

Resource Management Computer Applications: The Park System's Developing Response

Editor's Note: The grouping hereunder is a representative slice of the National Park System as individual parks have responded to the capabilities inherent in computer technology.

From Big Bend

The 730,000 acre Big Bend NP is one of the most remote National Parks in the contiguous United States. Located on the U.S./Mexican border in southwest Texas, the nearest grocery store is over 100 miles from park headquarters and the nearest town of any size is over 250 miles away. Spanish is a primary language, much of the park has no telephone service and many of the residences receive their only "outside" news from short-wave radio. Because of the park's resemblance to late 19th century Mexico, many people believe that information dissemination and management are restricted to the telegraph and pony express. This view perpetuates the "Goodbye God, I'm going to Big Bend" syndrome. Actually, behind the sleepy adobe facade there lives an active modern information management program that consists of three separate sub-programs: Telecommunication-dissemination; Community or recreational-assimilation; and Administrative-networking.

Administrative-Networking

In October 1982, the park purchased an ALTOS series 5 computer system. The multi-user system can run under either CP/M or MP/M II. The basic configuration includes five-megabyte hard disk drive, a 5 $\frac{1}{4}$ inch floppy disk drive, three Televideo terminal stations and a Diablo 630 printer. While the basic system is small, it has catapulted certain time consuming administrative tasks into microsecond technology. Rewriting operating programs (10-575's) once took hours; it can now be done in minutes, and recalculations can be completed in seconds.

The real time saving may be found in information sharing. A division stores its budget in the computer, which then can be accessed by administrative personnel who, with a few simple entries, can generate a status of funds or make administrative changes. In addition, the park uses the computer to generate billing, maintain vehicle mileages, information storage, filing, and general word-processing including lists, letters and mailings. The park already has outgrown the system and is investigating the possibility of acquiring a larger Data General System which will be directly compatible with other park and regional office equipment. Once installed, the park system will be able to talk directly with those other systems — further increasing the efficiency and networking capabilities.

Telecommunication-dissemination

In 1982/83, telephone operations (which were in the Administrative Division) and the park radio system (which was in the Ranger Division) were combined into a Telecommunication Center operated by the Division of Interpretation and Visitor Services. The move streamlined the entire information flow in the park and consolidated it in a centrally-located position. The majority of information exchange deals directly with visitor services — telephone information requests, weather and road reports, etc. The Dispatchers, who are trained in both interpretation and law enforcement procedures, deal through a multi-channel radio system with Customs Patrol Officers stationed in the park and U.S. Border Patrol.

Community or Recreational-Assimilation

One of the major problems in an isolated area like Big Bend is the difficulty in receiving information from the "outside world." Lack of television and radio reception may be praised by some, but a person totally deprived of information in an information age probably is not going to possess a complete set of socio-communicative tools. A community may live without "60 Minutes," the "Superbowl," and "Hill Street Blues;" but can it compete socially or intellectually with communities that have access to a variety of media stimulants?

Residents of Panther Junction (park headquarters area) banded together to form a non-profit TV corporation. In 1983, the "club" signed an agreement with a cable company to install two large satellite receiving dishes and a residential cable system which, combined with an improved translator system, provides subscribers with a wide variety of FM radio and television programs including the Spanish International Network (SIN) for the 35-40 percent of the residents who speak Spanish. Two small residential areas in the park still have no TV or radio reception, but the club is working to have satellite receiving stations installed in those remote locations.

To the uneducated eye, Big Bend may represent the epitome of historic information management. But within the wilderness setting, there is a plan and a certain modern sophistication. Therein lies the paradox — Big Bend NP is a combination of 60 million year-old mountains, state of the art satellite receiving stations, vast expanses of wilderness, computers, old adobe buildings, microwave telecommunications — and people. People talking with people is the bottom line in information management.

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