



Welcome to the New York

GIS for BCP Seminar

Presented by

CITRIX® ESRI



Agenda

- 09.00 - 09.30 **Overview of how GIS can be applied to BCP**
Simon Thompson, Deana Henderson: ESRI
- 09.30 - 10.00 **BCP at Lehman Brothers**
Patrick Alesi, Business Continuity Manager
- 10.00 - 10.15 *Coffee Break*
- 10.15 - 11.00 **Citrix Solutions for BI and BCP**
David Kim, Barry Flanagan: Citrix Systems
- 11.00 - 11.45 **BCP in Action: IncidentOS Demonstration**
David Braig, Ryan Moquin: BAE Systems
- 11.45 - 12.00 **Open Discussion - Q&A**



About ESRI

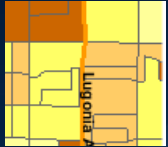
- Founded in 1969
- Privately held
- Pioneer in GIS
- Zero Debt Posture
- Consistent Annual Growth
- Over 3,000 employees Worldwide
- 100,000+ Customers Worldwide
- 1,000,000+ Users Worldwide
- Over \$650 million annual revenue

Holds majority market share in global GIS sales





What is GIS?



According to Gartner:

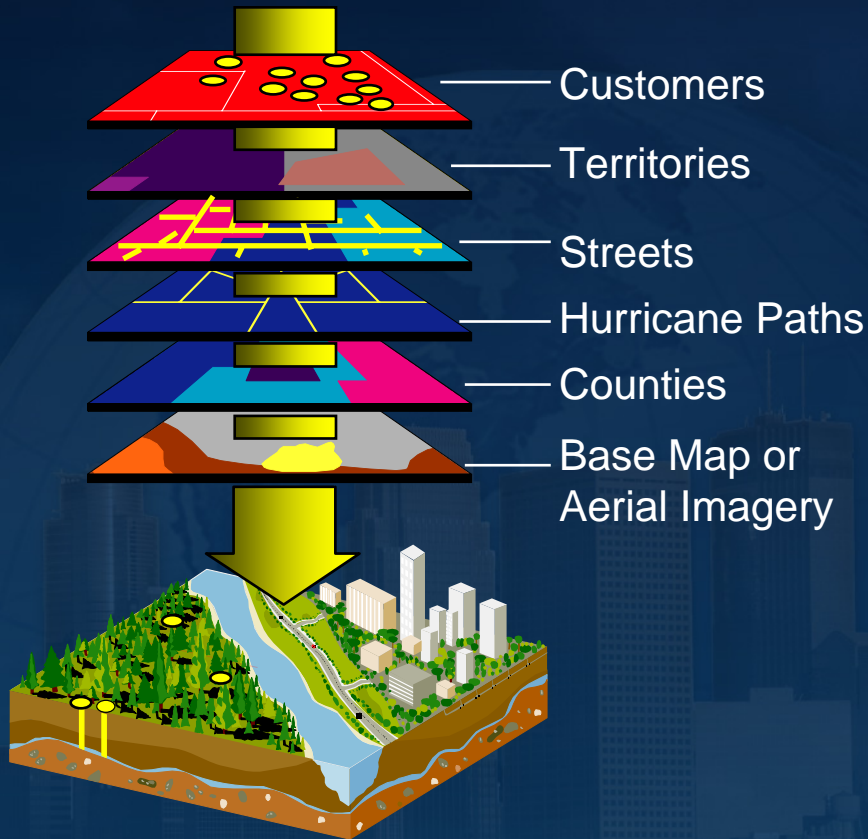
“GISs are a collection of computer hardware, software and geographic data for capturing, managing, analyzing and displaying every form of geographically referenced information.”

GIS is more than the physical systems – it is a way of organizing your operational activities and solving problems based on the geographic approach to business



What is GIS?

GIS is a digital model – a geographic, interconnected representation of the world



Everything in the world can be defined as

- Points:
 - Customers, Business Locations, Facilities...
- Lines:
 - Streets, Supply Chain...
- Polygons:
 - Zip code, Market Area, Wild Fire Boundary...
- Grid Cells:
 - Elevation, Digital Aerial Photo, Satellite Image...



