

***GITA's  
Geospatial Enabling  
Community Collaboration  
Tampa Area Workshop***



# Welcome and Introductions

Bob Samborski  
Executive Director  
GITA



# Special Thanks

- The University of Tampa
- Gas Technology Institute (GTI)
- City of Tampa
- Delta State University
- USGS/DHS



# GECCo Workshop Leaders

## **Talbot Brooks \***

Director, Interdisciplinary GIS Center  
Delta State University  
Cleveland, Mississippi

## **Robert Samborski**

Executive Director  
Geospatial Information &  
Technology Association  
Denver, Colorado

## **Andy Lund**

Vice President  
Sentinal USA  
Tampa/St. Petersburg, Florida

## **Dave DiSera**

Chief Information Officer & VP  
First Insurance Co. of Hawaii  
Honolulu, Hawaii

## **Robert Austin, Ph.D.\***

Manager of Enterprise  
Application Integration  
City of Tampa  
Tampa, Florida

## **Doug Leibbrandt \*\***

General Manager  
GeoEye  
Mission, Kansas



\* = GITA Board of Directors

\*\* = President of GITA



# Workshop Participants

## Local & Regional Government

- City of Tampa
- City of Tampa Police Department
- City of Lakeland
- City of St. Petersburg
- Hillsborough County
- Hillsborough County Public Works
- Hillsborough County Affordable Housing Office
- Pinellas County
- Pinellas County BTS
- Pinellas County Sheriff's Office
- Sarasota County
- Southwest Florida Water Management District
- ECFRPC
- HART



# Workshop Participants

## State Agencies

- Florida Division of Emergency Management
- Florida DOT
- Florida Fish and Wildlife

## Utilities

- TECO Energy
- Progress Energy
- Tampa Electric
- TECO Peoples Gas
- Hillsborough County Water Resources Services
- Withlacoochee River Electric Cooperative
- Sunshine State One Call

## Federal Agencies

- USGS/DHS
- NOAA

## Military

- USCG
- MacDill AFB

## Other

- EcoSystem Partners
- DEL-JEN
- Sentinel USA
- University of South Florida
- University of Tampa
- Delta State University
- Gas Technology Institute



# About GITA

The Geospatial Information & Technology Association (GITA) is the professional association and leading advocate for anyone using geospatial technology to help operate, maintain, and protect the infrastructure, which includes organizations such as utilities, telecommunication companies, and the public sector.



# GITA's Industry Representation and Outreach

- Non-profit, Independent Professional Organization
  - Rich History of Partnering with Public and Private Organizations
  - Community of Pragmatic GIT Related Professionals
  - Extensive Volunteer Leadership Network – Board of Directors, Committees, Task Forces, etc...
  - Applied Research Focused on Critical Infrastructure and Emergency Response (Geospatial Dimensions of Emergency Response Symposium)
- Organizational Network
  - Local, Regional, State, & Federal Agencies
  - Utility Sectors
  - International Best Practices (i.e., ROADIC)
  - Other Public and Private Association Partners
- Communication Channels – GIS Research Projects, Web casts, Conferences, Seminars, Publications...



# GITA Community

GITA Community											
Infrastructure			Government				Private & NP			International	
Emergency Services			Local				Non-profit Associations			Public Organizations	
Energy (Electric, Oil, Gas)			County/Regional				Vendors			Private Sector	
Water/wastewater			State/Provincial				Consultants/SME's			Utilities	
Telecommunications			Federal (FGDC, etc.)								
Transportation											



- ▶ HOME
- ▶ WHITE PAPERS
- ▶ ERS
- ▶ GECCo
- ▶ PRESS

# CIP-ER SPACE

Your Geospatial Resource for  
 Critical Infrastructure Protection-Emergency Response



## Recent News

### GITA Announces New "CIP-ER" White Paper Series

Aurora, Colo., Nov. 19, 2008—The Geospatial Information & Technology Association (GITA) announced the release of a new *Geospatial Dimensions of Critical Infrastructure Protection and Emergency Response (CIP-ER) white paper series, which will include at least seven white papers published into the fall of 2008 and spring of 2009.*

[▶ read more](#)

## Welcome to GITA's CIP-ER Space

### About CIP-ER Space

The Critical Infrastructure Protection-Emergency Response (CIP-ER Space) is a collection of the Geospatial Information & Technology Association's (GITA's) work for geospatial solutions for critical infrastructure protection and emergency response. From white papers to a Symposium and workshops, this is a valuable resource for anyone with a vested interest in geospatial solutions for the infrastructure.

