

# 2021 RFP MnDOT and LRRB Need Statements for FY23

Updated: 7/29/2021

PROPOSAL FORM FOUND AT ([www.dot.state.mn.us/research/process-and-docs/ResearchProposalForm.docx](http://www.dot.state.mn.us/research/process-and-docs/ResearchProposalForm.docx)) PROPOSALS ON OLDER FORMS WILL NOT BE ACCEPTED.

Need Statement Number	Primary Research Category	Research Need	MnDOT LRRB Joint	Project Champion	Agency/MnDOT Office	Project Advisor	Literature Searches
<b>Bridges and Structures</b>							
NS-637	Bridges and Structures	<a href="#">Develop Element Level Bridge Performance Measures and Targets</a>	MnDOT	<a href="#">David Hedeem</a>	MnDOT Bridge	<a href="#">Brent Rusco</a>	<a href="#">NS-637 Lit Search</a>
NS-663	Bridges and Structures	<a href="#">Minnesota's State and Local Bridge Safety Inspection Program - Evaluation</a>	LRRB	<a href="#">Sam Muntean</a>	Lac qui Parle County	<a href="#">Brent Rusco</a>	<a href="#">NS-663 Lit Search</a>
<b>Environmental</b>							
NS-638	Environmental	<a href="#">Functional Longevity of Erosion Prevention Products</a>	MnDOT	<a href="#">Lori Belz</a>	MnDOT Environmental Stewardship	<a href="#">Marcus Bekele</a>	<a href="#">NS-638 Lit Search</a>
NS-639	Environmental	<a href="#">Re-use of Minnesota waste material in sustainably designed soils. Part 2</a>	Joint	<a href="#">Dwayne Stenlund</a>	MnDOT Environmental Stewardship	<a href="#">Marcus Bekele</a>	<a href="#">NS-639 Lit Search</a>
NS-640	Environmental	<a href="#">Assessing a New Tool for Early Detection of Endangered Turtles on Proposed Transportation Projects</a>	MnDOT	<a href="#">Christopher E. Smith</a>	MnDOT Environmental Stewardship	<a href="#">Marcus Bekele</a>	<a href="#">NS-640 Lit Search</a>
NS-641	Environmental	<a href="#">Time and Vegetation Effects on Infiltration and Filtration Performance</a>	MnDOT	<a href="#">Dwayne Stenlund</a>	MnDOT Environmental Stewardship	<a href="#">Marcus Bekele</a>	<a href="#">NS-641 Lit Search</a>
NS-661	Environmental	<a href="#">Update the 2009 Storm Water Management – Best Practices</a>	LRRB	<a href="#">Brian Giese</a>	Pope County	<a href="#">Brent Rusco</a>	<a href="#">NS-661 Lit Search</a>
NS-664	Environmental	<a href="#">Tire Derived Aggregate (TDA): Light Weight Fill and as Stormwater Infiltration Media</a>	LRRB	<a href="#">Mark Hansen</a>	City of Coon Rapids	<a href="#">Brent Rusco</a>	<a href="#">NS-664 Lit Search</a>
NS-665	Environmental	<a href="#">Impervious Surface Exchange Program</a>	LRRB	<a href="#">Lon Aune</a>	Marshall County	<a href="#">Brent Rusco</a>	<a href="#">NS-665 Lit Search</a>
<b>Maintenance Operations</b>							
NS-642	Maintenance Operations	<a href="#">Effective Strategies to Extend Remaining Life of ASR-Affected Pavements</a>	MnDOT	<a href="#">Greg Ous</a>	MnDOT District 7	<a href="#">Marcus Bekele</a>	<a href="#">NS-642 Lit Search</a>
<b>Materials &amp; Construction</b>							
NS-643	Materials & Construction	<a href="#">Development of Process to Lower GWP of Construction Materials</a>	MnDOT	<a href="#">Curt Turgeon</a>	MnDOT Materials & Road Research	<a href="#">Marcus Bekele</a>	<a href="#">NS-643 Lit Search</a>
NS-644	Materials & Construction	<a href="#">Evaluation of Gravel Stabilizer Used on Gravel Roads and Gravel Shoulders</a>	Joint	<a href="#">Terry Beaudry</a>	MnDOT Materials & Road Research	<a href="#">Marcus Bekele</a>	<a href="#">NS-644 Lit Search</a>
NS-645	Materials & Construction	<a href="#">Assessment of Alternative Pozzolans for Use in Minnesota Concrete</a>	MnDOT	<a href="#">Bernard Izevbekhai</a>	MnDOT Materials & Road Research	<a href="#">Marcus Bekele</a>	<a href="#">NS-645 Lit Search</a>
