

## Orlando International Airport Pavement Management System Implementation & Update



The Orlando International Airport (OIA) is a vital link in the world's transportation system, serving nearly 100,000 passengers daily. The around the clock demand on the OIA's facilities means that any pavement

closure has a significant impact on the traveling public, the airlines, the freight carriers, and the thousands of people who serve these industries. Keep the airfield pavements in good operational condition at all times is of highest priority for the Greater Orlando Aviation Authority (GOAA). In addition, Federal Aviation Administration and Florida Department of Transportation funding conditions require that grant recipients subscribe to a progressive and continuing pavement maintenance and management process in order to protect the long-term investment in capital airfield projects.

To further the proactive management of the pavements at PIA, GOAA retained the team of AVCON, Inc., Applied Pavement Technology, Inc. (APTech), and Kimley-Horn and Associates, Inc. to evaluate the pavements at OIA and to develop a pavement management program in 2000. This project included a thorough records review and an evaluation of pavement conditions using the pavement condition index (PCI) survey procedure. APTech assisted in the establishment of a computerized airport pavement management system and the preparation of a 10-year pavement maintenance and rehabilitation program for GOAA to use as a planning tool.

During 2006, the project team performed a records review to identify all rehabilitation/construction projects completed since 2001 and to update the network definition map accordingly. All airside pavement sections were then re-surveyed in accordance with the PCI procedure, with updates existing MicroPAVER pavement management database. Although additional structural testing was not performed during this project, the 2001 deflection testing data were re-analyzed using the latest traffic projections to determine the structural remaining life and Pavement Classification Number. Finally, the findings from the various field evaluation and data analysis activities were collectively considered in the development of a new 10-Year Capital Improvement Program for OIA.

