# The Evolution of a Local Level GIS in Rural Oklahoma

Where We've Been, Where We Are & Where We're Going

## **Beginning**

### **State Capital Improvement Planning Act: 1992 (HB 2375)**

• "There is hereby created a Long-Range Capital Planning Commission to advise & assist the Legislature in providing for capital facilities in this state..."

- Oklahoma legislative request
- Commerce administers CDBG
- CDBG funds are highly flexible
- Planning is an eligible activity
- CDBG helps improve rural communities
- Improvements begin with planning

### Response

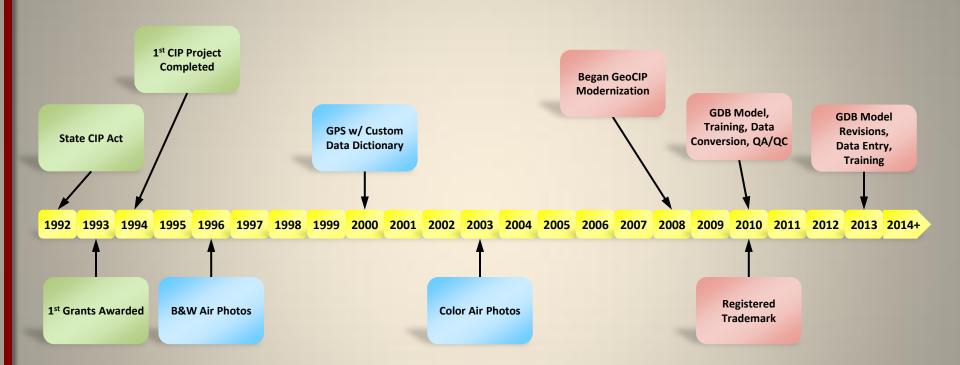
Geographical Information Systems (Geo)
&
Capital Improvement Planning (CIP)

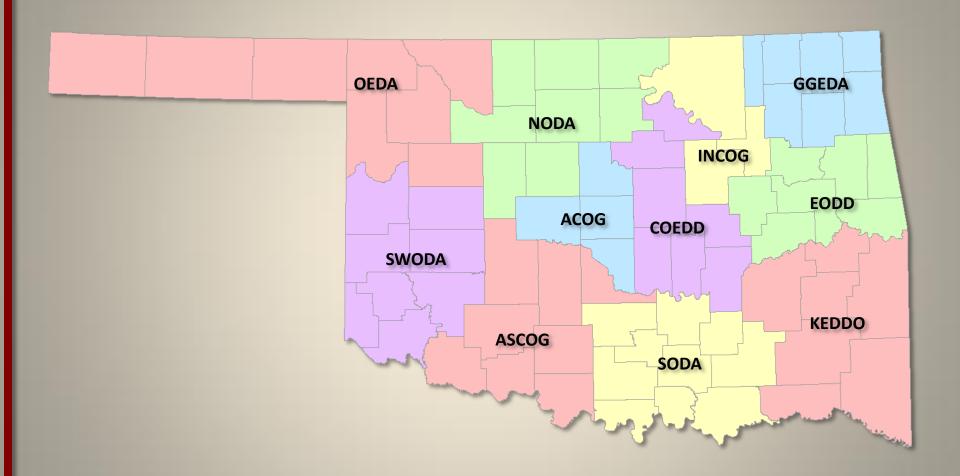
GeoCIP® is a standardized process for creating a GIS based inventory of local government assets to be used in annually evaluating asset conditions, setting improvement priorities for assets & updating the local government capital budget.

