

The Value of Research (VOR) Overview

The [Value of Research](#) is a joint initiative by MnDOT and LRRB, supported by work of the consulting firm CPCS. The purpose of VOR is to better demonstrate and communicate the value of research through a sample of projects. The Office of Research & Innovation (ORI), stewards of this change-initiative, began a pilot implementation for 2023-funded academic research projects (project proposals submitted in the fall of 2023). VOR activities replace research benefits requirements that were a part of 2023 proposals and previous year's workplans and project tasks (initial/final memos on research benefits and potential implementation steps).

While research benefits and implementation potential remain important to the VOR initiative, the first step of VOR involves an early evaluation of a project's outcomes to determine Project Type. Specifically, ORI staff and Project Champions evaluate benefits tracking and communication support needs as they relate to a project's (1) likelihood of implementation, (2) size of impact or how widespread the benefits reach across localities, the state, and beyond, (3) variety of interested audiences, and (4) ability to quantify or qualify the research benefits.

Based on the evaluation, ORI organizes projects into one of three types: Type 1 Projects show the highest needs relative to evaluating and communicating the value of research, Type 2 Projects show moderate needs, and Type 3 show the lowest needs (see section 5.1 of the 2024 Research Proposal and Workplan Instructions for more detail).

Steps involved in the VOR pilot implementation

1. **Fall Proposal Review:** ORI staff and Project Champions calculate Project Type (1, 2 or 3) based on rating levels for each of the four support needs outlined above, using the Matrix-Calculator detailed below.
2. **Winter Board Meetings:** Boards approve the designated Project Types for pilot implementation.
3. **Workplan Development:** ORI staff work with Technical Liaisons (TLs) and Principal Investigators (PIs) to incorporate into the workplan a VOR Task related to Project Type (Type 1 and 2).
4. **Active Project:** ORI staff engage Technical Advisory Panels (TAPs) on VOR activities and work with the PIs and TLs on the tools and resources available. The PI completes the VOR Task during the project's lifecycle.

Tools and resources supporting VOR pilot implementation

1. **Project Type Matrix-Calculator:** The Project Type Matrix has three levels (high, medium, low) for the criteria Implementation, Impact, Interest, Benefits Metrics. The Calculator takes each score (high=5, medium=3, low=1) to calculate Project Type (1, 2 or 3) based on calculator weights. Type 1 projects have the highest and Type 3 have the lowest support needs related to evaluating and communicating the value of research. MnDOT and LRRB use Project Type to select VOR projects for the pilot implementation. Also, TLs and PIs will use Project Type for workplan development and active project work. See an images of the Matrix and Calculator on page 2.
2. **VOR Tracker:** This MnDOT Tool helps PIs and TLs with tracking the quantitative and/or qualitative research benefits and communications activities of active Type 1 and 2 projects throughout the project duration. Funded researchers will receive the Value of Research Tracker once the project becomes active.
3. **Communications Plan Support:** ORI staff will work with the TL and TAP to develop a communications plan for Type 1 and 2 projects. PIs for all project types can support communication planning by providing project photos and videos.

VOR Project Type Matrix

Use to evaluate Communication Support Needs (Project Type)
related to a Project’s Anticipated Outcomes

	Implementation	Impact	Interest	Quantification of Benefits
High	Likely to be implemented immediately .	Likely to impact transportation- system changes and provide system-wide benefits such as cost savings throughout Minnesota .	Likely to attract interest beyond MnDOT to include many stakeholders across the state, nation, other DOTs, elected officials, transportation-system users, the public, etc.	Key MnDOT benefits are more easily quantified with fewer numerical assumptions.
Medium	Likely to be implemented within the next 5 years .	Likely to impact transportation planning and engineering in most areas of Minnesota .	Likely to be of high interest to MnDOT and may attract partnering and other agencies.	Key MnDOT benefits are more easily qualified than quantified because of more numerical assumptions.
Low	Likely to be implemented after 5 years or more .	Likely to impact specifications, operational processes or product/material investigations for a particular office or discipline .	Likely to interest a relatively small audience engaged in this specialized research topic .	Key MnDOT benefits are difficult to quantify or qualify with a high level of numerical assumptions and qualitative unknowns.

Matrix Calculator (Sample)

Criteria	Criteria Weight	Score Hi/Med/Low	Needs Score	Subtotal
Implementation	2	Hi	5	10
Impact	2	Hi	5	10
Interest	1	Low	1	1
Quantification of Benefits	1	Low	1	1
Total Score				22
Project Type				Type 1