## Section 1

## INTRODUCTION

Window Rock Airport, which serves Window Rock, the Capital of the Navajo Tribe, is located in Black Creek Valley, Apache County, Arizona. The Navajo Tribe includes some 146,000 people; the Navajo Nation encompasses some 25,000 square miles of northeast Arizona, southeast Utah, and northwest New Mexico.

Several factors create a strong underlying demand for improved general aviation facilities to serve Window Rock. First, the relatively low population density of the Nation, approximately six persons per square mile, combined with the rugged geography and climate creates difficulties in delivering traditional government services. That a significant portion of the reservation is not served by improved roads compounds this problem. As such, the Navajo government has come to rely on its general aviation fleet as a means of rapidly accessing the reservation from Window Rock. Similarly, Window Rock Airport serves as a staging point for air medical evacuations from outlying areas to the medical facilities at Fort Defiance and in Gallup, N.W. Albuquerque, N.M. and Phoenix, Arz. It also serves as the staging point for firefighting aircraft under contract to the Department of Interior.

A second factor creating a demand for general aviation facilities is the location of the Navajo Nation with respect to the major cities of the encompassing States. For example, Albuquerque (163 miles) and Phoenix (333 miles) are the closest major metropolitan centers to Window Rock and the only two directly accessible via the Interstate Highway System. Both cities represent major commercial and governmental centers at which the Navajo Tribe conducts business on an almost daily basis. Assessibility to these cities is impaired not only by distance, but also by the lack of direct airline service to Window Rock.

Finally, as the governmental center for the Navajo Tribe, Window Rock Airport experiences continued visitations by representatives of the U.S. Government and commercial interests seeking to conduct business with the Tribe. Again, the lack of airline service to Window Rock and the limited airline schedule at Gallup, N.W. has supported the use of general aviation aircraft as the principal means of transportation for these activities.

Aware of the Tribe's aviation needs and Window Rock's position as the aerial gateway to the Navajo Nation, the Tribal Council directed the aviation consulting firm of PRC Speas to undertake an airport planning study. The study was to clearly identify the aviation needs at Window Rock and prepare a physical plan for satisfying those needs. This document, the master plan for Window Rock Airport, is the result of that study.

This master plan report for Window Rock Airport is organized, following the summarized findings and recommendations, according to the chronological listing of events that led to its preparation. A description of the Navajo Nation and Window Rock's aviation history is presented first, followed by a section addressing the forecast of aviation demand for the airport. Next, the calculation of required facilities is discussed. As an analysis of alternative airport sites was included in the scope of work, the site selection process and findings are addressed. Environmental considerations and their impact on calculated facility requirements are then identified, succeeded by the presentation of airport plans. Finally, implementation plans are addressed, including a financial analysis and a recommended schedule of events.

The following section presents a summary of the major findings and recommendations.