

# Comments for the Pavements and Bridges NPRM by Steve Mueller

President and CEO, The Stephen Mueller Consultancy

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<http://www.regulations.gov/#!docketDetail;D=FHWA-2013-0053>

Summary:

This rulemaking would create national performance management measures and standards to be used by the States to meet the national transportation goals identified in section 1203 of MAP-21. This rulemaking would also establish the process to be used by States to set performance targets that reflect their performance measures. The FHWA anticipates issuing up to three rulemakings in this area. This rulemaking, number two, will cover the bridges and pavement.

There are some general comments concerning the overall application of the proposed rules that I would like to make to assist the reviewers of the comments that will be received during this public process.

As a retired FHWA employee, and as a person who worked in local government for 13 years, and as the holder of a Master of Public Administration degree, I have experience and knowledge of the Federal Program from those perspectives. As a licensed Professional Engineer with private sector experience, and as an industry representative, I have both practiced and taught pavements and pavement management for many years.

## **Comment #1 – No State and MPO Flexibility**

The FHWA Executive Director has stated on numerous occasions that the MAP-21 legislation is “transformational.” I agree with Mr. Paniati’s assessment. The long-standing Federal-aid Highway Program provided financial resources to the various States and MPOs to support new highway construction, rehabilitation, reconstruction, maintenance, and preservation of our public highway assets. For the first time, Congress has enacted legislation that not only provides resources to the States and MPOs – essentially “free money” for transportation programs (but with some strings attached) - but will also now require the states and MPOs to report back to FHWA and Congress about the results of their use of that money. That simple change, to require the reporting of results, is a major – indeed “transformational” – change from the original program. The old FAHP was hardly an “unfunded Federal mandate.” When applying for and accepting Federal-aid dollars, the States and MPOs agreed to meet all of the conditions that Congress has determined are necessary. The States and MPOs had broad discretion and flexibility as to which projects would use Federal dollars, and how the money would actually be spent. MAP-21 now requires States and MPOs to actually demonstrate that their acceptance and use of Federal funds is having an impact on the conditions and performance of the highway network for which the States and MPOs have accepted responsibility. Congress was wise to make this change.

The flexibilities that the States and MPOs have enjoyed in the past have not led to a high-performing system in the present. Citizens are outraged at the declining conditions of our national infrastructure, and the system that once was the envy of the world is continuing to spiral downward in comparison to other countries. The American people are dodging potholes, experiencing unsafe driving conditions due to unfunded maintenance and preservation operations, and paying higher costs for vehicle maintenance and fuel usage due to deteriorating and rough roads. The deteriorating infrastructure is impacting our national economy, impeding the movement of goods and services, and creating unnecessary injuries and fatalities.

Some State Transportation Officials and MPO officials will undoubtedly be commenting that they need even more flexibility in their use of Federal-aid dollars. I would argue that exactly the opposite is true. If flexibility was the answer, we would still have the best highway network in the world. It is an unfortunate situation that Congress has had to enact legislation to require performance measures and reporting by the States and MPOs, but the old system hasn't provided sufficient incentives for most of the State and MPO transportation officials to stay focused on taking good care of our existing assets. Typically these State officials are appointed by the Governor of their individual State, and political influences often result in more emphasis on politically-expedient projects rather than the rather mundane maintenance and preservation aspects of their jobs. This situation is even more pervasive at the MPO level, where the mere collection of condition data is extremely rare. Yet it is exactly those management requirements for maintenance and preservation that will have the largest long-term impacts on the funding requirements for the States and MPOs. States and MPOs that do poor jobs in this area will eventually require more Federal support to bail them out of the holes into which they are digging themselves.

There is an inherent Federal interest in our roads and bridges. The American people have supported the construction and on-going development of a vast network of roads and bridges, and it is well-proven that a system which is maintained in good condition is less expensive to maintain than one that has deteriorated. Good roads cost less, and good roads are safer than bad roads – and performance measures will help FHWA gather and evaluate the data that is needed to preserve and protect the highway network that is important to America's national interest. There should be no flexibility offered to the States in the collection and analysis of this essential data.

**Comment #2 – Goal Setting in the NPRM – no planned declines in conditions should be allowed.**

America can't allow our highway assets to continue on the downward spiral they are generally on. KEEP OUR ROADS AND BRIDGES IN GOOD CONDITION, especially our interstates and the NHS. If States or MPOs submit condition goals that are declining over time, they need to revise their plans to show that the road and bridge conditions will not deteriorate any further, or will actually improve over time. It would be wrong to accept declining conditions on our roads of National importance. If a State or MPO says they can't afford to keep these roads in good condition, they need to reprioritize their expenditure plans to change that. Anything less should be deemed unacceptable.

**Comment #3 – Good / Fair / Poor Rating System**

Most pavement management systems collect and analyze data using rating scales that range from zero to five or zero to one hundred. The Good / Fair / Poor Rating System is a simplified system that is useful for reporting purposes and communications with non-engineers. This 3-point ranking system is not sufficient to manage a pavement network or the bridges within a jurisdiction – but it serves well as a simplified communication tool. I would like to suggest that a five-point scale might work even better: excellent/good/fair/poor/failing (needs reconstruction). I would not support a general renaming of the rating conditions to other language since many pavement management systems have this terminology already built into them, there are actual costs to change the systems, and practitioners and users are accustomed to the use of this language – and the terminology has a history of proven understanding.

**Comment #4 – Pavement Preservation Program Requirements and Possible Interim Funding**

4.1 There is no mention of pavement preservation programs, or even the words “pavement preservation” in this NPRM. Since these concepts are prominently mentioned in the MAP-21 legislation, I believe this is an oversight in the proposed NPRM. I would contend that each State and MPO needs to have both a pavement management system and a pavement preservation program in order to improve the condition of their roads over time, and that revisions should be made in this NPRM to include pavement preservation program requirements for the States and MPOs.

4.2 There are several previously submitted comments that call for delaying the implementation of the rules until all of the data and data quality issues are resolved. Perhaps if there is a delay, an alternative interim program could be adopted that would require states and MPO's to fully fund preservation programs for all eligible roadways and bridges in the interim. This could help to hold the system together until the technological issues are satisfactorily resolved. Every year

we wait the conditions decline. Funding preservation can help us hold the system together in the interim.

FHWA has a model on how this could work for the States. It was often called the “Stimulus Program” in 2009, or ARRA – specifically the portion that was to address backlog or deferred needs for pavement and bridge preservation, area-wide safety improvements, area-wide signing improvements, area-wide stripping and pavement marking, and area-wide signal upgrading. There would need to be some obvious changes, but if the calls for delay are found to be persuasive, this would be a proven alternative.

#### **5. Cracking Severity Measurements**

The severity level of cracking (high, medium or low) be added to the HPMS "Cracking %" reporting requirement to be used as one of the pavement condition rating threshold in the regulation. This will help better describe the severity of the cracking present in each HPMS reporting section ( 0.1 mile in length), therefore resulting in a more accurate assessment of the actual pavement condition in each HPMS reporting section. ( I agree completely with Mr. Rodriguez’s previously submitted comment on this.)

#### **6. IRI data and targets for MPO’s.**

I would suggest that the IRI required targets for urban arterials be limited to roadways with posted speed limits of 45 mph or more. Urban areas have utilities and drainage facilities that impact IRI measurements significantly at lower speeds.