

McChord Air Force Base MicroPAVER Pavement Management System Update



Applied Pavement Technology, Inc. (APTech) was contracted through the Air Force Civil Engineer Support Agency to provide the technical expertise to update the MicroPAVER pavement management system at McChord Air Force Base (AFB) and the assault strip at Grant County International Airport in Washington. The pavement management system at McChord AFB, where combat airlift have flown continuously on a daily basis since October 2001, is for the airside pavement system.

During May 2005, APTech conducted a thorough systems inventory to determine the cross section and construction history of the different pavement areas, and used this information to divide the pavement network into management units for extensive, detailed pavement evaluation surveys. The pavement condition index (PCI) survey information and other collected data were entered into a MicroPAVER database.

To customize the MicroPAVER software, APTech determined unit costs for pavement maintenance and rehabilitation (M&R) activities and developing pavement performance prediction models specific for McChord AFB pavements. Once this task was completed, APTech evaluated several budget scenarios to assess the impact of each on the overall pavement condition over time.

Overall, the pavement sections at McChord AFB were performing well due to M&R efforts, but some pavement sections required major rehabilitation work, so APTech recommended continued maintenance and select repairs to slow the rate of deterioration and to maintain the pavement condition in suitable condition. APTech provided key results from the project, such as the PCI and M&R plan, on color-coded maps in accordance with Air Force standards.