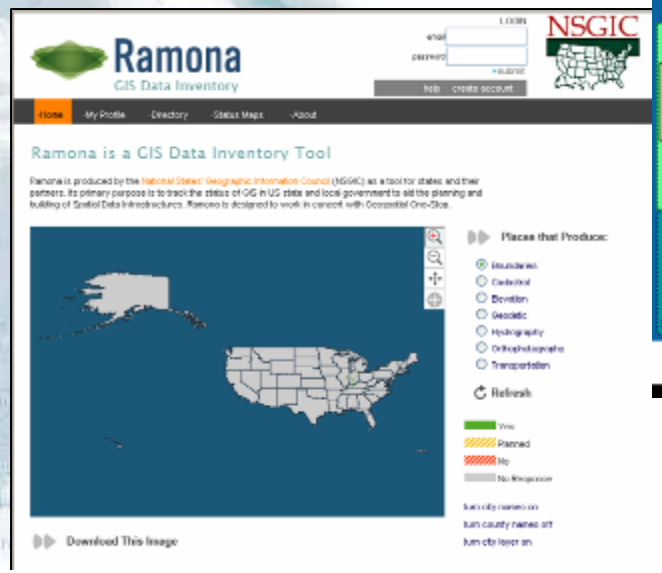
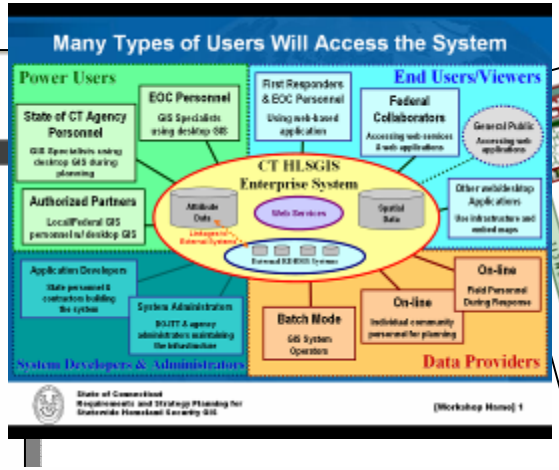
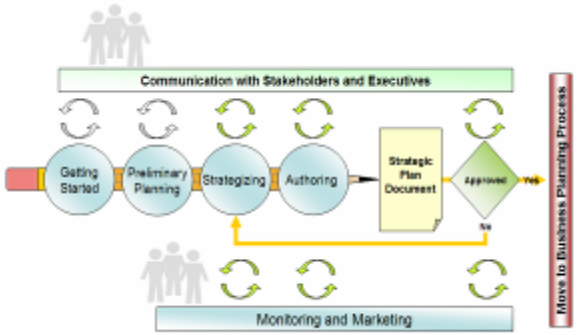
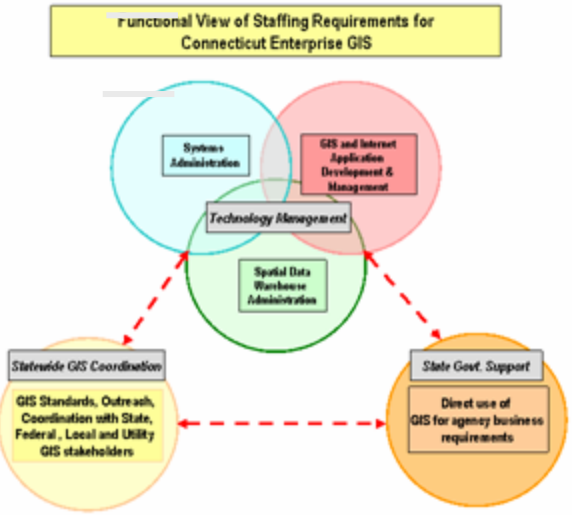
State of Connecticut

Developing Geospatial Strategic and Business Plans for the State of Connecticut









Strategic and Business Planning Findings and Recommendations

Agenda…

- **Findings and Recommendations contained in Connecticut's Strategic and Business Plans**
  - **Summary vision**
  - **Goals that have been established**
  - **High level approach to meeting each goal**
  - **Other recommendations**

What are the *Strategic* Goals for the State of Connecticut?

Strategic Goals :

1. ***Improve coordination*** and ***organize GIS efforts*** across all levels of government (federal, state, regional, and local)
2. ***Develop*** a ***core*** set of ***framework data layers*** that can be shared across state agencies and with local government
   - Orthos
   - Parcels
   - Street Centerlines
   - Address Points
3. ***Communicate*** the ***benefits*** of and ***educate decision makers*** on the use of geospatial technology to increase adoption and provide sustainable funding

What are the *Strategic* Goals for the State of Connecticut?

