Oklahoma Department of Transportation and Southern Plains Transportation Center 2021 Short Course When: July 28, 2021 **Risk Management and Analysis for Infrastructure** 8:30 am - 4:30 pm **Projects** Where: ODOT Training Center 5307 NE 122nd St Instructed By: Oklahoma City, OK 73013 Douglas D. Gransberg PhD How to Register: Go to President, Gransberg and Associates, Inc. **Emeritus Professor of Construction Engineering** Gallogly College of Engineering and Environmental Science, **Breakfast & Lunch Provided** The University of Oklahoma ***SEATS LIMITED. REGISTER NOW***

This one-day short course covers eight modules.

Module One: Introduction to Risk Management covers design and construction risk context, risk management theory, and decision theory.

Modules Two through Four will cover design, scope, cost, schedule, construction, how to use risk rankings like pairwise comparisons and importance index, how to use a 3-point estimating technique, and how to develop bid tab data for risk analysis input for use in risk identification, evaluation, and quantification.

Module Five focuses on Qualitative Risk Analysis using risk registers, exposure milestones, response plans, and monitoring and control plans.

Module Six focuses on Quantitative Risk Analysis using a hybrid 3-point input process, risk response decisions, and risk-based line-item contingencies. Module Seven: Stochastic Risk Analysis covers the FHWA Major Project Cost Estimate Risk Analysis, rational contingency development, Monte Carlo Simulations, and how to interpret simulation output.

The last module of the short course will cover Qualitative Risk Evaluation PE and will cover developing a qualitative risk register for a typical ODOT project including both design and construction risks.

Target Audience

This course is designed for infrastructure industry professionals and others wishing to learn about risk management and analysis with an infrastructure focus. **Eight (8) professional development hours will be available.**

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