

## **DIGITAL SPATIAL (SURVEY) DATA ARE USED:**

**Many survey (spatial) data are stored in digital form in a data base. Spatial data are used for many purposes, some are digital (numbers) and some are analog (maps). Several of the more obvious uses are:**

- **As coordinates to define unique location (digital):**
  1. **Used for inventory purposes.**
  2. **Uniqueness is critical, geometry is secondary.**
  3. **Coordinate system is default or user's choice.**
  
- **Point-pair relationships (digital):**
  1. **Distance between points (definition is user's choice).**
  2. **Direction point to point (reference to meridian).**
  3. **Elevation difference between points (flat/round earth?).**
  3. **Answers dependent upon chosen coordinate system.**
  
- **Maps (analog):**
  1. **Location plotted on map.**
  2. **Objects formed by collection of defining points.**
  3. **Elevation represented by contours.**
  
- **Visualization (analog):**
  1. **Based upon digital terrain model (DTM).**
  2. **Computer based views from any perspective.**
  3. **Objects defined by user and selection of data.**
  4. **Fly-throughs give user impression of being there.**