### About GITA

The Geospatial Information & Technology Association (GITA) is the professional association and leading advocate for anyone using geospatial technology to help operate, maintain, and protect the infrastructure, which includes organizations such as utilities, telecommunication companies, and the public sector. Through industry leading conferences—along with research initiatives, chapters, membership, and other programs—GITA provides education and professional best practices. Visit GITA's home page, [www.gita.org](http://www.gita.org), for more information on membership and conferences.

### GITA's Current CIP-ER Initiatives

<a href="#">Receive CIP-ER E-mail Updates</a>	<a href="#">GECCo</a>
<a href="#">CIP-ER White Paper Series</a>	<a href="#">Articles and Press Releases</a>
<a href="#">Geospatial Dimensions of Emergency Response Symposium</a>	<a href="#">Directions' Disaster Management and Response</a>

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# Workshop Goal

- To build on the experiences and knowledge gained from previous local and regional exercises in the greater Tampa Bay area in order to further examine and begin resolving the **collaboration and geospatial information exchange issues** that characterize critical infrastructure interdependencies and inhibit effective emergency preparedness and response.



# Workshop Objectives

- Identify local initiatives and resources and discuss how to improve the flow of information and data from federal to local levels
- Enhance understanding of Geospatial Information Technology (GIT) as a key tool for supporting critical infrastructure protection and emergency management
- Examine data sharing and collaboration issues and opportunities among public and private infrastructure owners (governments, utilities, first responders, etc.)



# Workshop Objectives

- Benefit from GITA's Geospatially Enabling Community Collaboration (GECCo) program findings from previous GECCo workshops in other regions of the U.S.
- Define next steps for improving collaboration and information exchange of critical infrastructure interdependencies to support more effective emergency preparedness and response using GIT



# Workshop Agenda - Tuesday

Tuesday, January 13, 2009	
8:00 am	<b>Registration and Continental Breakfast</b>
9:00 am	<b>Welcome and Introductions</b> – Bob Samborski, Executive Director, GITA
9:30 am	<b>Defining and Coordinating Key Stakeholder Roles</b> – Representatives from federal, state and local agencies, utilities and emergency response communities will set the stage for a discussion of how to improve communication, coordination and cooperation
10:30 am	<b>Local and Regional Exercises: Summary of Findings</b> – Overview of results from various area emergency response and Critical Infrastructure Protection (CIP) exercises in the greater Tampa area
11:30 am	<b>GECCo Findings</b> – An Overview of GITA's GECCo program and findings to date
<b>Noon</b>	<b>Lunch (to be provided)</b>
1:00 pm	<b>Facilitated Discussion:</b> Workshop attendees will help identify community initiatives and resources, challenges, critical elements of successful collaborations and opportunities for improvement
1:45 pm	<b>Working Session I</b> – Groups define collaboration and data sharing challenges (breakouts)
2:30 pm	<b>Group Discussion</b> – Groups present and discuss their findings from Working Session I
3:00 pm	<b>Working Session II</b> – Groups identify opportunities for improving collaboration and data sharing
3:45 pm	<b>Group Discussion</b> – Groups present and discuss their findings for Working Session II
4:15 - 4:30 pm	<b>Summary and Adjourn</b>



# Workshop Agenda - Wednesday

Wednesday, January 14, 2009	
8:30 am	<b>Continental Breakfast</b>
9:00 am	<b>Working Session III</b> – Three 40 minute sessions covering key topics such as: <ul style="list-style-type: none"><li>• Using of the National Grid</li><li>• Understanding vertical datum</li><li>• Planning Ahead:<ul style="list-style-type: none"><li>- <b>Advance contract negotiations</b></li><li>- <b>Data sharing agreements and collaboration</b></li></ul></li></ul>
11:30 am	<b>Working Session IV</b> – Develop recommendations and next steps for a Tampa GECCo program
Noon	<b>Summary and Adjourn</b>



