

Auburn University

Samuel Ginn College of Engineering

The New Orleans Levees: The Worst Engineering Catastrophe in US History - What Went Wrong and Why?

Date: April 5

Time: 4:00 p.m.

Place: Haley Center Rm. 2370



Lawrence H. Roth

*Deputy Executive Director,
American Society of Civil Engineers*

Biography

As the Deputy Executive Director of the American Society of Civil Engineers (ASCE), Lawrence H. Roth is responsible for its professional, technical, and educational activities. He also oversees ASCE's publications and continuing education programs. Mr. Roth joined ASCE after a thirty-year career in consulting practice where he was a nationally recognized leader in civil and geotechnical engineering. During his years in practice, he specialized in geotechnical engineering for design and construction of water resource projects including dams and canals.

Mr. Roth earned his bachelor's and master's degrees in civil and environmental engineering from the University of Wisconsin-Madison, and serves on the Department's Visiting Committee. In the fall of 2000, Mr. Roth received the Distinguished Service Citation from the University of Wisconsin-Madison College of Engineering.

Abstract

The New Orleans Levees: The Worst Engineering Catastrophe in US History - What Went Wrong and Why?

During this presentation, Mr. Roth will summarize the findings and conclusions of the External Review Panel. Much of the destruction from Hurricane Katrina was caused not by the storm itself, but by a series of engineering and engineering-related policy failures. The levees and floodwalls breached because of a combination of unfortunate choices and decisions, made over many years, at almost all levels of responsibility.

There were two direct causes of the levee breaches. First, several levees with concrete floodwalls collapsed because of the way they were designed. Second, many levees and floodwalls were overtopped by water pouring over them eroding their foundations. However, there were also many indirect causes as well. During this presentation Mr. Roth will describe other key additional failures that strongly contributed to the levee failures.

The lessons learned from Katrina go beyond the issues of levees in Southeast Louisiana. Mr. Roth will discuss how these lessons should cause all civil engineers to bring about shifts in the way they approach projects that impact public health, safety, and welfare. These shifts include developing a better understanding of risk and safety; reevaluating and fixing hurricane- and flood-protection systems throughout the United States; and demanding engineering quality.

Video

- [Lawrence H. Roth: The New Orleans Levees: The Worst Engineering Catastrophe in US History - What went wrong and why?](#)