



Research Need Statement 528

Date:	7/31/2018
Need Statement Champion:	Mark Nelson / Shannon Foss
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Idea Submitted by:	Mark Nelson
Idea Originated from:	

Select Program:

MnDOT OR Local Road Research Board (LRRB)

Research OR Implementation

Need Statement Title:

A qualitative and quantitative assessment of pavement segments that have remained in poor condition for 5+ years

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

The 2014 Transportation Asset Management Plan calls for developing a method to annually track, monitor, and identify road segments that have been in poor condition for more than five years and consistently consider them when programming.

Based on the discussions in the development of the TAMP, it was clear that, as an agency, we have not systematically identified or assessed roadway segments that have maintained a poor ride quality index over time. (RQI<2.5). The objective of this study would be to characterize segments remaining in poor condition (i.e., traffic volume, posted speeds, overall pavement quality, public complaints generated, reactive maintenance costs incurred, etc...) and determine if there are more appropriate metrics for programming future work. The findings would be used to inform future programming decisions.

Provide a summary of the potential benefits:

We anticipate that segments with low RQI scores will have varying levels of impact on the agency and the traveling public based on the context. There are likely instances where RQI is not an effective measure of adequacy and other instances where persistently poor ride quality is negatively affecting the traveling public's experience and generating additional reactive maintenance costs. A better understanding of these segments will allow MnDOT to assess the impact of its asset management investment decisions.



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

Remaining Asset Service Life Measure (MnDOT research report 2018-23)

Provide names to consider for a technical advisory panel:

Shannon Foss
Curt Turgeon
Josh Pearson
Mark Nelson
2nd Materials Office designee
Asset Management Project Office designee.