



# Town of Southington, CT

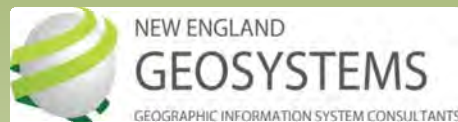
## GIS

Engineering - Public Works - WPCA

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Marwin Gonzalez – GIS Manager

Southington GIS Coordinator



1200 Boston Post Road, Suite 206  
Guilford, CT 06437  
203.404.7129  
[www.ne-geo.com](http://www.ne-geo.com)

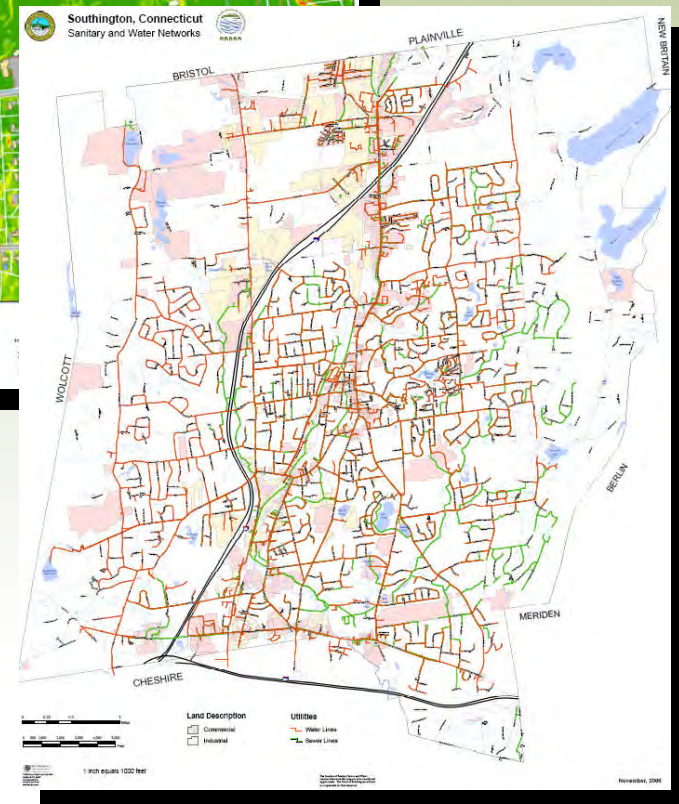
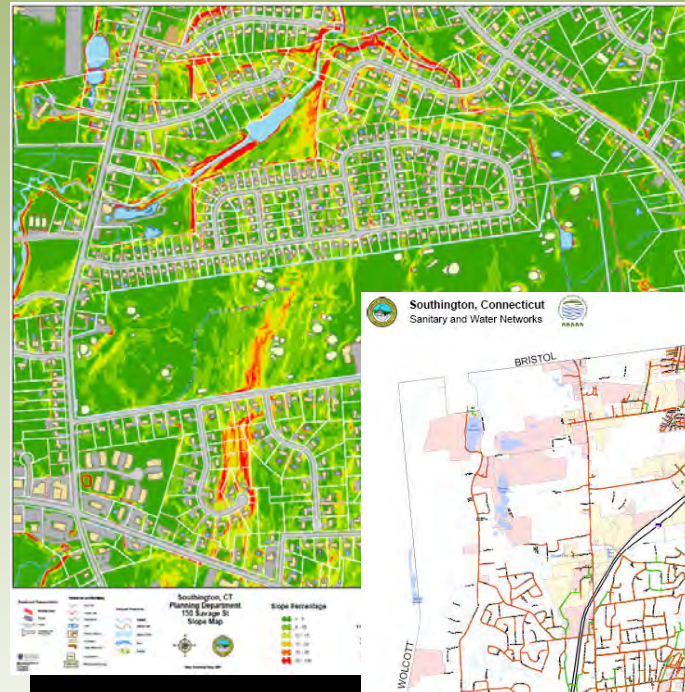




# Town of Southington, CT

## Presentation Outline

- Past, Present and Future
- GIS Data
- GIS Infrastructure
- Utilization of GIS
- Databases
- Good Times and Bad Times
- Examples