# **GeoCIP®**



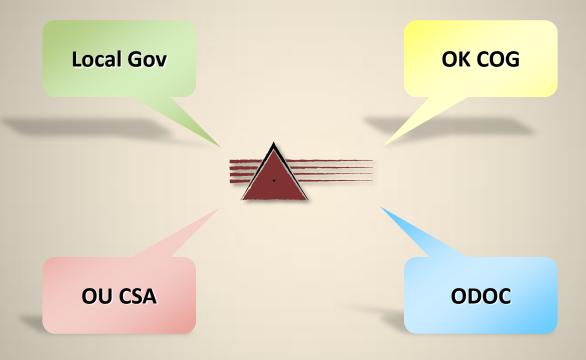
# **History**



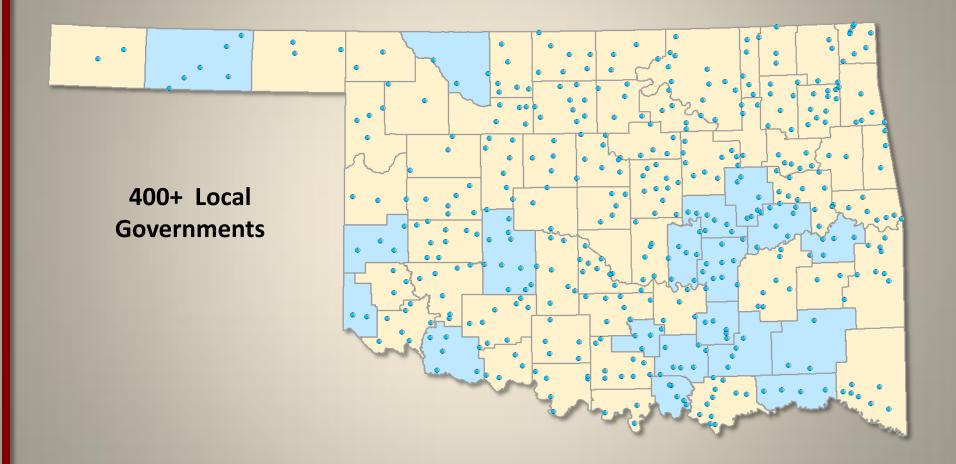


11 Regional Partners

### **Partners**



# **Participants**



(local governments that have participated in the GeoCIP program)

### **Typical Small Town Scenarios**

- Existing information is old & outdated
- No information exists
- Few persons know about the town infrastructure
- Knowledge & information lost or forgotten
- Crisis management mode
- Do nothing

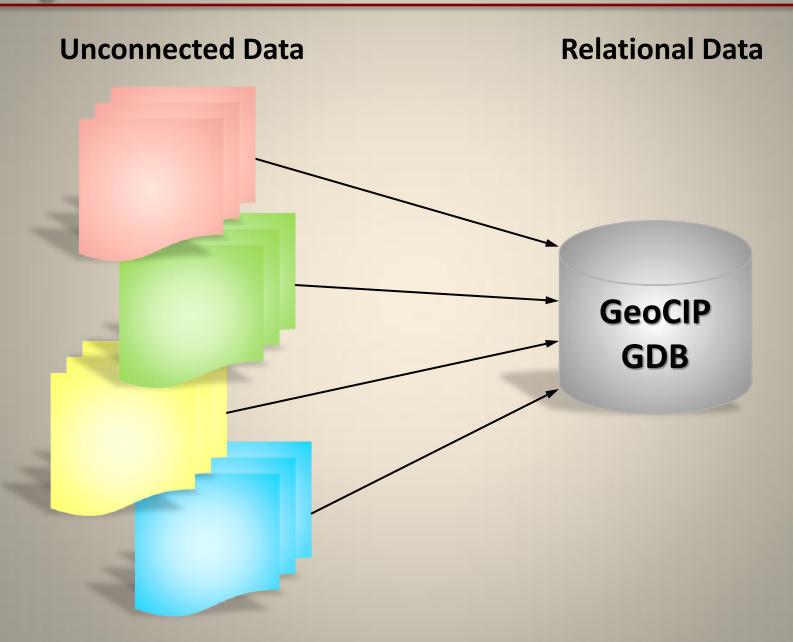
## **GeoCIP Asset Categories**

- Electric System
- Gas System
- Parks
- Public Safety
- Solid Waste System
- Storm Drainage System
- Transportation
- Wastewater System
- Water System

