

Other experts:

Dr. Chris Letchford, professor of civil engineering, can speak to the impact that hurricanes have on engineered structures. Letchford surveyed damage to structures in the wake of both Rita and Katrina for groups such as the Federal Emergency Management Agency and the National Institute for Standards and Technology.

He says Rita's greatest impact was to "lifeline" infrastructure such as electricity, transportation and communication. The storm blew over hundreds of thousands of timber telephone poles; destroyed five major high voltage lines; and damaged ports, bridges, water treatment centers and chemical plants. Also, it bent the canopies over gas stations, hindering access to fuel for emergency vehicles and generators. Letchford can be reached at (806) 742-3476 Ext. 328, or chris.letchford@ttu.edu.

Larry Tanner, research associate in civil engineering, was a member of the FEMA mitigation assessment team that studied Hurricane Katrina. He led a team that recorded wind and water damage along the coastline in Louisiana and Mississippi.

The team's report, currently being prepared for the agency, provides information that can be used by communities as they rebuild. Much of the damage done by Katrina, he says, resulted from structures being built below the base flood elevation – or the elevation that flood waters will rise to during a 100-year storm event (meaning the storm only has a 1 percent chance of happening in a year). Tanner can be reached at (806) 742-3476 ext. 336, or larry.tanner@ttu.edu.

Dr. Bradley Ewing, professor of operations management in the Rawls College of Business, has studied the economic impact of hurricanes and tornadoes for more than 12 years.

Currently, he is sending 5,000 surveys to Katrina evacuees in a study of the long-term economic impact of the evacuation. The survey will collect household-level data both in the region that was hit by the storm and the areas where evacuees relocated.

Ewing can speak to the impact of hurricanes and tornadoes in cities like Oklahoma City, Corpus Christi, Wilmington, N.C., Miami, Fla., and Nashville, Tenn. Ewing can be reached at 806-742-3939 or bradley.ewing@ttu.edu.

Dr. John L. Schroeder, assistant professor of Atmospheric Science at Texas Tech University, visited both hurricanes Rita and Katrina to deploy instrumented towers that gather high-resolution storm data at a time when most conventional observation systems fail.

Schroeder can offer insight into how hurricanes develop, move, and react to various meteorological elements. He is an expert on how the hurricane interacts with

man's built environment at landfall and has been actively intercepting hurricanes since 1998. Schroeder can be reached at (806) 742-2813 or john.schroeder@ttu.edu.

Dr. Ernst Kiesling, professor of civil engineering and executive director of the National Storm Shelter Association, recommends that homeowners who live above the flood plane in hurricane prone areas buy a storm shelter for their home.

As was seen in Houston preceding Hurricane Rita, evacuations often can put immense strain on traffic corridors, leading to traffic jams and – in the case of Houston – fatalities. By utilizing in-home shelters, some families who are not required to evacuate can remain where they are and ease the traffic flow.

However, Kiesling urges buyers to look for a seal of the National Storm Shelter Association when they buy a safe room for their home. Although there are a variety of products available for homes, Kiesling says many shelters are not designed by engineers or architects who are familiar with the wind loads present during hurricanes.

Kiesling specializes in debris impact and above-ground shelters. He can speak on the construction and use of personal and community shelters. Kiesling has more than 30 years of experience in the field documenting debris damage and testing different materials and types of construction. He can be reached at (806) 742-3476, ext.335 or ernst.kiesling@wind.ttu.edu.