# Town of Southington, CT

## GIS Data

- 984 MB of total GIS features
- 247 MB Topic of Discussion – 25%

### Storm

- Catch basins
- Culverts
- Junctions
- Manholes
- Outfalls
- System Lines

### Sanitary

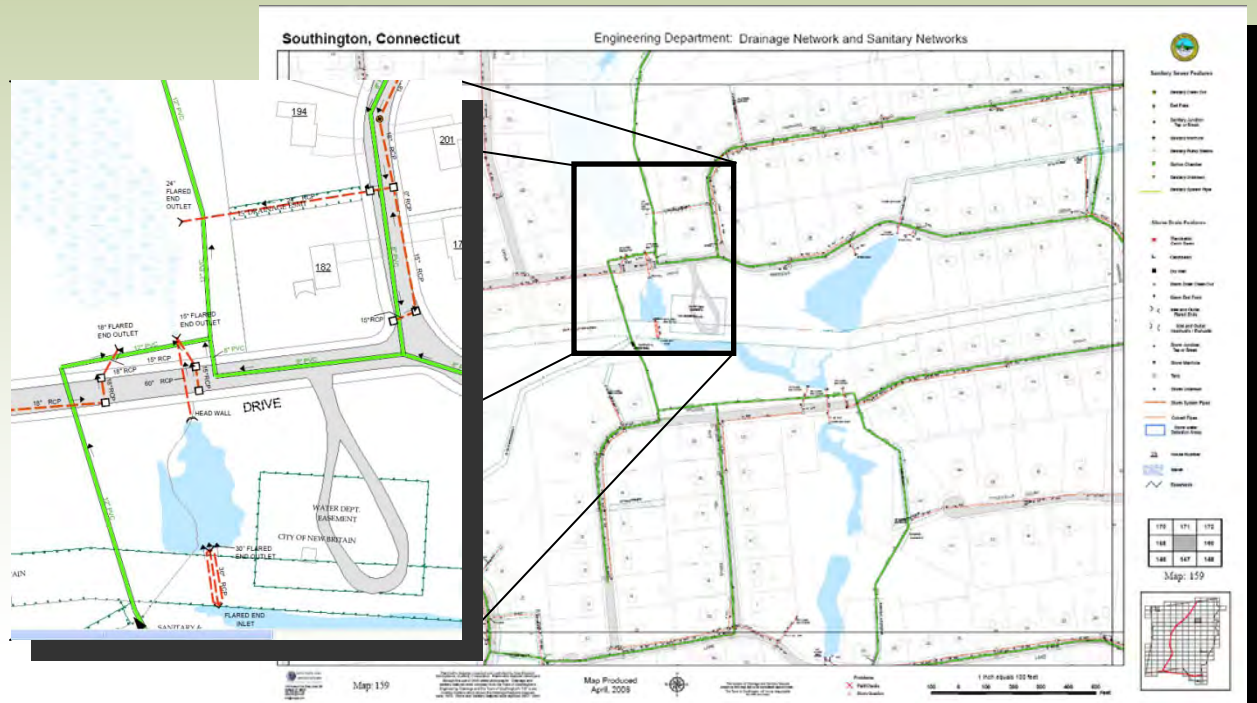
- Sanitary Lines
- Manholes
- Pump Stations
- Structures
- Scan Locations

