

Good Info - Interesting Content from Around the Country

By Kansas LTAP Staff

Missouri River Flooding: Rinse and Repeat

APWA Reporter – Alysen Abel, PE, Public Works Director, Parkville, MO

<http://www3.apwa.net/Resources/Reporter/Articles/2019/9/Missouri-River-Flooding-Rinse-and-Repeat>

Alysen Abel provides a helpful account of numerous flooding events that occurred in 2019 and the response by her small public works department. Limited internal resources required the City to contract out much of the flood remediation work. Her experience can be helpful to other small communities that will face disaster recovery work.

How Locals Need to Prepare for the Future of V2V/V2I Connected Vehicles

University of Minnesota - Gordon Parikh, Melissa Duhn, John Hourdos

<http://www.dot.state.mn.us/research/reports/2019/201935.pdf>

Connected and Automated Vehicles (CAVs) are expected to affect the foundations of transportation operations and roadway maintenance as they become more prevalent on the roadways. This report is an effort to address this complex subject for the various owners, agencies and stakeholders involved in traffic operations. It discusses the connected vehicle ecosystem and its background, potential CAV applications, types of communication and hardware required for CAV systems, and recommendations to local road owners. The report also includes a survey sent to local road owners to assess the current readiness of the transportation system for CAVs. Although it is too early to give specific recommendations, general guidance is provided for road owners to begin preparing for the future of CAVs.

Cost/Benefit Analysis of the Effectiveness of Crack Sealing Techniques

University of Minnesota Duluth - Manik Barman, Jared Munch, and Uma Maheswar Arepalli

<http://www.dot.state.mn.us/research/reports/2019/201926.pdf>

Crack sealing is an important preventive treatment in the pavement preservation program. To achieve a cost-effective crack seal, it is important to select a proper crack sealing method. While Minnesota usually seals cracks in asphalt pavements, there is no clear consensus on the most appropriate crack sealing method for a specific job. This study focused on developing a guideline so that a cost-effective crack sealing method could be chosen based on pavement type, functional condition, pavement age, and traffic volume etc. This study includes a literature review, online survey, field performance data collection and analysis, and development of a guideline. The effectiveness of the crack seals was determined using a benefit-cost analysis. Two decision trees were developed for choosing the most appropriate crack sealing method. The first, which can be used in MnDOT's pavement management

system, needs information such as crack severity, pavement type (new vs overlay), pavement analysis period and design life, traffic level, and crack seal occurrence number. The second decision tree, which is a simplified version of the first, can be used by the preventive maintenance crews and requires less information: crack severity, traffic level, and crack sealing occurrence number.

Smart City Addressing the Challenges of Today and Tomorrow

U.S. Department of Transportation (U.S. DOT)

<https://www.transportation.gov/sites/dot.gov/files/docs/Smart%20City%20Challenge%20Lessons%20Learned.pdf>

Over the past year, the U.S. Department of Transportation (U.S. DOT), under the leadership of Secretary Anthony Foxx, has leveraged nearly \$350 million in public and private funds for smart city and advanced transportation technologies. Building on Beyond Traffic 2045, the Smart City Challenge provided a spark for cities looking to revolutionize their transportation systems to help improve people's lives. Through the Smart City Challenge, the Department committed up to \$40 million to one winning city. In response, cities leveraged an additional \$500 million in private and public funding to help make their Smart City visions real. And, in October 2016, Secretary Foxx announced an additional \$65 million in grants to support community-driven advanced technology transportation projects in cities across America, including four of the finalists in the Smart City Challenge.

FHWA On-Demand Roadway Lighting Training

Federal Highway Administration

https://safety.fhwa.dot.gov/roadway_dept/night_visib/roadway_lighting_workshop/

Roadway lighting training from the Federal Highway Administration (FHWA) is now available as an on-demand, web-based training program. The free training is based on a combination of guidance from an FHWA handbook as well as a series of in-person workshops, and other, more recent technical advancements on roadway lighting design.

Updated FHWA Guidance on Bicycle and Pedestrian Planning and Project Development

Federal Highway Administration

https://www.fhwa.dot.gov/environment/bicycle_pedestrian/guidance/guidance_2019.cfm

FHWA has posted new guidance on bicycle and pedestrian project development. This guidance does not change policy; rather it updates previous guidance to reflect small changes made by the Fixing America's Surface Transportation (FAST) Act and includes new planning and design resources developed since 2015. These resources represent research from national subject matter experts. FHWA continues to support improving safety and infrastructure for bicycling and walking.

