Title: Pedestrian Bridges: A Key Infrastructural Element in Economic Development

Authors: Harmon Parker (Bridging the Gap Africa), J.D. Buchholtz and Josh Terndrup (Baylor University)

Abstract:

The construction of the pedestrian bridge over the Brazos River in 1867 was a key to economic development in that part of Texas that was South of the Brazos River. The abundant grazing lands made this region idea for raising cattle, but the sparse population density provided little market for beef. The first bridge across the Brazos River allowed millions of cattle to be raised and moved to Ft. Worth, a central location for beef production and distribution.

One hundred and fifty years later, there are many places in Africa and around the world where a pedestrian bridge can open the doors to huge economic development, as well as providing access to medical care and educational opportunities. Bridging the Gap Africa was started to meet just such needs. The Founder and Director, Harmon Parker has built over 40 bridges in Kenya, transforming many isolated villages and people groups into thriving communities.

This presentation will focus on the largest bridge project undertaken to date by BTG, the design and construction of a 400 foot suspension bridge across the Galana River, the second largest river in Kenya. With the assistance of missionaries from Ireland, the people on the far side of the river can for the first time grow significantly more food than they consume, providing an opportunity to trade the surplus for other goods that would benefit the community. Bridging the Gap has been charged with putting into place this bridge. Baylor University has provided engineering support for this project, with senior Mechanical Engineering students J.D. Buchholtz and Josh Terndrup working on the project during the Spring 2008.

Key to the success of such a project is the proper involvement of the community in the project, providing both financial investment and much sweat equity so that it will be THEIR bridge when finished. Engineering support is being provided from several quarters and financing the bridge is made possible by the visionary investments of some governmental organizations and some private donors.