### SWD

- Laterals
- Mains
- Casings
- Hydrants
- Meters

### Public Works

- Parks
- Trails
- Street Signs
- Light Poles
- Routes



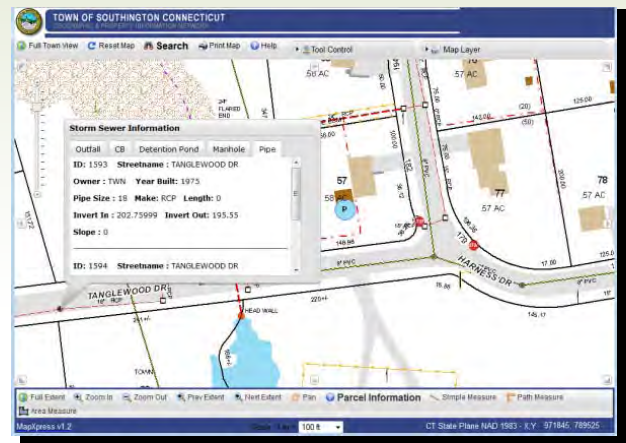
**\*\* STREET CENTERLINE \*\***



# Town of Southington, CT

## Distribution of GIS data

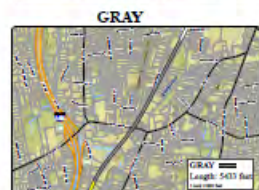
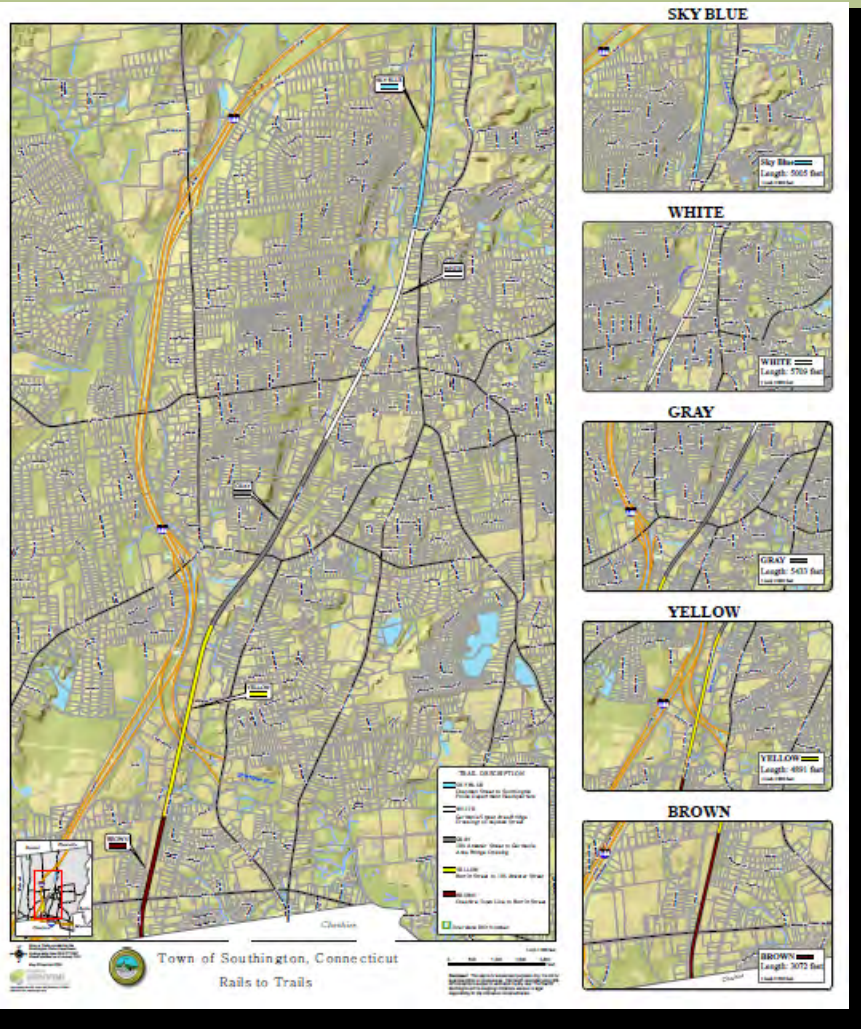
- Statics Maps
  - Storm, Sanitary and Water Utility Mapping
  - Map Books, Wall maps
- Arc Suites
  - License dependent on Department
- Public GIS Parcel Viewer
- Internal GIS Parcel Viewer
  - All Dept
  - Old / New
- New Hardware - Internal Website
  - Arc Server 10
  - Processors - Dual Quad core - each core 2.4 GHz
  - 64 bit OS windows 2008 R2 standard
  - SQL-Server 2008
  - GIS Main Hub






# Town of Southington, CT

## Distribution of GIS data






### Town of Southington Public Works

Access Point for the Town of Southington's GIS Asset Information

Choose asset to search for:


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### Town of Southington Street Sign Information