# ***Defining and Coordinating Key Stakeholder Roles***



# Defining and Coordinating Key Stakeholder Roles

- Emergency Services – Corporal Doug Pasley, Tampa Police
- Local Government - Bob Austin, City of Tampa
- Utilities/Infrastructure – Brian Dean, Sunshine State One Call
- State Government – Richard Butgereit, FL Division of Emergency Management
- Federal Government – Michael Lee, USGS/DHS



# ***Local and Regional Exercises: Summary of Findings***



# Local and Regional Exercises: Summary of Findings

- Overview of results from various area emergency response and Critical Infrastructure Protection (CIP) exercises in the greater Tampa Bay area



# ***GITA's GECCo Overview and Objectives***



# GECCo Overview

- In 2002 GITA created the GECCo Program to respond to Presidential Directive 7, “...*reduce and/or eliminate the vulnerability of the infrastructures of society’s complex technology systems that increase the difficulty for attacks on US systems*”
- 85% of critical infrastructure privately owned and operated
- User driven, bottom-up versus top down
- Supports/enables ongoing F-S-L emergency management and CIP initiatives



# GECCo Objectives

- To provide a framework by which by public and private organizations can better collaborate and share information to protect critical infrastructure and relate interdependencies
- To assist infrastructure owners with:
  - Identifying and accessing the interdependencies of critical infrastructure
  - Building an actionable plan for mitigating and protecting those critical infrastructures
  - Establishing procedures and standards



# GECCo Process

- Find organizations willing to take on leadership role to bring stakeholders together to support critical infrastructure protection
- Hold a “kick-off” interactive regional workshop to raise awareness and facilitate networking
- Design and conduct an infrastructure protection and interdependencies exercises



# GECCo Process

- Identify gaps and recommend solutions
- Develop a prioritized action plan of activities for inclusion into a critical infrastructure strategy
- Define project requirements, assist with securing funding and technical assistance for implementation



# Past GECCo Initiatives

- City and County of Honolulu, Hawaii
- City of Denver and the Front Range, Colorado
- Western New York State, Southern Tier West Regional Planning Agency, New York
- City of Seattle and King County, Washington
- Greater Tampa Area, Florida!



# GECCo Current Initiatives

- Gas Technology Institute Collaboration
- Critical Infrastructure Protection Manual and Templates
- Critical Infrastructure Interdependencies White Papers
- A Practitioner's Guide to Critical Infrastructure Interdependencies
- Critical Infrastructure Interdependencies Applied Research Project Agenda



# GECCo Applied Research



Critical Infrastructure  
Protection and Emergency  
Management

- Data Sharing and Collaboration Project Manual and Templates

Geospatial  
Interdependencies of  
Critical Infrastructure

- A Practitioner's Guide



# Data Sharing and Collaboration

## Manual and Templates

- Geospatial Data Sharing and Collaboration Project Overview
- Model Letter of Intent and Data Sharing Memorandum of Agreement
- Model Confidential Agreement
- Data Sharing and Collaboration Project Purpose and Partnering Process
- Critical Infrastructure Interdependencies Material and Exercise



