

# 2013 MUNICIPAL STREETS SEMINAR

For public works directors, engineers, street superintendents, maintenance personnel, consultants, city administrators, and elected city officials.

November 13, 2013 – Ames, Iowa Scheman Building, 1810 Lincoln Way, Iowa State University

National Concrete Pavement  
Technology Center

IOWA STATE UNIVERSITY  
Institute for Transportation



- ▶ Street Maintenance Plan – How to Reduce Costs and Improve Systems
  - ▶ Types of Pavement Issues: Why and Prevention
- ▶ Value to City on Recycled Concrete
  - ▶ Update on Revenue Options for Street Improvements
- ▶ Concrete Pavement Spectrum
  - ▶ Optimize Concrete Pavement Design
- ▶ Understanding the Effects of Subgrades & Subbases on Pavement Service Life

- 8:00 **Registration, Breakfast and Welcome** – Moderator, Dale S. Harrington, representing the CP Tech Center
- 8:30 **Street Maintenance Plan – How to Reduce Costs and Improve Systems** – Paul Moritz and Al Olson, City of Ankeny  
The City of Ankeny will present their approach to street maintenance planning and implementation through the utilization of their pavement management plan. The presentation will provide an overview of Ankeny's pavement preservation, patching, rehabilitation and street replacement programs. The presentation will also show how public works monitors and adjusts their deicing practices to preserve pavement life.
- 9:00 **Types of Pavement Issues: Why and Prevention** – Jim Grove, Global Consulting Inc.  
Discussion will include pavement distresses, why they occur and how they can be prevented. Selected materials to prevent early age cracks, moisture and temperature control of early age pavements, control of incapability of the mix, the impacts of water/cement ratio, set retarding admixtures, and material admixtures such as fly-ash and slag will be covered.
- 9:45 **Value to City on Recycled Concrete** – Mike Danburg, Yaggy Colby  
Recycling concrete pavement is a relatively simple process, however, there are certain characteristics of recycled concrete pavement that need to be understood. A review of recycled concrete aggregates and their use will be presented along with their particular applications. Presentation will also include a discussion on leachate with drainage systems.
- 10:15 **BREAK – 2<sup>nd</sup> floor**
- 10:30 **Update on Revenue Options for Street Improvements** – Mark Cory, Ahlers and Cooney Law Firm  
The various economic options that exist to help cities undertake necessary street improvements are explored. These include TIFs, special assessments, and general obligation bonds.
- 11:45 **LUNCH – 2<sup>nd</sup> floor**
- 12:30 **Concrete Pavement Spectrum** – John Cunningham, Iowa Concrete Paving Association  
Agencies have more options than ever before when it comes to selecting concrete pavement options. The key is to select options that are likely to deliver the desired service life. John will discuss five different terms for service life: 10 years, 20 years, 30 years, 40 years, and 50 years. In his presentation, John will show tools that cities can use to design pavements for each of these five terms.
- 1:15 **Optimize Concrete Pavement Design** – Todd M. LaTorella, MO/KS Chapter, American Concrete Pavement Association  
Have you ever wondered if dowel bars are really necessary for a certain pavement? What about 3i aggregate? Many times, pavements are designed and constructed with some elements that deliver a much greater return than the overall pavement design. Todd LaTorella will discuss the options in pavement design and construction that can be adjusted to fit the pavement's service life. He will also discuss how this exercise was conducted with the Kansas DOT and how it led to project cost savings.
- 2:00 **BREAK – 2<sup>nd</sup> floor**
- 2:15 **Understanding the Effects of Subgrades & Subbases on Pavement Service Life** – Dr. David White, National Concrete Pavement Technology Center & Jerod Gross, Snyder & Associates, Inc.  
What is the impact to the concrete pavement support system by placing a subbase or stabilizing the subgrade? What are the critical design parameters of subbases and subgrades that influence the long term performance of concrete pavements? How can we test for these parameters and optimize their values to achieve the best design? This discussion will address these questions based on recent field testing.