

MDT, WTI & MSU Partnership

The Montana Department of Transportation (MDT), Montana State University (MSU), and the Western Transportation Institute (WTI) share a long-standing partnership dedicated to improving Montana's transportation system through applied research, innovation, and practical implementation.

Shared Purpose

This partnership brings together the strengths of a state agency and a university research institute to advance transportation planning, design, construction, operations, and maintenance.

How the Partnership Functions

The collaboration is structured around a simple and effective model:

- MDT identifies needs.
 - The agency brings forward transportation challenges, research priorities, and implementation opportunities, and provides funding to support this work.
- WTI provides solutions.
 - WTI delivers technical expertise, fieldwork, data analysis, and practical recommendations aimed at improving transportation safety, efficiency, and sustainability.

Together, this creates an ongoing cycle of problem identification, research, testing, and implementation that benefits Montana communities.

Examples of Collaborative Research

Recent and ongoing projects reflect the breadth of the partnership's impact. These include:

- Pavement safety research using micro- and macro-texture data.
- Remediation of roadside soils affected by deicers using native Montana plant species.
- Evaluation of wildlife fencing effectiveness to reduce collisions.
- Analysis of bridge deterioration trends to inform asset management.
- Modernization of MDT's interpretive markers for improved public engagement.
- Exploration of long-term transportation funding strategies.

MDT also recently highlighted a WTI led safety education initiative that received a 2024 AASHTO High Value Research award — a strong indicator of the partnership's national visibility and effectiveness.

Why This Partnership Matters

By combining MDT's on-the-ground operational knowledge and federal funding with WTI's research capacity and MSU's academic environment, the partnership produces solutions that are:

- Practical and implementable
- Responsive to Montana's unique rural context
- Grounded in scientific research and innovation
- Focused on safety, sustainability, and cost-effective decision-making

In essence, this collaboration ensures that Montana's transportation system benefits from both real world insight and cutting-edge research, strengthening the state's ability to deliver safe, reliable infrastructure for the people it serves.