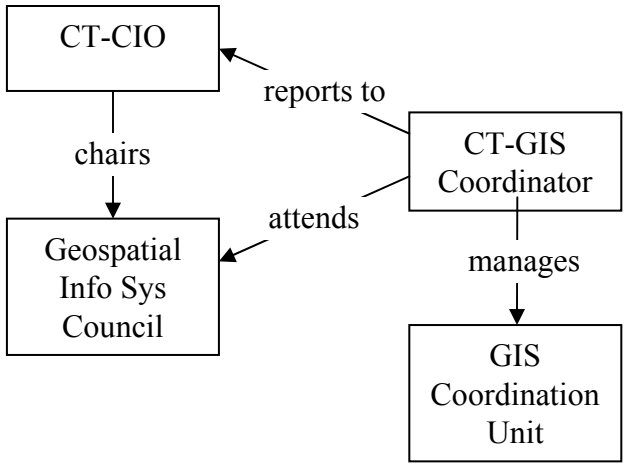
Strategic Goals :

1. Improve **coordination** and **organize GIS efforts** across all levels of government (federal, state, regional, and local)
   - **Purpose:**
     - Improve ***coordination*** and avoid redundant efforts
     - Help set ***priorities*** to target funding initiatives
     - Provide geospatial ***guidance***, share technology and expertise
   - **Sub-goals:**
     - Create GIS Coordination Unit as part of the Department of Information Technology
     - Inventory federal, state, regional, and local government geospatial activities
     - Create state GIS clearinghouse as repository

Create GIS Coordination Unit as part of the Department of Information Technology

Status:

- Two staff positions have been created within DoIT
  - GIS Coordinator/Manager
  - Technical Analyst
- Staff needs to be freed up to focus on geospatial coordination



Requirements:

- Staffing required to support Connecticut's Geospatial activities:
  - GIS Coordinator
  - GIS Outreach Coordinator
  - Technical Manager/DBA
  - Enterprise Analysts (2)

Responsibilities:

- Inventory and coordinate federal, state, and local government geospatial activities

Create and Manage GIS State Clearinghouse

Status:

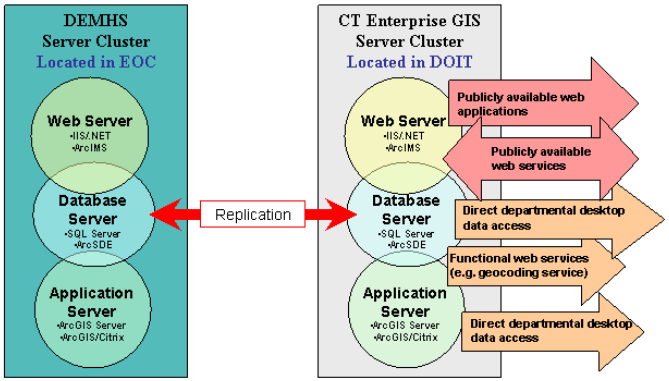
- Base infrastructure created by DEMHS HLS project and additional FGDC funding
- Hubs of federated systems being created
  - EOC
  - SIMS
  - DOT

Requirements:

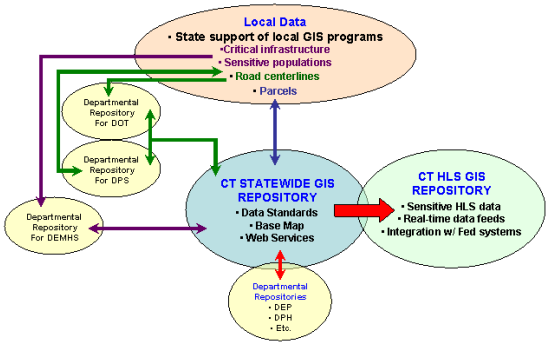
- Federated System
  - Consolidated repository
  - Definitive source for all stakeholder groups
  - State Departments manage data sets they are responsible for
  - Direct and indirect interaction with muni's or RPO's

Vision for CT Enterprise GIS Architectural Overview

Dual clusters to provide redundancy and the ability for the EOC to function when power and internet are unavailable.



Some Data Sets Will Require a Modified Workflow Whereby Data Travels from a Local Entity to the Statewide Repository via a State Agency Repository



What are the *Strategic* Goals for the State of Connecticut?

