

Value of VTrans Research: Qualitative and Quantitative Analysis

Dr. Greg Rowangould and Mitchell Robinson
Transportation Research Center, University of Vermont

Why Assess the Value of Research?

Assessing the value of publicly funded research is important to:

- Justify agency research budgets,
- Enhance accountability and,
- Improve program management.

However, estimating the value of research is extremely challenging. This research aimed to create a simple and practical tool for the Vermont Agency of Transportation to assess the value of its external research program.

Research Assessment and Valuation Challenges

There are many challenges to the qualitative and quantitative assessment of transportation research project value including:

- Systematic collection of research project objectives, their alignment with agency goals and extent to which objectives are accomplished,
- Valuation of “basic research” and intangible benefits including knowledge creation and workforce development,
- Gap in time between applied research findings, implementation and when benefits may be observed,
- Limited resources for collecting data required for using existing economic assessment tools, and
- Challenges in economic valuation of environmental and social benefits.

Research Approach and Recommendations

Through a review of prior research evaluation studies and recently completed external research projects, we developed a simple and flexible assessment framework and associated [spreadsheet tool](#) that can be implemented with limited resources. The assessment framework collects qualitative data about the purpose, benefits and potential uses of each research project and tracks progress from research idea generation to eventual implementation. The diagram to the right provides an overview of the assessment logic and information collected during each phase of the research process.

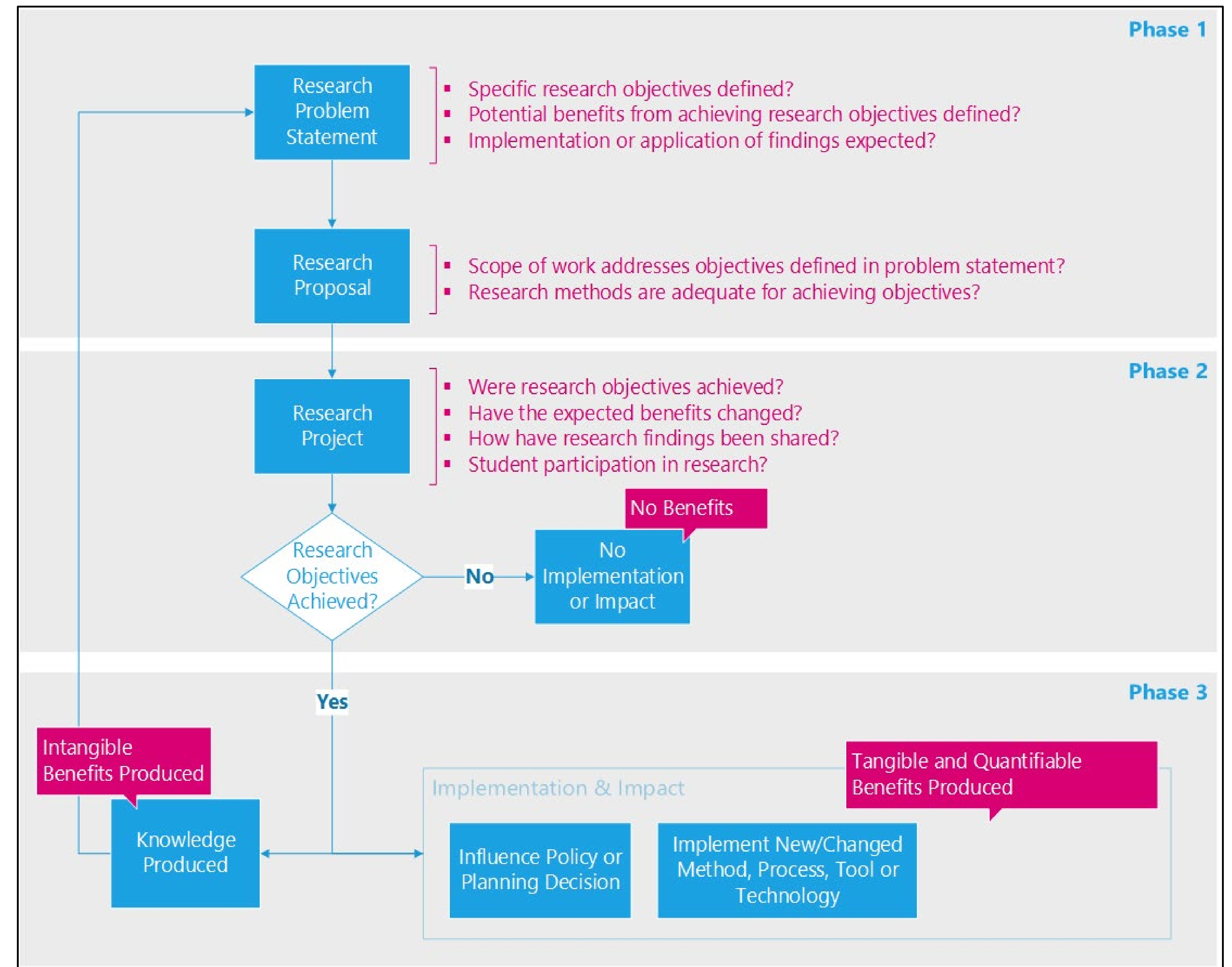


Figure 1. Overview of Recommended Assessment Framework

Potential Impacts and VTrans Benefits

The data collected by applying our assessment framework allows for the systematic evaluation of how expected research benefits and uses change from research initiation to eventual implementation as well as issues that affect project success and implementation. This information can help VTrans discuss the value of its research program, improve the design and management of its program, and identify barriers to implementation and application of research findings.

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