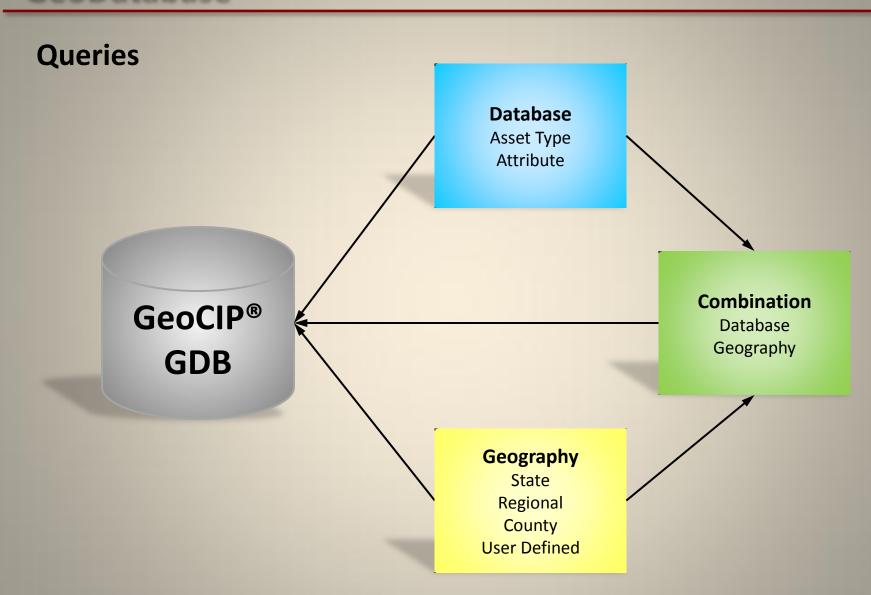
- Structure
- Equipment
- Rolling Stock
- Space Use

- 13 Asset Categories
- 63 Features
- 1071 Attributes

# **Program Modernization**

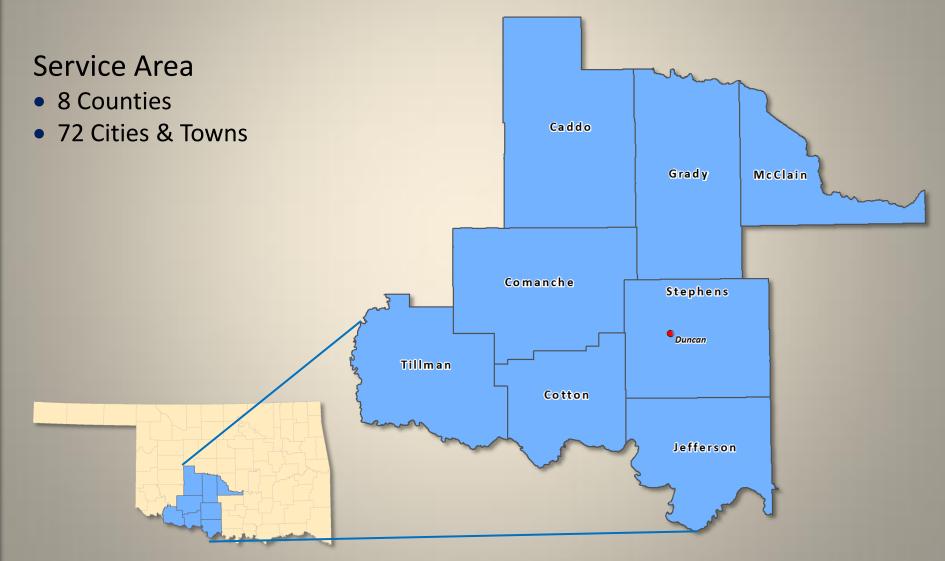


# GeoDatabase



### **ASCOG**

### **Association of South Central Oklahoma Governments**



Population: 278

Area: 0.33 sqmi (192 acres)

Located: Tillman County

Current CIP: 2012

Completion: Late Summer 2013

### Scenario:

At start of project, mayor passed away

- Project put on hold until new mayor elected
- Re-explain to new mayor & town board what CIP is
- Proceed with project
- GeoCIP used for points on CDBG & REAP Applications
  - Goes toward getting projects funded

