



LRRB Research Need Statement

LRRB-4

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Name	Agency	E-mail	Phone
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Submitted by: LRRB via Priority Process			
Originated from: LRRB Idea Solicitation Process (Pre-Screen Board Mtgs)			

Select Type:

Research OR Implementation

Need Statement Title:

Lightly Surfaced Roads - Cost Benefit

Need Statement: Describe the problem or the opportunity. Include background and objective.

Minnesota has a large network of aggregate surfaced roads mostly maintained by counties and townships. Local road officials are often faced with the responsibility of upgrading these roads with a limited budget. Light surface treatments (LSTs) are considered an economical alternative to conventional paving using hot-mix-asphalt (HMA) or concrete pavements, but what is the cost versus benefit?

A few online resources should be evaluated to determine if they meet the needs of Minnesota County Engineers:

- Resources are available to guide cost-based decisions such as the [Pavement Preservation & Recycling Alliance \(PPRA\)](#), which has an online decision support guide.
- [Upper Great Plains Transportation Institute’s Local Road Surface Selection Tool](#)

Are these tools adequate? Are there any other guidance tools available or should one be created to assist in providing the cost benefit of LSTs including proprietary stabilizers?

The focus of this research project should incorporate previous LRRB LST resources and be expanded to include cost/benefit project selection guidance.

Suggested Deliverables:

LST Selection Guide
Online tool to help design LST roadways (simple spreadsheet) if one does not already exist.

How does this project build upon previous research (include title or reference to a completed research effort)?

Expand on recent RIC project: [Lightly Surfaced Roads \(LSR\) Training & Workshop Curriculum](#)
Along with the NRRRA project - [Pavement Preservation Approaches for Lightly Surfaced Roadways Project - Preventive Maintenance Team - NRRRA - MnDOT \(state.mn.us\)](#)



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Provide names to consider for a Technical Advisory Panel:

Ron Gregg (Fillmore County); Darrick Anderson (Cass County); Bruce Hasbargen (Beltrami County); John Brunkhorst (Mcleod County); Jim Olson (Becker County); Greg Johnson (MnDOT); Terry Beaudry (MnDOT);