Why BCP Matters to Financial Services and Business

- Business Operations are *Interdependent*
 - Operationally
 - Technically
 - Financially
 - Geographically
- Business Challenges are *Interconnected*
 - Adherence to regulatory requirements
 - Increased competition in the marketplace
 - Staff support, facility security and risk management
 - Planning vs Monitoring, Scenarios vs Training

No runners up prize for failure



Why BCP Matters to Financial Services and Business

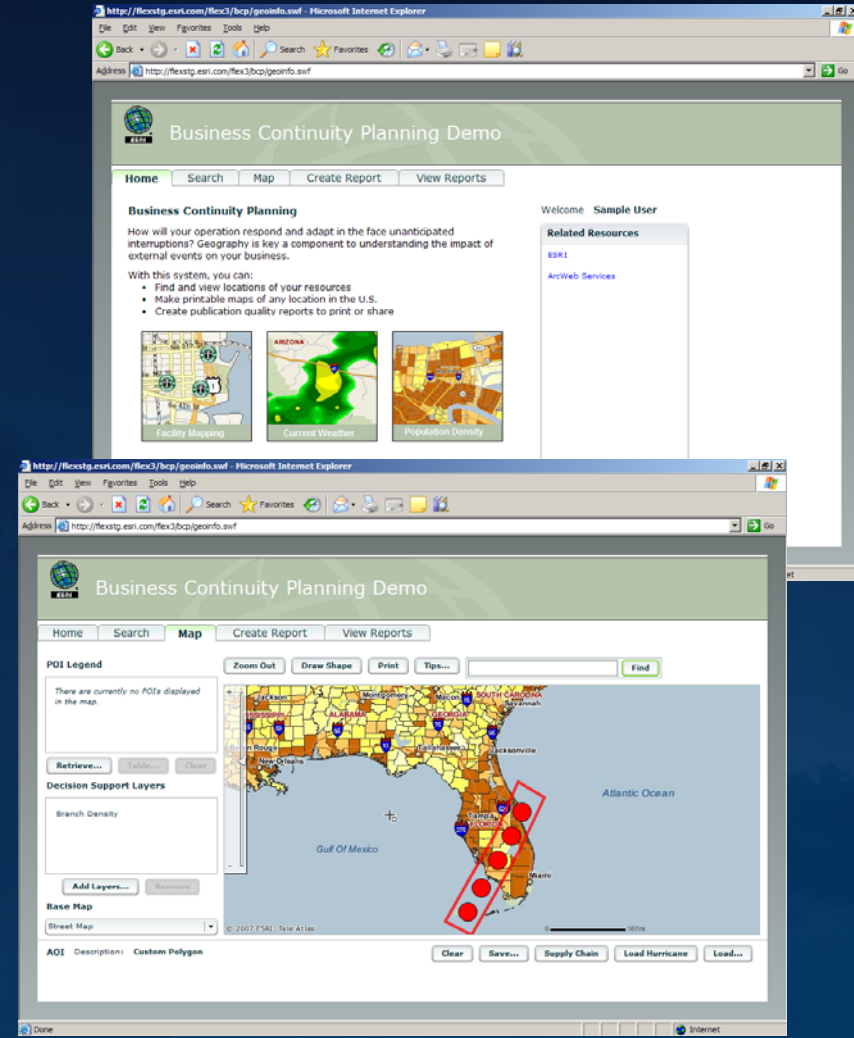
Downtime Cost Estimates Per Hour

• Brokerage Operations	\$6,450,000
• Credit Card Authorization	\$2,600,000
• Ebay (1 outage in 22 hours)	\$225,000
• Amazon.com	\$180,000
• Package Shipping Services	\$150,000
• Home Shopping Channel	\$113,000
• Catalog Sales Center	\$90,000
• Airline Reservation Center	\$89,000
• Cellular Service Activation	\$41,000
• On-line Network Fees	\$25,000
• ATM Service Fees	\$14,000



GIS for Business Continuity Coordination

- Analyze site locations
- Apply 'what if' scenarios
- Identify areas and assets at greatest risk
- Evaluate different response plans
- Test and integrate modeled results
- Visualize, analyze and publish information across the enterprise





- [illegible]



Real Time Refresh

The map will display all earthquakes received from the live feed in the last 5 days. The map will refresh every minute. The size of the symbol represents the rough size of the event at that location. The first refresh may take upto 1 minute.