Strategic Goals :

2. Develop a **core** set of **framework data layers** that can be shared across state agencies and with local government.
   - **Purpose:**
     - Creating ***data*** is ***expensive***, ***sharing*** data is very ***cost-effective***
     - Cooperative ***partnerships*** increase ***quantity***, ***quality*** and effectiveness of data available
     - ***Construction*** of ***high-priority data layers*** supports the SSDI and NSDI
       - Orthos
       - Parcels
       - Centerlines
       - Address Points
     - Eliminate redundancy and focus expenditures to benefit all stakeholders
   - **Sub-goals:**
     - Establish subgroup of GISC data workgroup for each priority data layer
     - Refine each data layers requirements for all stakeholder groups
     - Develop detailed business plan for each data layer

Creation of a Statewide Orthophoto Program

Status:

- 2004 Statewide Imagery Program
- 0.8’ resolution (~9.6 in.)
- 1” = 200’ Scale (+/- 4-5’ spatial accuracy)
- Black and White Photography
- 88% of respondents “need this to do their work”
- Usability:
  - Not color balanced serious issue
  - Format of data (tiled)
  - Three different years data used to complete coverage

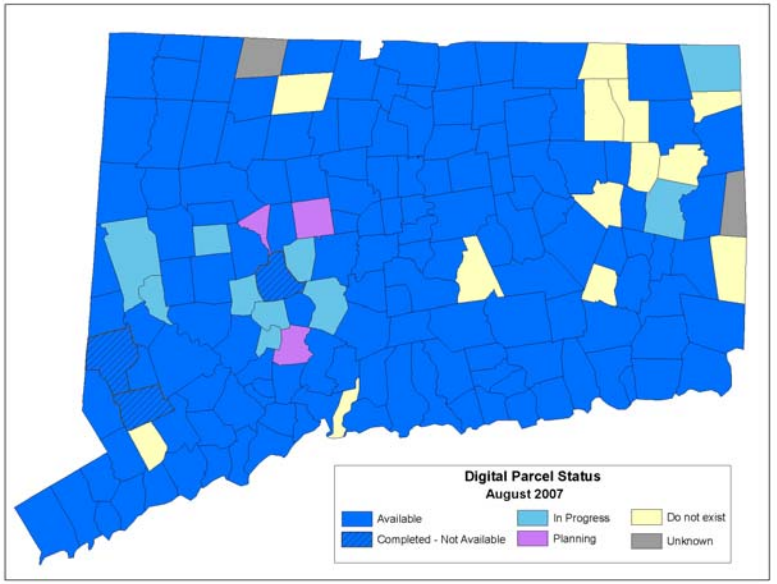
Requirements:

- New digital multi-spectral imagery acquired every 5 years
  - Spring, color, 6” pixel resolution flight and product
  - 1”= 100’ as base
  - Tie to Assessor's revaluation cycle
- Participate in Imagery for the Nation program
  - Base paid for by Federal and State funds, offer “buy-up” program for other organizations in contract
  - Increased accuracy, resolution
  - Derivative products (CIR, imperious surface, LU/LC)
- Collect Lidar elevation data (support 2’ contour generation preferred, 5’ as fallback)
- Historic photos are important to large number of stakeholders

Creation of a Statewide Parcels Layer

Status:

- Digital parcels exist for 83% of the State (141 muni's)
- 10 more are in process of developing (6%)
- 3 more planning projects within the next year (3%)
- Total 92% parcels available in the next year
- No digital parcel standards
- 100% of LGA's "need it to do their work"



Requirements:

- Comprehensive Parcel Layer Statewide
- Based on standard
- Updated on an annual basis
- Create from tax maps
- Map to 1" = 100' scale accuracy
- No owner names required at a state level
- Establish official municipal boundaries via survey

Recommended Approach:

- Create subgroup of data workgroup for parcel layer creation
- Create detailed business plan for creation of layer
- Create state parcel standard
- Provide parcel grants for conformance with standard or backfilling of gaps

Creation of a Statewide Centerline Layer

Status:

- TANA data licensed and available for all government entities
- Lacks accuracy (spatial and attribute) for detailed decision making
- Commercial product deters municipal participation
- 80% of respondents “need this layer to do their work”
- 12% did not know they exist
- Duplicative efforts at state and local level

Requirements:

