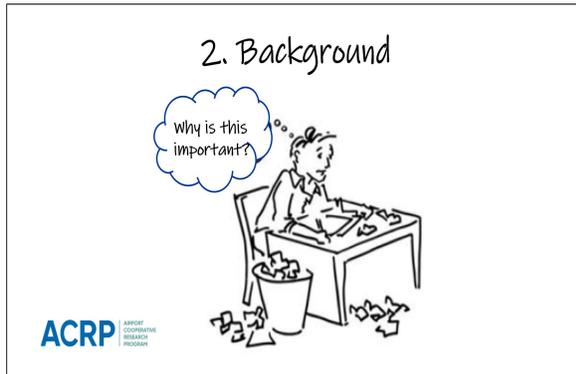
Next, you'll need to fill in the following 9 fields:

1. Problem Title
2. Background
3. Objective
4. Research Approach
5. Cost Estimate
6. Related Research
7. Topic Areas
8. Identification of the group, panel, or committee submitting the problem statement (if applicable)
9. Author Contact Information

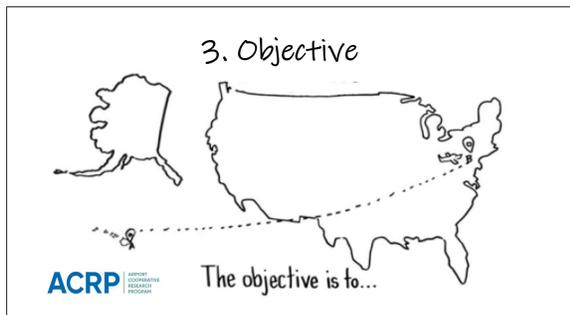


First, choose a **problem title** to help readers quickly identify the proposed research idea. Try to keep your title to ten words or fewer.

# What Makes a Good ACRP Problem Statement?



The background section is your opportunity to convince the reviewer that your research idea merits funding. In three short paragraphs or less, describe the current situation or problem in the industry requiring research and the expected benefits it will deliver. When writing this section, answer the question, “Why is this problem important to the field?”



Since the focus of ACRP is to help airports, the **objective** should be a succinct statement of what the final product of the research would be. It should not be vague or include intermediate deliverables or research steps. These should be described in the next section.



Describe a general **approach** to conducting the proposed research, with a focus on key tasks. Don't be too detailed. If your proposed research is selected, ACRP will want proposers to the RFP to suggest their own approach. Recommended tasks include:

- Literature Review
- Site Visits
- Interviews/Focus Groups with operations and maintenance staff
- Case Studies
- Cost/Benefit Analysis

## What Makes a Good ACRP Problem Statement?

### 5. Cost Estimate



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Next, provide a **cost estimate and justification**. Most ACRP projects cost between \$300,000 and \$600,000 and take about 1 to 1-and-a-half years to complete.

### 6. Related Research



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In this field, describe both completed and ongoing **research** on the topic and explain how your proposed research would complement and build on those other efforts, or fill gaps, rather than duplicate previous work. [Check the ACRP website for completed research.](#)

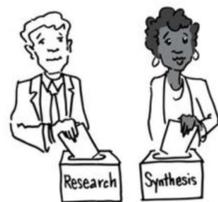
### 7. Topic Areas



ACRP AIRPORT COOPERATIVE RESEARCH PROGRAM

Select up to five **topic areas** and terms that are associated with your proposed research project. Same examples include “Operations,” “Environment” and “Noise.” Including topic areas will help link your problem statement to multiple disciplines and subject areas it addresses.

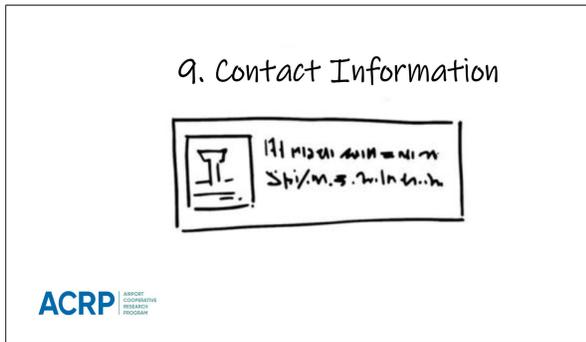
### 8. Group Submission



ACRP AIRPORT COOPERATIVE RESEARCH PROGRAM

Submitting on behalf of a group, panel, or committee? Collaboration is encouraged, and this can be noted here.

## What Makes a Good ACRP Problem Statement?



Finally, add your contact information to receive status updates about your problem statement



When do I need to submit by? Problem statements can be submitted at anytime, but need to be submitted by the April deadline to be considered for the following fiscal year to allow ample time for industry and staff review before the Oversight Committee review in July each year.



If you need help, feel free to reach out to any of TRB's [nine aviation committees](#) for assistance. You can also email us at: [acrp@nas.edu](mailto:acrp@nas.edu) or call (202) 334-1649

So, what are you waiting for? Submit your Problem Statement today!