**ID# 2272 — BLOSSOM WAY**

<p><b>Street Name</b> BLOSSOM WAY</p> <p><b>Primary Sign Type</b> SPEED LIMIT 25</p> <p><b>Other Sign Type</b></p> <p><b>Condition</b> GOOD</p> <p><b>Comment</b></p>	<p><b>Nearest Cross Street</b> LANING ST</p> <p><b>Secondary Sign Type</b></p> <p><b>Pole Type</b> METAL</p> <p><b>GPS Date</b> 6/13/2006</p>
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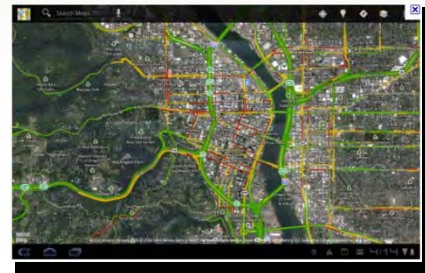
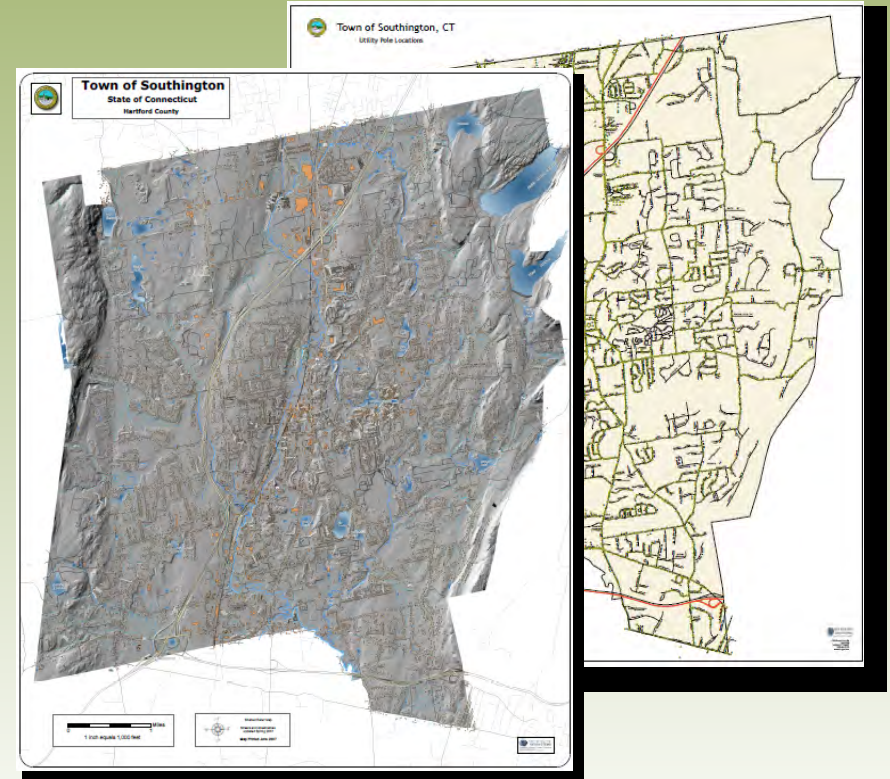




# Town of Southington, CT

## Utilization of GIS

- Statics Maps
  - Display Purposes, Field Visits, Reference
- Arc Readers, Viewers and Editors
  - Specific to users
  - Template requirement – Add Project Specific text
- Internal Viewer Software Application
  - Fast, Useful, some maintenance, did its job
  - Multi-User Platform
  - Outdated
- Public Viewer
  - View layers in the field and internally - Browser
  - Need for wireless service – Motorola Canopy Platform
  - Limitations
- New Server
  - Currently accessed throughout Town Hall
  - Future plans - virtualized and accessed Town Wide
- Mobile Technology
  - Live editable data
  - ArcSDE – central location for data editing and accessibility





# Town of Southington, CT

## Enhancing Internal GIS

- Plethora of Software applications
  - Each serving a purpose
  - Spatial Relationship
- Laserfiche
  - Document Management
- Pavement Management
  - Segmented centerline
  - Not Implemented
- Tasks
  - Scanning, Importing of Mylar and paper maps
  - Verification and Updating of GIS features
  - Videos
  - Accessibility

The screenshot displays the Laserfiche software interface, which is used for document management and GIS data handling. It features a hierarchical folder structure on the left, a central table of document entries, and a detailed view of a specific document on the right.

Name	Entry ID	Type	Pages	OCR'd Pages	Indexed
SFR10040	545127	Document	9	None	Yes
SFR10042OF	545368	Document	1	None	Yes
SFR10041O	545366	Document	30	None	Yes
SFR10041	545365	Document	3	None	Yes
SFR10030	545126	Document	3	None	Yes
SFR10020	545125	Document	1	None	Yes
SFR10010	545124	Document	17	None	Yes
SFR10000	545123	Document	6	None	Yes
S9919	544739	Document	1	None	Yes
S9370	544907	Document	1	None	Yes
S986F	544774	Document	5	None	Yes
S9865	544685	Document	6	None	Yes
S9863	544684	Document	10	None	Yes
S98620	544947	Document	3	None	Yes
S986108F	544721	Document	2	None	Yes
S9630	544906	Document	2	None	Yes
S960F08F	544773	Document	3	None	Yes
S9600	544905	Document	3	None	Yes
cccccccc	544904	Document	3	None	Yes

The right-hand pane shows a detailed view of a document titled "Sewer Inspection Reports 09143 - Laserfiche". It includes a map of a street layout with various annotations and a metadata table on the right side.

