1-14-2010

Earthquake Expert Available To Comment On Haiti Earthquake

Beth Potier
UNH Media Relations

Follow this and additional works at: https://scholars.unh.edu/news

Recommended Citation
https://scholars.unh.edu/news/3216

This News Article is brought to you for free and open access by the Administrative Offices at University of New Hampshire Scholars’ Repository. It has been accepted for inclusion in Media Relations by an authorized administrator of University of New Hampshire Scholars’ Repository. For more information, please contact nicole.hentz@unh.edu.
Earthquake Expert Available To Comment On Haiti Earthquake
Earthquake Expert Available To Comment On Haiti Earthquake

Media Contact: Beth Potier
603-862-1566
UNH Media Relations

Contact for Information: Pedro de Alba
603-862-1417
Civil Engineering

Jan 14, 2010

DURHAM, N.H. – University of New Hampshire professor of civil engineering Pedro de Alba, an expert on earthquake engineering, is available to discuss the implication of Tuesday’s earthquake in Haiti. The powerful 7.0-magnitude earthquake destroyed the capital city of Port-au-Prince and has a possible death toll of more than 50,000.

De Alba is available at 603-862-1417 or pedro.dealba@ unh.edu.

De Alba describes the devastating damage produced by this earthquake as due to the worst possible combination of unfavorable factors: it was a shallow earthquake (about 10 kilometers below the surface), which is in the most destructive category; it was only 15 kilometers from the center of Port-au-Prince, which is within the ‘near field’ of energy release; and it struck a densely populated area with extremely poor construction.

“Although the city is practically on the fault that ruptured, the area had not experienced a severe earthquake for more than 100 years, so people had very little ‘earthquake consciousness’ which would translate into requiring earthquake-resistant design,” says de Alba. “This is demonstrated by the number of building collapses, including the presidential palace, which lost its whole second floor in a classic example of the ‘soft story’ effect, where internal bracing is sacrificed to leave large open spaces.”

De Alba adds that reconstruction is going to be a very challenging task, given the great poverty of the majority of the population and the urgent need to provide shelter. “There are some new techniques for building more earthquake-resistant housing at relatively low cost, but these would require very significant financial and technical support from other countries,” he says. “Unfortunately, it is not only housing that will need a large investment, but also lifeline systems, as shown by near total failure of the water supply at this critical time.”

De Alba’s research concerns how saturated sand “liquefies” when it is shaken by an earthquake, temporarily losing a large proportion of its strength and potentially causing damaging landslides. By modeling liquefied sand, he aims to help predict how sands will behave after they liquefy, research that can inform future development in earthquake-prone areas. A native of Mexico, de Alba holds a Ph.D. from the University of California at Berkeley. He has taught at UNH since 1978.

The University of New Hampshire, founded in 1866, is a world-class public research university with the feel of a New England liberal arts college. A land, sea, and space-grant university, UNH is the state’s flagship public institution, enrolling 12,200 undergraduate and 2,200 graduate students.