- Establish single, uniformly accurate, and complete, centerline layer
- Cooperative effort between state and local government
- Must be maintained and kept current (annually)
- 1’=100’ scale accuracy for local government needs (State 200 scale)

Recommended Approach: (some of this is already being done)

- Create subgroup of data work group for centerlines
- Create detailed business plan for creation of layer
- Evaluate potential sources of data (commercial, AT&T, internal)
- Create state standard for submission of updates by municipalities

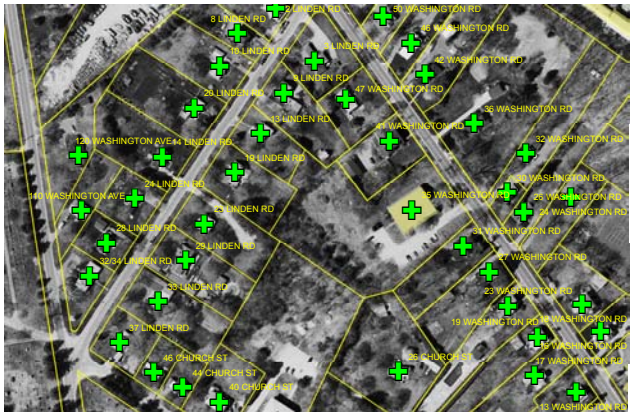
Creation of a Statewide Address Point Layer

Status:

- 48% of survey respondents said they have an address point layer
  - Many responses qualified that they were using centroids of parcels
  - Much lower percentage at info gathering sessions
- Additional 28% said they desire, but no known source
- 76% "said they need this layer to do their work"

Requirements:

- Comprehensive address point layer for all physical structures
- Cooperative effort between state and local government
- Must be maintained and kept current (quarterly to monthly)
- 1'=100' scale accuracy



Recommended Approach:

- Create subgroup of data work group for centerlines
- Create detailed business plan for creation of layer
- Involve all levels of government in process (federal, state and local)

What are the *Strategic* Goals for the State of Connecticut?

Strategic Goals :

3. ***Communicate*** the ***benefits*** of and ***educate decision makers*** on the use of geospatial technology

- **Purpose:**
  - Increased ***awareness*** will increase use, ***maximize benefits*** and lead to more ***support***
  - ***Relate*** GIS ***funding*** requests to specific statewide ***initiatives***
  - Identify and ***build relationships*** with multiple ***champions***
- **Sub-goals:**
  - ***Identify programs*** that can ***benefit*** from geospatial technology
  - Develop ***communication*** and ***outreach program*** for geospatial initiatives
  - Develop ***educational materials*** that support programs

Creation of communication and outreach program

Status:

- The only formal activity that exists in this area is the training and education workgroup of the GISC
- Many avenues do exist
  - RPO's Community Outreach Coordinators
  - GIS User 2 User Group
  - Conference and trade organizations (CCM, CT APA, etc)

Requirements:

- Create an atmosphere of open dialogue and bidirectional flow of information with all stakeholder groups
- Cooperative effort with other regional government efforts

Recommended Approach:

- Establish Communication Plan
  - Identifies and transmits messages about current and future events
  - Notifies and documents decisions made and standards that have been set
  - Creates standard presentations or materials for use in educating
- Create Outreach Plan
  - Proactive program of engaging the community to provide guidance
  - Identifies opportunities available for use of the technology and reaches out to appropriate parties
  - Engage multiple potential champions that will support and fund geospatial activities
- Hire Outreach Coordinator as part of GIS Coordination Unit to develop and/or execute plans

Other Recommendations

Technology

- Most stakeholders have high speed access at their desktop
  - Web Services approach most appropriate for data distribution
  - FTP and CD/DVD as a backup plan
- Develop basic web viewer application to provide access to those communities that do not have GIS
- In general stakeholders are looking for more advanced training on GIS topics
  - Advanced desktop GIS
  - Advanced server techniques
  - Advanced RDBMS

Geospatial Council

- Addition of additional state departments that are more commonly found on GISC's
  - DSS, DMR, DOC, State Police
- Addition of Federal Member to GISC (27% voting, 55% invited)
- Addition of utility representative on council (26% voting, 81% invited)
- Modify that CIO is always chair of GISC, currently Governor appointed

Legislative

- Need to create repository for information on distribution of Geospatial data
  - Past FOI cases and rulings
  - Process for exemption of GIS data with DPW (DEMHS, October)
  - Past data sets that have been exempted, those that have not
  - Standardized fee structure for distribution of data to requestors

Questions and/or comments?