### Waterlines:

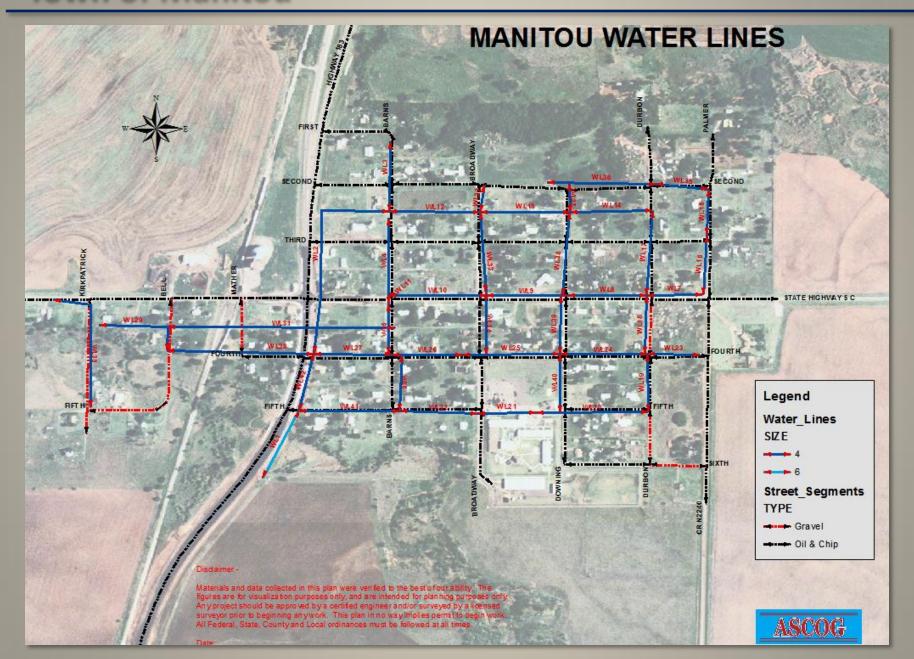
- Started working with old paper maps & working with town "Water Guy"
- "Water Guy" ONLY person in town who has slightest idea locations & conditions
- Walked & GPS'd water valves & fire hydrants ascertain line locations
- Updated locations & conditions using paper maps & "Water Guy" knowledge

### **Town of Manitou**

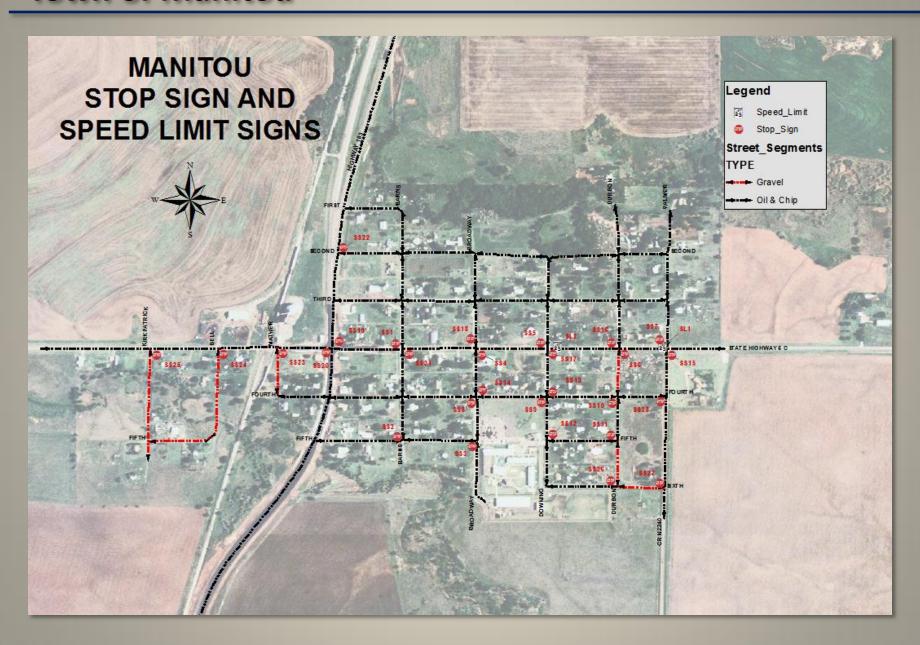
### 15 Assets Mapped & Inventoried

- Fire Station/City Hall
- Electric Lines
- Electric Appurtenances
- Wastewater Appurtenances
- Wastewater Lines
- Water Supply
- Water Lines
- Water Appurtenances
- Lagoon
- Parks
- Street Lights
- Street Name Signs
- Stop Signs
- Speed Limit Signs
- Street Segments
- City Limits
- Base layer is 2010 county aerial mosaic