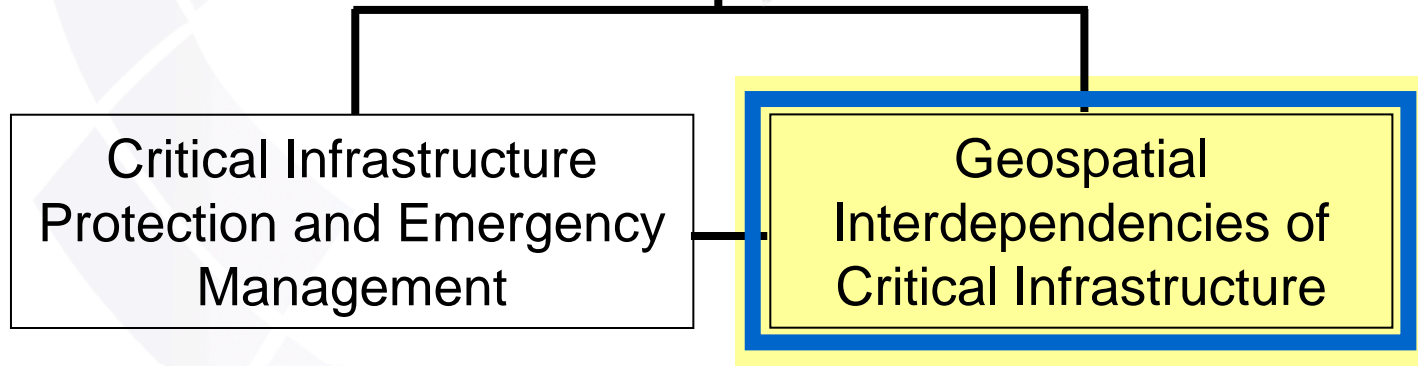
# Data Sharing and Collaboration

## Manual and Templates

- Data Sharing and Collaboration Project Overview Presentation Material
- Example Emergency Management and Critical Infrastructure Protection Recommendations
- Example GIS Applications for Emergency Management and Critical Infrastructure Protection
- Model Guideline Considerations for Spatial Data Access and Sharing



# GECCo Applied Research



- Data Sharing and Collaboration Project Manual and Templates

- A Practitioner's Guide



# Geospatial Interdependencies of Infrastructure: A Practitioner's Guide

- Critical Infrastructure Protection and Interdependencies Overview
- Critical Infrastructure Protection Interdependencies by Industry
- Critical Infrastructure Identification, Classification, and Modeling Processes
- Critical Infrastructure Protection Checklist
- Steps for Creating a Partnership Among Infrastructure Owners



# ***Findings from Past GECCOs***



# Summary of Past GECCo Findings

- Workshop Identified Needs
  - Collaboration and Support Theme
  - Data and Database Management Theme
  - Interoperability and Accessibility Theme
  - Practices and Processes Theme
- Barriers to Collaboration
- Keys to Collaboration and Data Sharing Success



# Summary of Past GECCo Findings

## Collaboration and Support Theme

- Funding (local, state, federal)
- There is also a lack of digital infrastructure at the local level
- Lack of a framework and a mandate
- Need to answer the question, “What’s in it for me?”
- Need to explain the ROI
- Organizations take a very short term view
- The ability to manage expectations about the technology and data is very important



# Summary of Past GECCo Findings

## Collaboration and Support Theme

- Establish data sharing agreements among essential public and private organizations
- Establish advanced contracts for data collection, such as the use of remote sensing technology for incident management
- Develop predefined list of GIS and other technical personnel and vendors required to support an event
- Data formats, translations, data currency are major issues for sharing data
- Differing priorities complicate the situation



# Summary of Past GECCo Findings

## Data and Database Management Theme

- Predefine all critical infrastructure data necessary to support planning for and responding to an event
- Establish back-up data center
- Consolidate multiple datasets of duplicate data into a single environment
- Consider the cost associated with maintaining data when estimating a project or initiative
- Multiple sources of the same data confuse the issue when different organizations need to share data



# Summary of Past GECCo Findings

## Data and Database Management Theme

- Develop a critical infrastructure database model to support emergency response and critical infrastructure protection
- Create/share single, common georeferenced landbase (e.g., buildings, utilities, street and building addresses)
- Develop predefined metadata standards to ensure the best possible data are used in making decisions
- There are different data models that complicate sharing



# Summary of Past GECCo Findings

## **Interoperability and Accessibility Theme**

- There is a technology gap at several levels: the public's inability to communicate; people on the ground; not PC literate; paper-oriented
- Data formats between Computer Aided Dispatch and GIS systems are an issue
- Planning processes need to incorporate 'what to do when all else fails'



# Summary of Past GECCo Findings

## Interoperability and Accessibility Theme

- Establish guidelines for shared data with the media during and after an event
- Develop interoperability standards to enable the integration and exchange of related critical infrastructure protection data
- Develop mobile mapping capabilities for both taking data in the field and collecting it during and after an event
- Establish an ftp site for monthly data exchange



# Summary of Past GECCo Findings

## Practices and Processes Theme

- Establish a process and/or clearing house to organize and integrate both internal and external data together and distribute it
- Establish emergency map production capabilities in more than one location
- Establish coordination of map production across agencies (Federal, State, City, private organizations)
- Establish data collection responsibilities among multiple agencies (e.g., environmental monitoring, building inspections)



