PRESENTATION

4:00-6:30 PM

Continuously Reinforced Concrete Pavements - The Engineering Behind the Standard

Speaker: Elizabeth (Lisa) Lukefahr, P.E. Executive Director, Texas Concrete Pavement Association

Lisa received a B.S. in Mechanical Engineering from the University of Texas at Austin in 1989 and a B.A. in English in 1990.

Lisa began her career with TxDOT in the Research Section, coordinating research activities in planning, construction, pavements and materials. Lisa transferred to the Pavements Section in 1993 and then to the Materials and Tests Division in 1995. Initially, she concentrated on hot-mix issues, but after four years, made the change to concrete and began work in the Concrete and Cement Laboratories in 1999.

In September 2004, she became the Manager of the Rigid Pavements and Concrete Branch. Lisa feels that her biggest contributions were modernizing TxDOT's analytical capabilities of cement and fly ash and incorporating 20-years of CRCP research (some cost-saving, some performance-enhancing, some longevity-improving) into the 2011 statewide CRCP standards.

In April 2013 Lisa explored her planning and programming roots, spending 16 months in TxDOT's Project Management Office. Lisa ended her 26-year TxDOT career in April 2016 as TxDOT's Austin District Laboratory Engineer.

Lisa has been the Executive Director of the Texas Concrete Pavement Association since May of 2016, and hopes to support and promote the use of quality concrete pavements in Texas for years to come.

PRESENTATION SUMMARY

Since the AASHO Interim Guide for the Design of Pavements (1972), millions of dollars have been spent with each subsequent generation of pavement design tools. However, little to no national attention was given to the design of continuously reinforced concrete pavements (CRCP) until AASHTO's MEPDG.

TxDOT, the largest owner of CRC Pavements in the world, after evaluating the MEPDG, decided to develop their own mechanistic-empirical design tool, called TXCRCP-ME. Ms. Lukefahr will provide some insight on what was behind that decision and possibly give you some food for thought on

how best to perform a concrete pavement design.

