

gis notes

GIS Plans

If you are planning to build a GIS data base and use GIS technology in your park, the best way to anticipate and plan for your needs and requirements is by preparing a GIS plan. There are no formal guidelines for preparing this document, but here are some suggestions on what it should address:

1. What resource, maintenance, operations, or other management problems will the GIS help solve? In other words, what are the intended applications of the GIS?

2. What data, at what scales, will be needed in the GIS to address the problems cited above?

3. What data does the park already possess? What form are these data in (e.g., maps, tables, digital, etc.)? What is the scale of the maps? What text data bases exist that could be used in conjunction with the GIS?

4. What data does the park need to acquire? How will this be done? What are sources of additional data? How much will data acquisition cost? What is the schedule for data acquisition?

5. How will the digitizing of data be done? How much will the digitizing cost? What is the schedule for digitizing?

6. What GIS software will be used?

7. What are the alternatives for running the GIS? How much will they cost? What hardware acquisition is proposed? What is the schedule for hardware acquisition?

8. Who will operate and use the GIS? Where will the system administratively reside? How much time will the park devote to using the GIS?

9. How does the creation and use of the GIS data base relate to other data management activities in the park? Is it part of a wider effort to coordinate and consolidate all data management activities throughout the park?

Circulate the draft GIS plan throughout the park – to all divisions. This will serve to bring everybody in on the process, and minimize conflicts and misunderstandings along the way.

Note: Parks with GIS plans include Yosemite, Sequoia/Kings Canyon, George Washington Memorial Parkway, and Rocky Mountain.

Status Update:

GIS Capabilities and Data Bases

List 1. Parks with GIS data bases ready for use: Acadia, Antietam, Big South Fork, Big Thicket, Big Bend, Cape Cod, Capitol Reef, Death Valley, Denali, Everglades, Glacier, Great Smoky Mountains, Lake Mead, Minute Man, Morristown, Mount Rainier, North Cascades, Obed, Olympic, Prince William, Redwood, Santa Monica Mountains, Saratoga, Shenandoah, Wrangells/St. Elias, Yellowstone, Yosemite.

List 2. Parks with GIS data bases under construction: Big Cypress, George Washington Memorial Parkway, Great Basin, Richmond.

List 3. Parks and related units with *onsite* operational GIS capabilities (i.e., hardware in hand to conduct onsite, standalone GIS activities; this list excludes parks with strictly CAD or display capabilities): Antietam, Big South Fork, Biscayne, Bryce Canyon, Capitol Reef, Everglades, Glen Canyon, Gulf Islands, Indiana Dunes, Mount Ranier, Obed, Redwood, Santa Monica Mountains, Shenandoah, Southeast Archeological Center, Yosemite.

List 4. Parks and related units *in the process* of acquiring operational onsite GIS capabilities: Big Cypress, Canyonlands, Death Valley, George Washington Memorial Parkway, Grand Tetons, Gulf Islands, Indiana Dunes, Richmond, Sequoia/Kings Canyon, Yellowstone.

If you're not on one of these lists – and you feel you should be – or you're not on the right list, or your situation is just plain misrepresented, drop me a note or simply call (FTS 327-2593, 303-969-2593) to correct matters. Also, don't forget the open invitation to send in comments and articles about your GIS activities.

Equipment Notes

The DOI GIS Peripherals Contracts (Winter '88, p. 21) have been amended. Significant changes include:

1. Replacing the Pericom MX7100 low resolution color terminal with the Pericom MX7200 medium resolution color terminal. Price: \$2850;
2. Replacing the Tektronix high resolution color terminal with a high resolution color UNIX workstation. Price: \$18,765. This device is a high-performance standalone computer capable of running both SAGIS, GRASS, *and* MS/DOS applications.

There are now two hardware paths to GIS processing: the UNIX-enhanced AT, on the one hand, and the integrated workstation, on the other. The UNIX-enhanced AT consists of a standard 80286-based AT and a UNIX processor, which runs the GIS software. The graphics terminal is separate and serially driven. The workstation consists of an integral UNIX processor connected directly to a graphics display device. Feel free to call me for specifics (303-969-2593; FTS 327-2593).

Harvey Fleet, *Chief*
Digital Cartography Branch
GIS Division, NPS Denver