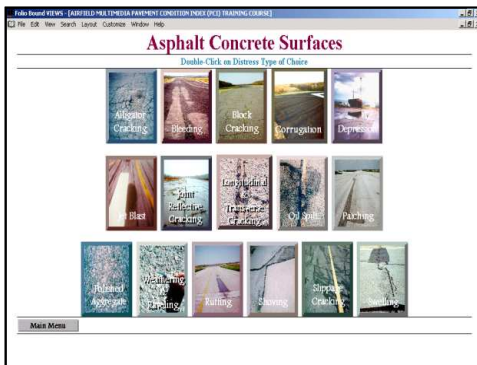


Maryland Statewide Airport Pavement Management System



Applied Pavement Technology, Inc. (APTech) implemented an airport pavement management system (APMS) for the Maryland Aviation Administration (MAA) in 2001. The project involved developing a comprehensive inventory of all pavements at the project airports, including the physical location of pavements and their maintenance and construction histories. APTech engineers evaluated the condition of the pavements at the airports, used the collected data to establish a MicroPAVER database, and linked the CAD maps of the airports to the MicroPAVER database. The collected information was used to develop a 5-year strategy for the maintenance and rehabilitation of the pavement infrastructure.

The MAA felt that training was a very important part of the pavement management process. Therefore, APTech provided training courses on the pavement evaluation procedure and the use of the pavement management software to MAA staff, as well as interested individual airport staff. Due to MAA's satisfaction with APTech's initial implementation, APTech was retained to update the APMS for the non-National Plan of Integrated Airport Systems airports in the system. In addition to updating the existing system, the APMS was extended to include structural testing and evaluation. This permitted a comprehensive maintenance and rehabilitation plan to be developed that considers structural as well as functional pavement condition.

At eleven selected airports, the PCI information was supplemented with an evaluation of the structural condition of the pavements. A nondestructive testing (NDT) program was implemented to determine the structural integrity and load-carrying capacity of the pavements. The testing was conducted using a falling weight deflectometer (FWD). A coring program was conducted at ten of the selected airports in association with the FWD testing to determine pavement layer thicknesses. The structural testing did not include T-hanger sections or facilities already planned for rehabilitation.