

WHAT YOU NEED TO KNOW ABOUT PAVEMENT MANAGEMENT (as indicated: “Pavement Requires Management”)

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The term “pavement management” is a truism. Maintenance of roadway pavement absolutely requires management. The management is over the maintenance and is in regard to the labor, equipment, materials and resources, etc.

Road pavement is **expensive public infrastructure open to public view**. The performance/condition of a paved roadway surface has ramifications for public safety and public fiscal trust. Also, road funding is finite or limited.

Many governmental decisions are made daily without the same level of public exposure or criticism. Citizens are afforded a daily opportunity to grade the performance/condition of this expensive commodity and grade their public officials and their road crews on their performance. Each county should seek to provide an effective and efficient maintenance/condition of this expensive public infrastructure. This endeavor necessarily requires knowledge and solutions. In this century there are many low costs tools available to evaluate the inventory, condition and arrive at solutions based upon best practices. The CJAA had

A proper inventory (MAP 21), assessment (New Technology) and pavement management program WILL provide the “management” in pavement management. The opposite is not true. Managing the valuable labor, material, equipment and resources dedicated to hundreds of miles of asphalt roads on the fly is not effective or efficient. (The best fry cook or mere human could not hope to wing maintenance of a pavement management program on the fly).

Road departments often say their department is better than one or more of their neighbors. The citizens know the difference. The citizens know which road departments in a region do well and which don't.

As Will Rogers famously said: “Even if you are on the right track, you will get run over if you just sit there”. Progress is demanded of you. Going backwards will not be tolerated.

I've seen first-hand the successes and failures of pavement management. I've seen the safety successes. I've seen the safety failures. I've seen good maintenance practices. I've seen failed maintenance practices. I've seen road crews that are effective and efficient. I've seen road crews that are not deserving of their paychecks.

A proper inventory, assessment and pavement management program will allow your public road department to fulfill its duty to the public:

- provide for the safe travel of the citizens;
- maintain the existing paved roadway surfaces effectively;
- manage the labor, equipment, materials and resources efficiently;

Public Safety: Despite tort immunity and sovereign immunity, public officials and road crews have responsibility to be mindful (assess) and manage pavement for safety.

Rutting is key. Hydroplaning is a major public safety hazard. Array of hazards or “maintenance opportunities”. Pickles Gap.

Use law enforcement and accident reports to locate “maintenance opportunities”. Often driver error, but road can be contributing factor. You don’t want a school bus accident where the driver was partially at fault and the road was in part a cause of the accident.

Also, safety features such as reflective signage (M.U.C.T.D.). ½ penny sales tax. Report projects, etc. T-square and Dr. Williams low costs safety measures.

Assessment/conditions/cracking/Sealing/resurface/pot holes: With the advent of technology a paved roadway can now be assessed for conditions, cracking, ruts, ride and pot holes. Can even show hot spots and show improvement over the years.

Maintenance Program: The assessment then can be used to determine what roads need and how to responsibly spend public funds (labor, equipment, materials and resources). No person alive can in their head alone assess the needs and chart an efficient use of labor and resources. The use of the assessment is to ascertain which best practices to deploy AND how to best use finite resource (your road budget).

Political Expression of Needs: ASA Hutchinson, Governor of the State of Arkansas, issued a Proclamation in April declaring the necessity of a well-maintained road system. He referenced the various independent studies that have determined that the “*state highways, roads, streets and bridges*” in Arkansas are in *dire need* of construction, reconstruction and maintenance. The Proclamation also determined that: (a). the revenues currently available are *inadequate* for the preservation and maintenance of the existing state highways and local roads infrastructure; and (b). the current structure of the motor fuel tax is *inadequate* due to reductions in revenues due to fuel efficiency and use of alternative fuels.

Historically, the county officials have not done well at explaining or quantifying their needs to state officials or to the public. However, a couple of recently launched programs are proving helpful to this end. During the CJAA Road Seminar and Annual Fall Meeting, Dr. Stacy

Williams, P.E., University of Arkansas, Research Associate Professor, Department of Civil Engineering and Director of the Center for Training Transportation Professionals (CTTP). CJAA President David Hudson, Michael Morgan, P.E. of Greenburg-Farrow and Darryl Gardner of Ergon Asphalt and Emulsions made a presentation on establishment of a pavement management program (and parenthetically on a double chip-seal method). This program was a follow up of the presentations of Larry Galehouse, P.E., Executive Director of the National Center for Pavement Preservation for Michigan State University to the CJAA in September of 2014. In essence the presentation this year explained the pilot project conducted in Sebastian County for assessing the paved roads and establishing a pavement management program. Other larger counties have recently sought these consultant services primarily as an internal management tool. However, such information should prove useful in further assessing the maintenance and funding needs for our massive system of county roads.

Conclusion: A state or local official and the road department have a duty to the public to spend well dedicated roads funds. Determination and assessment of the public infrastructure and use of best practices is warranted. Consideration of new assessment tools is warranted. At the very least these tools will help result in the improvement of your inventory of local roads. Said another way, citizen outcry and public scrutiny will demand change where the public infrastructure inventory is faltering.