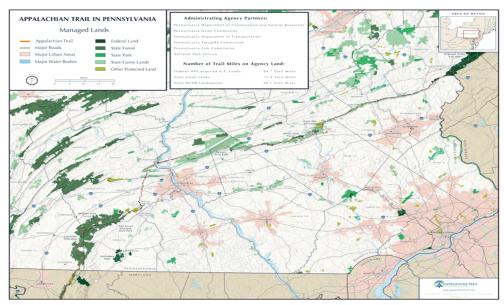
# The A.T. GIS Program















### Inventory and Manage Trail Data

- Trail features (shelters, campsites, bridges, etc)
- Natural and Cultural Resources
- Park Boundary
- Trail Projects & Deficiencies
- Incidents

#### **Create Maps**

- Internal Management Maps
- Planning
- Presentations
- Trail Hiking maps & Guidebooks
- Appalachian Trail Journeys Magazine
- Internet

#### Manage Trail Resources

- Rare, Threatened & Endangered Species Monitoring
- Resource Management Planning
- Cultural mapping and investigation
- Forest Health & Environmental Monitoring

### Analyze External Developments

- Telecommunication Towers
- Utilities (e.g. powerlines, wind farms, etc)
- Road Crossings
- Subdivisions

#### Aid in Land Protection

- Parcel/Tax Map, Zoning, and Other Planning Data
- Conservation Plans & Proposals
- Land Owner Relations
- Identify High Priority Areas for Conservation

## The Role of Volunteers in GIS

- Like the Appalachian Trail itself, the Appalachian Trail GIS program was founded on partnerships and the efforts of volunteers.
  - In 1998, ATC volunteer, Dr. Vernon Vernier, completed the first "on-screen" digitization of the Appalachian Trail.
  - In 1999, Dr. Vernier hiked the entire A.T., at his own expense, with a Global Positioning System (GPS) providing the first digital GPS survey of the trail.
- In 2002, Dr. Vernier conducted a more detailed GPS survey of more than 80% of the trail, using high-end GPS equipment and establishing his own base station locations.
- In 2005, volunteers Karl Hartzell and John Fletcher finished Dr. Vernier's work.
- Thanks to volunteer efforts, ATC and NPS have a complete and highly accurate GPS record of the trail, along with shelters, campsites, vistas, parking areas, and a number of other important trail features.
- Volunteers continue to help us collect GPS information through A.T.'s Trail Inventory and Assessment process. (see next panel for more info)





