

TMRC Pooled Fund

2026 Project Idea Solicitation

The **Transportation Materials Resource Center (TMRC)**, TPF-5(546), is a multi-agency pooled fund initiative designed to support applied research and outreach focused on the development, evaluation, and implementation of innovative materials in transportation infrastructure. Read more about TMRC on the pooled fund site at <https://pooledfund.org/Details/Study/780>.

TMRC is soliciting research project ideas for the 2026 funding cycle for the following topic areas:

Research Category	Example Research Topics
Innovative Transportation Infrastructure Materials	Calcined clay concrete; chemical admixtures; hybrid polymer asphalt; freeze/thaw durability; pavement buckling; aggregate optimization
Circular Economy, Bio-Based and Recycled Materials	Bio-based asphalt additives; alternative transportation fuels; recycled tires as geo-cells; recycled/bio-renewable noise barriers; biomaterial sediment controls; biomaterial drainage and runoff treatment; biomaterial fencing; biodegradable fibers/geosynthetics
Testing Method Development	Methods development for measuring the quality of alternative aggregate (e.g., quarry fines, RCA, and contaminated RAP) in infrastructure construction (e.g., asphalt, concrete, unbound pavement layers, noise walls, earth retaining walls, culverts)
Resilient Pavement Infrastructure	Performance of asphalt binders modified with recycled plastics and or bio-based polymers performance; performance of High-RAP hot mix asphalt using bio-based and chemical rejuvenating agents
Resilient Geotechnical and Hydraulic Infrastructure	Unconventional stabilizers for low volume roads; recycled tires as geo-cells; streambank stabilization techniques using natural materials; coir fiber logs for erosion mitigation
Transportation Environmental Systems and Infrastructure Durability	Potential for galvanic corrosion of dissimilar materials; Reduction of freeze/thaw effects; Reduction of pavement buckling; Impact of low carbon cement systems on concrete properties
Environmental Engineering and Water Quality	Wastewater treatment for transportation facilities; corrosion of dissimilar materials; runoff quality improvement; long-term infrastructure durability; roadside environmental systems

Asset Management & Data Science	Developing standardized material data systems for informed infrastructure decisions
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Idea Submission

The provided form, “TMRC Pooled Fund - 2026 Ideas”, is required for all idea submissions. Each submission is limited to two pages and must be written in plain, non-technical language for a diverse audience. Submissions should focus on ideas capable of being ready for field piloting in under two years.

All processes or products produced through TMRC projects are non-proprietary.

Submissions are due to Khyle.Clute@iowadot.us, lead study contact for the TMRC Pooled Fund, by **COB Friday, August 7, 2026**.

Timeline

Submitted ideas for 2026 will use the following timeline:

Activity	Timeline
TMRC Board ranks submitted ideas	Mid-August
Selected ideas developed into separate Request for Proposals	Mid-August through September 14
Request for Proposals posted	September 15 through November 1
TMRC Board ranks submitted proposals	November
Request for pre-recorded 10-minute presentation from highest ranking proposals (if needed)	Late November-December
Notice of proposal results	January
Contract negotiations with Iowa DOT (TMRC lead state) for selected proposals	Immediately following selection
Project start	Spring 2027

TMRC Pooled Fund – 2026 Ideas

Idea Title:	Title
Project Area:	Identify the category(ies) that best fits your project idea. Innovative Transportation Infrastructure Materials Circular Economy, Bio-Based and Recycled Materials Testing Method Development Resilient Pavement Infrastructure Resilient Geotechnical and Hydraulic Infrastructure Transportation Environmental Systems and Infrastructure Durability Environmental Engineering and Water Quality Asset Management & Data Science Other (Please specify)
Problem Statement:	Describe the issues that led to the identification of this research topic and the importance/urgency of the topic, as well as a short and concise statement of the specific problem to be addressed.
Research Objective:	Clearly describe the project objectives.
Research Approach:	Describe the approach recommended for conducting the research.
Deliverables:	Describe the anticipated deliverables and how TMRC Pooled Fund members would use, implement, or benefit from them.
Participants:	Identify public and private agencies or organizations whose involvement on the project advisory committee may enhance the research results.
Duration:	Estimate the duration of the future project to bring the idea from concept to field piloting and then from field piloting to implementation readiness.
Alternate Funding:	Identify other possible funding avenues for cost sharing (known grants, university transportation centers, subject related associations, etc.).
Acknowledgment:	I acknowledge that submitted ideas are provided anonymously to the TMRC Board and that submittal neither guarantees future funding nor award of contract.