### **Town of Manitou**



## **Town of Manitou**



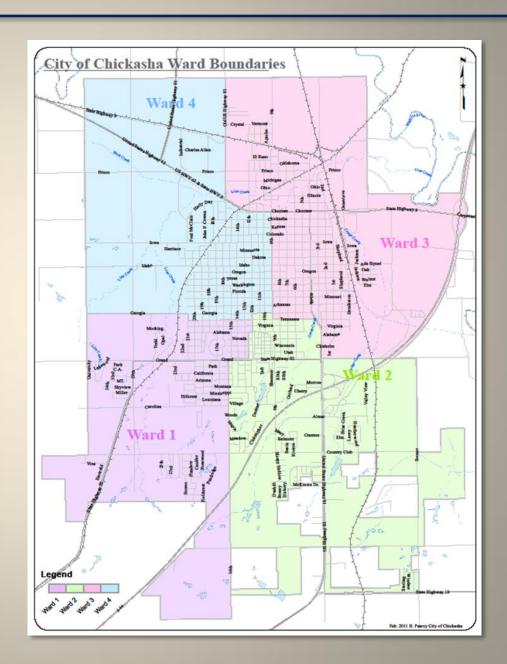
### **City of Chickasha**

### **Ward Boundaries Update**

Population: 16,360

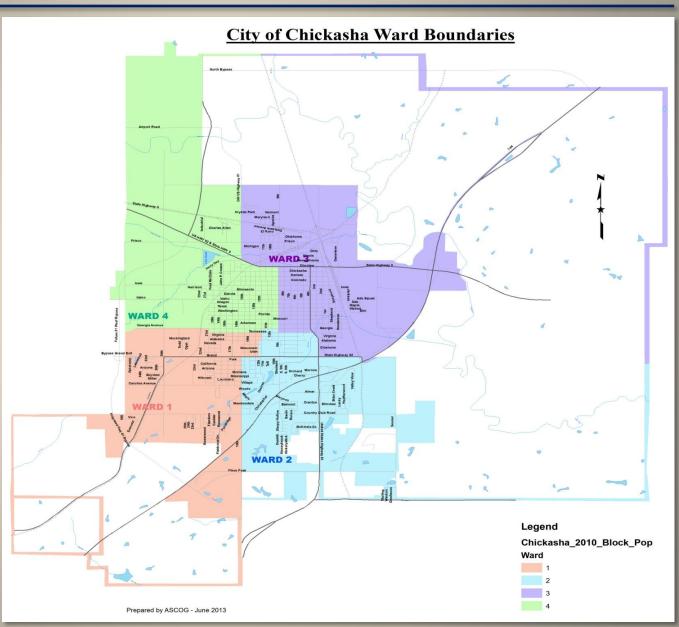
Size: ~20 sqmi

- Start with old ward boundaries
- Digitize "best fit" to 2010
   Census Blocks (population #'s)
- Overlay new incorporated limits



# **City of Chickasha**

- Digitize new incorporated limits
- Assign additional areas to wards
- Calculate population for each ward
- Present results to City for evaluation
- Finalize & create new ward boundaries



### **COG GIS Applications**

- Asset Inventory Control
- Capital Asset Management
- Cemetery Mapping
- Census Mapping
- Disaster Management
- E911
- Floodplain Management
- Grant & Project Tracking
- Hazard Area Identification
- Hazard Mitigation

- Housing
- Infrastructure Planning (CIP)
- Property Inventory
- Redistricting
- Residential Evaluation
- Commercial Evaluation
- Rezoning
- Urban/Incorporated Area Planning
- Rural/Unincorporated Area Planning
- Site Location/Business Location

### **Benefits**

### Partnerships

- Share the Load
- Broaden the "Brain Pool"

### Standardized Process

- All Doing the Same
- Uniform Training

### Integrated GIS Shop

- GeoCIP Good Foundation
- Launch Other Programs
- Initiate Additional Projects

### Intelligent Budgeting

- Identify Needs
- Encourage Planning
- Target Documented Needs

# **Challenges**

### Regional Differences

- Political
- Environmental
- Personnel

### Limited Funding

- More Competitive
- Plan Ahead

### Evolving Technology

- Justify Costs
- Improvement?

### Training & Education

- Who
- What
- When
- Where

### **Contact Info**

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