“How To” Create a Transportation Research Strategic Plan

A white paper developed for AASHTO committees to provide guidance on research-related activities.

Developing a plan for strategically accomplishing research activities within an AASHTO Committee can be a daunting, but necessary activity. The intent of this document is to highlight steps necessary to develop a committee-focused research strategic plan.

1. Why Complete a Committee Level Plan for Research?
   - Develops a clear road map for research activities and provides an opportunity to organize and identify needs over a period of time rather than just addressing short-term issues
   - Provides context for individual projects
   - Allows for progress tracking towards goals
   - Identifies priorities and how research can accomplish them
   - Aligns resources
   - Helps take advantage of emerging opportunities
   - Presents a clear succession between leaders and committee member changes

2. Considerations for Planning
   - **Consider using small groups to develop a draft mission/vision/expectations**
     Strategic planning cannot be effectively completed in a large committee setting. Awareness, buy-in, and ownership are strengthened by using a small group process, and vetting the results with the larger committee.
   - **Maintain a Record of Existing Research**
     Identifying what has already been achieved is the crucial first step, as it helps to identify the current state of research. There are several tools available for monitoring research endeavors. Also, reaching out to relevant University Transportation Center (UTC) programs can assist this step. Committees should consider having a liaison to TRB Committees (see AASHTO–TRB Committee Connection) and NCHRP Panels that are completing research. TRID is the main database to identify ongoing and completed transportation research.
   - **Identify Related Research Needs**
     It is also critical to identify the related research needs of others, as it helps to identify the direction future research may follow and helps to identify collaborators, champions, and sponsors of research. The following resources are available for coordinating activities:
     - TRB Research Needs Statements (RNS) database
     - U.S. DOT Research Hub
     - Research Program and Project Management (RPPM) Unfunded and Partially Funded Research Needs
   - **Poll Committee Members for Key Issues**
     Completing a survey of members helps identify key topics and can specify timeframes. It can also complement the results of the previous step. The survey can be completed over email using basic spreadsheets or using an online provider (Qualtrics or Survey Monkey).
   - **Develop a Research Plan or Roadmap**
     From the previous four steps, identify the research gaps within the committee’s mission/vision/expectations. These gaps can then be turned into research problem statements.

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- **Document**
  Capturing the information on vision/mission/expectations, and research gaps and needs allows the committee to keep a running record of the information and material, and ensures this information is not lost when committee members change.

- **Ensure research goals are time-bound**
  Determine a time frame for moving research needs forward into research projects.

- **Enlist consultant support as needed**
  Third party support for managing the process and developing the surveys, templates, and compiled results are valuable opportunities for augmenting volunteer time.

- **Regularly report on progress made toward goals**
  The committee should revisit progress made toward specific research activities regularly.

- **Update plans as needed**
  Revisiting the research plan is critical to its long-term success.

The complete set of “How To” documents include the following:
- Committee Approach to Research
- Writing a Strategic Plan
- Writing a Problem Statement
- Funding Resources
- Experimental Features
- Sharing Results
- Implementing Results
- Determining the Value of Research
- Monitoring Results