GIS in Clinton County

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Introduction

- The CATALIS Project
  - Clinton County
  - Automated
  - Topographic
  - Aspatial
  - Land
  - Information
  - System
Agenda

- Brief description of what GIS is
- Schedule of project milestones
- What is an Orthophoto?
- Demonstration of ArcExplorer
- Demonstration of ArcView
- Question-and-answer session
- Conclusion
Overview

What's going on?
- Introduction to ArcExplorer & ArcView training.
- Gathering of GIS data.
- Limited dissemination of GIS data.
- Educating the public.
- Contract management.
GIS Data already gathered:

- Bridges
- Townships
- Census Data
- Address Ranges
- Airports & Airfields
- Borders of Villages
- Cemeteries
- Churches

- Lakes
- Rivers
- Streams
- Ditches
- Township Roads
- State Roads
- County Roads
- City & Village Roads
GIS Data already gathered (cont’d):

- Glacial Geology
- Agricultural Land Use
- Dynamap 2000 Street Centerlines
- Endangered Species Last Known Locations
- Schools
- Government Institutions
- Private Drives
- Population Points
- TIGER Street Centerlines
- Land use ‘81
- County Grid System
- Hospitals
Overview (cont'd)

- What's next?
  - Placement of permanent monumentation in grid county wide.
  - Continuing ArcExplorer & ArcView training.
  - Orthophotography.
Vocabulary: What is...

- a GIS Data Layer
- ArcView
- ArcExplorer
- an orthophoto
- a raster file
- a vector file
What is GIS

- Geographic Information System.
- CATALIS; Clinton County's GIS Solution.
  - Users can make their own maps.
  - Users can query information geographically.
  - Users can better plan activities that involve geography.
What GIS Is Not

- A legally binding document(s)
- Just a public access data retrieval system
- A ready made portable network
GIS Applications

- Identifying Optimal Routes
- Querying a GIS Database
Project Milestones

- Placement of the monumentation
- Aerial photography
- Orthophotography
- Pilot project
Orthophotography Explained

Scanned images are rectified to remove distortion. What kinds of “Distortion”?

- Ground control points are used to ascertain the camera’s angle to the ground. If the angle isn’t exactly perpendicular, the distortion is calculated and removed.
- Calibrated camera information is used to remove distortion caused by the camera lens.
- A digital terrain model is employed to remove distortion caused by terrain.
Orthophotography

Things to look for in acceptable orthophotography:

- Consistent Radiometry
- Brightness
- Shadows
- Contrast
- Foreign Artifacts/Scratches
Orthophotography is the foundation on which all data layer creation is based.
Training is vital to using GIS applications and data properly.
Where to Get More Information

- Call Joe Merritt at 382-2078
- Attend training classes
- Attend meetings
- Read literature as it becomes available from the GIS office