NS-646	Materials & Construction	<a href="#">Improving and Developing Pavement Design Inputs and Performance Functions for Cold Recycled Pavement Layers in Minnesota</a>	Joint	<a href="#">Tim Andersen</a>	MnDOT Materials & Road Research	<a href="#">Marcus Bekele</a>	<a href="#">NS-646 Lit Search</a>
NS-647	Materials & Construction	<a href="#">Mitigation of tenting of transverse cracks and joints in asphalt pavement.</a>	Joint	<a href="#">Matt Hemmila</a>	St. Louis County	<a href="#">Brent Rusco</a>	<a href="#">NS-647 Lit Search</a>
NS-648	Materials & Construction	<a href="#">Asphalt Pavement Cracking Performance Data Analysis</a>	Joint	<a href="#">Shongtao Dai</a>	MnDOT Materials & Road Research	<a href="#">Marcus Bekele</a>	<a href="#">NS-648 Lit Search</a>
NS-658	Materials & Construction	<a href="#">A Synthesis of Usage and Performance of Daylighted Bases in Comparison to Edge Drains</a>	Joint	<a href="#">Bernard Izevbekhai</a>	MnDOT Materials & Road Research	<a href="#">Marcus Bekele</a>	<a href="#">NS-658 Lit Search</a>
NS-660	Materials & Construction	<a href="#">Pavement Design: Performance of Base vs Subbase</a>	LRRB	To Be Determined	Local Road Research Board	<a href="#">Brent Rusco</a>	<a href="#">NS-660 Lit Search</a>
NS-662	Materials & Construction	<a href="#">Lightly Surface Roads - Cost Benefit</a>	LRRB	<a href="#">Ron Gregg</a>	Fillmore County	<a href="#">Brent Rusco</a>	<a href="#">NS-662 Lit Search</a>
<b>Policy and Planning</b>							
NS-649	Policy & Planning	<a href="#">Haul Road and Detour Maintenance</a>	Joint	<a href="#">Tim Andersen</a>	MnDOT Materials & Road Research	<a href="#">Marcus Bekele</a>	<a href="#">NS-649 Lit Search</a>
NS-656	Policy & Planning	<a href="#">Arts for Construction Mitigation</a>	MnDOT	<a href="#">Jeanne Aamodt</a>	MnDOT Communication & Public Engagement	<a href="#">Brent Rusco</a>	<a href="#">NS-656 Lit Search</a>
NS-657	Policy & Planning	<a href="#">Utilizing Arts and Culture to Mitigate the Negative Impacts of Transportation Infrastructure on Communities</a>	MnDOT	<a href="#">Jessica Oh</a>	MnDOT Sustainability & Public Health	<a href="#">Brent Rusco</a>	<a href="#">NS-657 Lit Search</a>
NS-659	Policy & Planning	<a href="#">Understanding How Street Reconstruction Affects Property Value</a>	LRRB	<a href="#">Marc Culver</a>	City of Roseville	<a href="#">Brent Rusco</a>	<a href="#">NS-659 Lit Search</a>
<b>Traffic and Safety</b>							
NS-651	Traffic & Safety	<a href="#">Solar Roadway Lighting</a>	Joint	<a href="#">Susan Zarling</a>	MnDOT Traffic Engineering	<a href="#">Brent Rusco</a>	<a href="#">NS-651 Lit Search</a>
NS-652	Traffic & Safety	<a href="#">Complete Streets Speed Impacts</a>	Joint	<a href="#">Duane Hill</a>	MnDOT District 1	<a href="#">Brent Rusco</a>	<a href="#">NS-652 Lit Search</a>
NS-653	Traffic & Safety	<a href="#">School Bus Stop-arm Violations</a>	Joint	<a href="#">Scot Edgeworth</a>	MnDOT Metro Operations & Maintenance	<a href="#">Marcus Bekele</a>	<a href="#">NS-653 Lit Search</a>
NS-654	Traffic & Safety	<a href="#">Evaluation of static and dynamic no right turn on red signs at traffic signals</a>	Joint	<a href="#">Susan Zarling</a>	MnDOT Traffic Engineering	<a href="#">Brent Rusco</a>	<a href="#">NS-654 Lit Search</a>
NS-655	Traffic & Safety	<a href="#">Identification and Assessment of Preventative Methods to Mitigate Cognitive and Physical Declines Which Influence Driving Performance of Older Drivers</a>	MnDOT	<a href="#">Derek Leuer</a>	MnDOT Traffic Engineering	<a href="#">Brent Rusco</a>	<a href="#">NS-655 Lit Search</a>