Field	Value
Template	Southington Street Index
Permit Number	09143
Location ID	
Department	Engineering
Document Type	Sewer Inspection Reports
Sub-Category	\$PARENT-Sub-Category1
Street Number	0007
Street Name	



# Town of Southington, CT

## Essential Non-Spatial Data

- Convert VHS to Digital format for editing.
  - Chop the videos between line segments
  - Digital format (mpg or wmv) conversion to Flash videos
- Verification
  - Link videos to corresponding sewer line
    - GIS ID & ENG ID
  - Use recent scans to verify existing infrastructure
    - Storm and Sewer
- Database Creation
  - Manage new and future attribute information
- New Data
  - Sub-Divisions
  - Scan locations
- 95.7 GB of videos
  - Combination of mpg, wmv, flv, avi
  - 2,927 files – 1460 are final flash videos
  - On going

Town of Southington, CT  
Outfall Identification Card

Outfall ID: 1194

Location:

Close Up Photo      General Area Photo

Directions:

This outfall is located behind address 28.

Outfall Attributes:

Type:	STRUCTURAL	Comments:	BEHIND ADDRESS IS:
Height / Width:	CANOPY ACCESS	Discharge:	No
Outfall Shape:	RECTANGULAR	Discolor:	No
Description:	BOX CULVERT	Tidal:	No
Material:	CONCRETE	Date of GPS:	03/08/17
Nearest Street:	BROOKWOOD DR		

Date: 3/15/2017

### Town of Southington, CT Sewer Videos



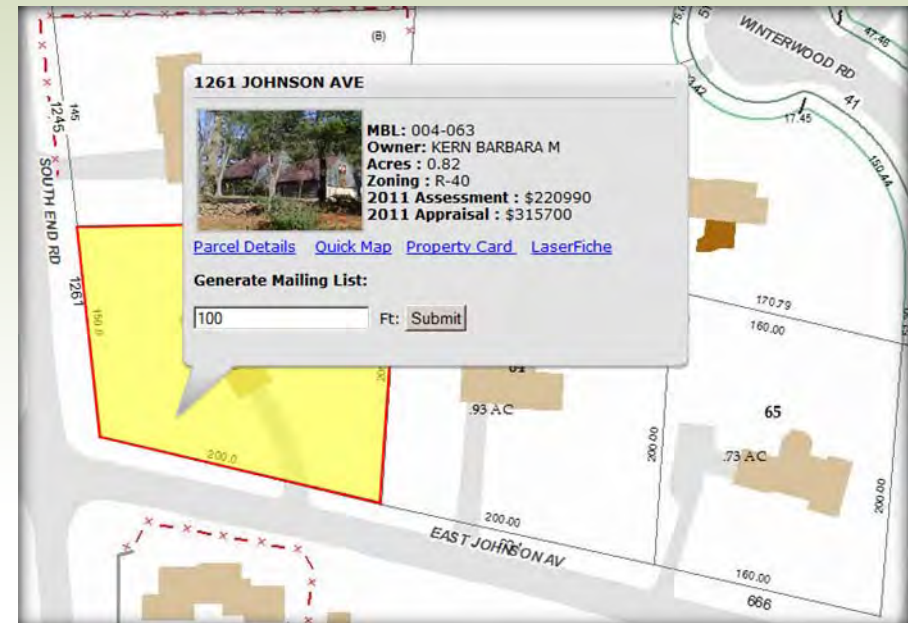




# Town of Southington, CT

## Collaboration for an Effective GI System

- Consider all municipal entities
  - What works for one dept may dramatically affect the other
- Engineering Dept
  - Streets and Addressing
  - Centerline
- Various Sources
  - Which is Authoritative?
  - Committee formed
- Decisions driven by GIS
  - Benefits all





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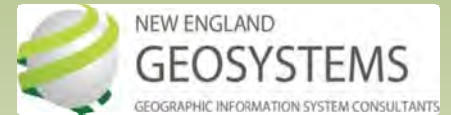
## SQL-Server

- Relational Databases and ArcSDE
  - Redundancy of Data
  - Ease of updating Spatial and Non-spatial files
- Automation
  - 99% Maintenance free
- Mobile Solutions
  - In Development
  - Research – Define your needs

A screenshot of Microsoft SQL Server Management Studio. The interface shows a server instance named 'master' connected to a database. The left pane displays a tree view of database objects, including tables like 'dbo.AnnRect', 'dbo.AuditAccess', etc. The main window shows a SQL query being executed: 

```
SELECT TOP 1000 [TocId]
  [ParentId]
  [Name]
  [LastModified]
  [CreateDate]
  [InheritAc]
```

 The 'Results' pane displays a table with columns: TocId, ParentId, Name, LastModified, CreateDate, InheritAc, IsIndexed, and VolumeId. The status bar at the bottom indicates 'Query executed successfully' and '1000 rows'.



**Thank you for your time.**