For the past half century, oil has driven the economy of the Gulf of Mexico. A third of U.S. oil production flows from nearly 3,500 platforms in the Gulf, with thousands of miles of pipeline delivering oil and natural gas to shore. Since the first Gulf well was drilled off Louisiana in 1938, in less than 15 feet of water, close-in reserves have been depleted and exploration has matched off the continental shelf, onto the continental slope, and beyond. Today Gulf oil is deep oil, the bulk of U.S. production drawn from wells in more than thousand feet of water. U.S. Gulf oil reserves are estimated at 4.9 billion barrels, but as the Deepwater Horizon disaster showed, the challenges of deep drilling are formidable.