Integrating Cartegraph and ArcView

City of Olathe, KS

Shafer, Kline & Warren, Inc

Olathe, Kansas

- Fast growing city
  - 1981 Population - 35,000
  - 1999 Population - 92,000
- 440 miles of waterlines
- 380 miles of sewerlines
- 4,000 hydrants
- 4,800 manholes

Shafer, Kline & Warren

- 112 year old surveying, engineering firm
- Established GIS department - 1995
- Since 1997, have worked with the City of Olathe to establish an Enterprise-Wide Geographic Information System

GIS Integration

- Over 90% of management information is geographically referenced
- Have mappers - don’t have database entry personnel
- Shared access with other departments/divisions

Implementation Strategy

- Develop Plan
  - Identify necessary tasks
  - Prioritize
- Budget for the project
- Select consultants to assist

Implementation Strategy

- Digitize maps and convert to ArcView
- Develop database structure
- Enhance integration of CartéGraph and ArcView
- Populate databases
  - Conversion
  - Data entry

Implementation Strategy

- Training
  - Familiarization
  - One on one
- Iterative development
- Go live

Develop Plan

- What infrastructure
- What management information
- What maintenance frequency
- What computing platform
- What is the cost/benefit ratio
- Who needs access
- Where will the information be stored

Budgeting

- Expensive - multi-year process
- Clear prioritization
- Software costs should total only 1/3 of total implementation costs

Selecting Consultants

- Determine type of vendor needed
  - Software
  - System Integrator
  - Maintenance group
- Selection committee must have broad representation

Creating ArcView Themes

- Water system - paper maps
- Wastewater system - AutoCAD conversion
- Goals
  - Address on Parcels
  - Numbered features
  - Improve maps as we digitize - field verification

Database Structure

- Shared relationship between the Work Director module and the inventory modules
- Establish codes
- Establish user accounts/security

Populate Databases

- Converted Excel spreadsheet files
- Data Entry
  - Multi year task - field verification of thousands of features
  - Seasonal help

Training

- Familiarization - CartéGraph training
- One on One training
  - Focused
  - At the work site

Iterative Development
Lessons Learned

- No matter how good a system is - people will always want it done their way
- Time consuming
- Make or break