# Summary of Past GECCo Findings

## Practices and Processes Theme

- Testing and preplanning necessary
- Interagency coordination and exchange cross-agency practices often lacking
- First response management missing GIS tools
- Set up field procedures in advance



# Summary of Past GECCo Findings

## Barriers to Collaboration

- Security issues - data getting into the wrong hands
- Competitive information gets in the way of sharing data when planning for and responding to an event
- Vulnerable infrastructure assets are not easily identifiable or available for emergency events
- Same data, different formats and accuracies, including the data format issues between software vendors



# Summary of Past GECCo Findings

## Barriers to Collaboration

- Determining what data needs to be shared, can't share everything
- Confusion regarding who is doing what about coordination
- How is the data to be used once you give it to an external organization
- Data is usually not complete or up-to-date, so it makes it more difficult to know if you are making the right decisions at the time
- Data accuracy varies widely among organizations, in some cases accuracy is off 100'



# Summary of Past GECCo Findings

## Barriers to Collaboration

- Liabilities issues associated with providing data to external organizations
- Limited data available to the right time and place to properly respond
- Only certain data is currently made available to external organizations regardless of the circumstance
- External organizations are afraid to sign agreement to share data
- Emergency response plans are out of date and do not leverage GIS technology



# Summary of Past GECCo Findings

## Keys to Collaboration/Data Sharing Success

- Federal and state funding support
- Dedicated and consistent team members to project
- Identify key decision makers in each stakeholder group
- Develop clear roles and responsibilities for everyone – i.e.: data collectors, users, etc.
- Educate and brief local legislators, council members, elected officials (i.e.: the highest level decision makers) in order to obtain a commitment for resources
- Educate everyone on the value of using GIS



# Summary of Past GECCo Findings

## Keys to Collaboration/Data Sharing Success

- Provide a education/briefing to private and public executives (highest level decision makers) to gain support
- Alignment/compliance with Federal and State mandates
- Leverage Federal data and technology architectures
- Tie project into National Response Plan, develop relationship to ensure compliance and assistance
- Provide continued facilitation and coordination by an unbiased organization like GITA



# Summary of Past GECCo Findings

## Keys to Collaboration/Data Sharing Success

- Use structured approach: objectives, activities, performance measures, schedules
- Need common operating picture, including standard operating procedures for Emergency Responders
- Clearly define the question: What does 'Give me your data' mean?
- Define risks, vulnerabilities and hazards: help define types of data for different groups and look at critical infrastructure interdependencies



# *Lunch!*



# Facilitated Discussion

- Workshop attendees will help identify community initiatives and resources, challenges, critical elements of successful collaborations and opportunities for improvement



# Working Session I and Discussion

- 1:30 pm – 3:00 pm
- Groups define collaboration and data sharing challenges (breakouts)
- Groups present and discuss their findings from Working Session I



# Working Session II and Discussion

- 3:00 pm – 4:15 pm
- Groups identify opportunities for improving collaboration and data sharing
- Groups present and discuss their findings for Working Session II



# *Day One Summary*



***Thank You!***  
***See You Tomorrow at***  
***8:30 am***



# Workshop Agenda - Wednesday

Wednesday, January 14, 2009	
8:30 am	<b>Continental Breakfast</b>
9:00 am	<b>Working Session III</b> – Three 40 minute sessions covering: <ul style="list-style-type: none"><li>• Using of the National Grid</li><li>• Understanding vertical datum</li><li>• Planning Ahead:<ul style="list-style-type: none"><li>- <b>Advance contract negotiations</b></li><li>- <b>Data sharing agreements</b></li></ul></li></ul>
11:00 am	<b>Working Session IV</b> – Develop recommendations and next steps for a Tampa GECCo program
Noon	<b>Summary and Adjourn</b>



# Working Session III and Discussion

- Use of the National Grid
- Understanding vertical datum
- Planning Ahead:
  - Advance contract negotiations
  - Data sharing agreements



# Working Session IV

- Develop recommendations and next steps for a Tampa GECCo program



# *Day Two Summary*



***Thank You***

