MWGLAIUG Conference
MapObjects in the Field

City of Savannah Water, Sewer, Stormwater

- 75 sq. mile service area
- 50,000 point features
- 2000 miles of linear features
- Mapping level surveys (sub-meter)
- Modeling level attribute accuracy’s

Commonly Asked Field Mapping and Utility Inventory Questions

- Is a field inventory necessary?
- How many systems are being mapped?
- How good are the source documents?
- What attributes should be collected?

GPS Survey Platforms

- Real-Time Differential or **RTD**
- Real-Time Kinematic or **RTK**

Why RTD GPS?

- Heavy tree canopy
- RTK/Total Station not cost effective
- 1ft contours available from LIDAR

Why Field Mapping?

- No confidence in source documents
- Aging infrastructure
- High accuracy requirements

Data Logger Issues

- Pro's
  - Technical field personnel not required
  - No additional equipment purchases
- Con's
  - No visual quality control
  - Water proof GPS limited by 'paper' maps
  - Potential for gaps in survey coverage
  - Source maps must be carried in field
  - No inventory on non-GPS'd features

Ruggedized Pen PC Issues

- Pro's
  - Manages source documents better
  - Insures complete survey coverage
  - Additional quality control
  - Field PC doubles as office PC
- Con's
  - Requires more technical field personnel
  - Additional equipment purchase
  - Additional file management issues

Why have Pen PC's evolved?

- The really good information is in the field!
- Direct digital data gathering
- Adaptability to external sensors (GPS, total stations, digital camera's, laser rangefinders, etc.)

Why SMARTSurveyor?

- RTD GPS integration for accurate positional information
- Map 3 utilities in a single sweep with 2 person crew
- High level of QA/QC built into the field process
- No off-the-shelf software available

SMARTSurveyor

Copy of SMARTSurveyor.lnk

Questions

ONE
WAY
File Edit
Work Order Inform
Work order #:
Location:
Description:
Crew
Prior
Recorded
Inspected
Completion