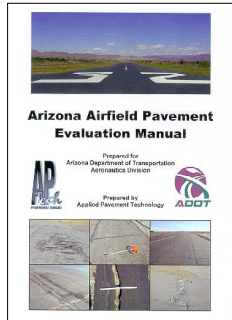


Arizona Airport Pavement Management System



In 2000, Applied Pavement Technology, Inc. (APTech) was retained by the Arizona Department of Transportation (ADOT) Aeronautics Division to implement an airport pavement management system (APMS) to proactively manage the pavement infrastructure at Arizona airports. Due to the success of the initial implementation and ADOT's satisfaction with APTech's work, the Aeronautics Division retained APTech to conduct updates to its pavement management system in 2003 and in 2006.

An analysis of current pavement conditions revealed that Arizona's airports needed timely improvements. Further, an assessment of maintenance and rehabilitation needs indicated that current levels of state funding were insufficient to sponsor all necessary pavement maintenance and rehabilitation projects. Based on the results of the pavement management study conducted by APTech, the Aeronautics Division initiated the Airport Pavement Preservation Program (APPP) (recipient of the Arizona State Quality Award) to make the best use of its limited budget by funding those work types that have historically proven to provide the most benefit per dollar expended. Because it was run at the State level, the Aeronautics Division was able to provide the airports with economies of scale for this work that individual airports, particularly those that are smaller or located in sparsely populated areas, could not hope to achieve by themselves.

APTech provided several other valuable end products, including a primer on the pavement evaluation procedure with high-quality color photographs specific to Arizona airports, a brochure summarizing the findings of the study in non-technical terms, and a Pavement Management Reference Manual. APTech also developed an interactive pavement management data access program capable of running directly from a CD or from ADOT's web page, which greatly facilitated the access and use of the results from this project.

The APMS and the APPP have been highly successful, with an area-weighted pavement condition index of the runways increase from a score of 81 to 84 since the implementations. In addition, individual airports have reported that it is much easier to plan ahead for pavement maintenance and rehabilitation using the results of the APMS.