



## **Lynne H. Irwin**

July 15, 1941 – August 2, 2016

Dr. Lynne Irwin, Professor Emeritus, passed away peacefully at his home in Brooktondale, NY after a long battle with complications of type II diabetes. Lynne was born in 1941 and raised in Los Angeles, CA, the only child of Lorne and Beverly Irwin. He attended the University of California Berkeley for his undergraduate degree where he met his wife, Diana, while he waited in line for registration. After completing their bachelor's degrees and marrying, Lynne and Diana moved to Cal State Chico where he completed a master's degree and they would welcome their first two children. Lynne and family then moved to College Station, TX where he earned a doctorate at Texas A&M University. Lynne obtained his Professional Engineering licensure while in Texas and kept his registration active for the rest of his career.

In 1973, Lynne was hired by Cornell University as an Assistant Professor in the Agricultural Engineering department where he remained until his retirement in 2014. Their third child was born shortly after Lynne and Diana moved to Ithaca. Lynne was an expert in highway and pavement design and known throughout New York State as the "Pot Hole Potentate" aka the Director of the Cornell Local Roads Program (CLRP) from 1973-2014. He continued as Senior Advisor after retirement. As Director of CLRP for over 40 years, he established the model on which the highly successful national Local Technical Assistance Program (LTAP) is based. As part of CLRP's extensive program of technical assistance and training to thousands of local highway and public works departments throughout New York State, he guided the development and delivery of the Annual School for Highway Superintendents for over four decades and the Statewide Conference on Local Bridges for more than two.

He served on the Transportation Research Board's (TRB) Low Volume Roads Committee for many years and was one of its first emeritus members. He chaired the Steering Committees for

TRB's Fifth and Eighth International Conferences on Low Volume Roads, and hosted the Fourth International Conference on Low Volume Roads here in Ithaca, NY. Lynne was also a long-time member of many TRB Standing Committees including, Conduct of Research, Soil Portland Cement Stabilization, Pavement Structural Modeling and Evaluation, and Backcalculation of Pavement Layer Moduli. He helped found and was the first chair of TRB's Standing Committee on Technology Transfer. In addition, he made substantial contributions toward the present leadership of TRB's standing committees.

In the research arena, Lynne was among the pioneers in the application of deflection testing in pavement structural evaluation including seasonal variations therein. In 1982, using an NSF grant, he imported the first falling weight deflectometer (FWD) into the United States from Denmark. He used this device through work with the U.S. Army Corps of Engineers and the New York State Department of Transportation in mechanistic-empirical analysis of pavements allowing evaluation of the physical properties of pavement in a non-destructive manner to identify roads that are near the end of their life. His substantial accomplishments in this area include development of the *MODCOMP* software for backcalculation of pavement layer moduli. Building on the concepts developed through his graduate work at Texas A&M, *MODCOMP* is among the most widely known and enduring tools for pavement structural analysis. Lynne developed and updated equipment and procedures for calibration of pavement deflection testing equipment that were implemented not only in the United States, but throughout the world. During his career, Lynne developed and delivered workshops on pavement structural analysis around the United States and the world.

Lynne taught highway engineering from 1973-1999 and pavement engineering from when he arrived 1974 until 2000. Highway engineering emphasized secondary highways while pavement engineering focused on the specifics of design, maintenance, and management of flexible pavements. Both classes had laboratory components, were always practical and he shaped the future of many engineers who work on roads and highways today. Lynne's students continue his legacy working for local, state, and federal highway agencies and continuing his research and extension activities.

Lynne was a collector of classic cars and could often be seen traveling around Cornell campus in one of his fixed-up convertibles with one of his many dogs enjoying the breeze in the passenger seat. He enjoyed traveling the world both for leisure with his family and to educate other countries on the best practices in pavement design. He has passport stamps from Sweden to Saudi Arabia to South Africa and many points in between.

Lynne's most lasting contributions are those most difficult to document. They are the contributions that came about quietly, under the radar, whenever someone asked for his help. He was, first and foremost, a teacher, whether in a classroom, or on an informal basis offering advice over the telephone to someone who reached out with a question. Lynne was always there to help. His wife Diana passed away a few years earlier so he is survived by his three children, four grandchildren, their families, and a very friendly golden retriever, Sassy.

*Written by David. P. Orr (Chair), Michael F Walter, and James W. Spencer, with notes from Nancy (Irwin) Easley, Jennifer Irwin, Ron Fury and Cheryl Richter*