Event: M 4.7, southern Iran
 Lat Long: 26.81 55.9
 Magnitude: 4.7
 Timestamp: undefined
 USGS Link:
<http://earthquake.usgs.gov/centerc/centercqww/QuakeUs/>

Navigation window: United States

Recent Earthquakes:

Last Week	Last Day	Magnitude
M 2.8, offshore Northern California	M 5.5, near the south coast of Honshu, Japan	M 6.2
M 3.8, Dominican Republic region	M 4.3, north of Anguilla, Leeward Islands	M 6.1
M 2.8, Southern Alaska	M 5.1, Venezuela	
M 3.0, Central Alaska	M 5.7, eastern Xizang	

LEGEND


- Oceans and Seas
- U.S. States
- U.S. Urban Areas
- U.S. Major Parks

https://redwa.esri.com/ Earthquake Report: M 5, 34.280352345699, 116.827278730496 - Microsoft Internet Explorer


Reply Reply to all Forward Print X Help

You replied on 4/20/2006 3:00 PM.


From: mreddid@esri.com [mreddid@esri.com]
To: Johan Herlin
Cc:
Subject: Earthquake Report: M 5, 34.280352345699, -116.827278730496
Attachments:

2 Suppliers  within 25 miles:

ADMIN_NAME	DISTANCE	NAME_2	SUPPL_ID	WTHIN	LONGITUDE	LATITUDE	DISTANCE
1. California	11.1	Lucerne Valley	689525081	United States	-116.9207	34.411	11.1
2. California	12.1	Riverside	166220710	United States	-116.9985	34.2442	12.1

1 Retail locations  within 25 miles:

CITY16	COMNAME	FIRSCOD	HOBRRCH	LCODE	LOCURM	NAICS_EXT	NUMBER_EMP	SALES_VOL	SC	STATE	ZIP	LONGITUDE	LATITUDE	DISTANCE
1.	Big Bear City Outlet Motorcycles 4	ASD	173572876	44322108	1	331	557106	CA	92314	-116.8536	34.2606	2.27		

8 Employees  within 25 miles:

Department	Employee	Id	Manager	ID	Store	ID	LONGITUDE	LATITUDE	DISTANCE
1. Sales	198	7	OMG5	1735	-116.8234	34.2652	1.13		
2. Sales	672	6	OMG5	1735	-116.8092	34.294	1.57		
3. Sales	265	5	OMG5	1735	-116.8013	34.2448	3.04		
4. Maintenance	453	4	OMG5	1735	-116.8083	34.2367	3.29		
5. Sales	343	3	OMG5	1735	-116.8513	34.2288	3.93		
6. Sales	523	0	OMG5	1735	-116.8775	34.2451	4.24		
7. Maintenance	298	1	OMG5	1735	-116.9044	34.2379	6.08		
8. Maintenance	823	2	OMG5	1735	-116.9147	34.2426	6.58		

Done Unknown Zone (Murd)

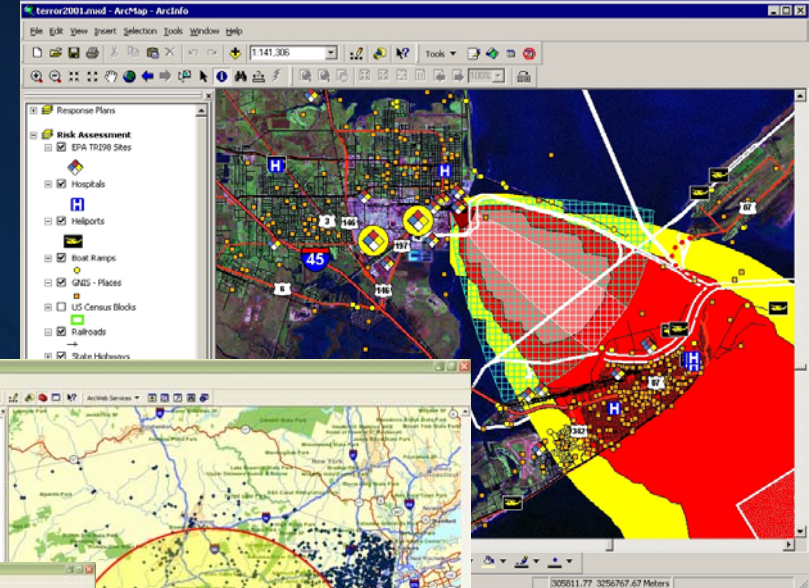
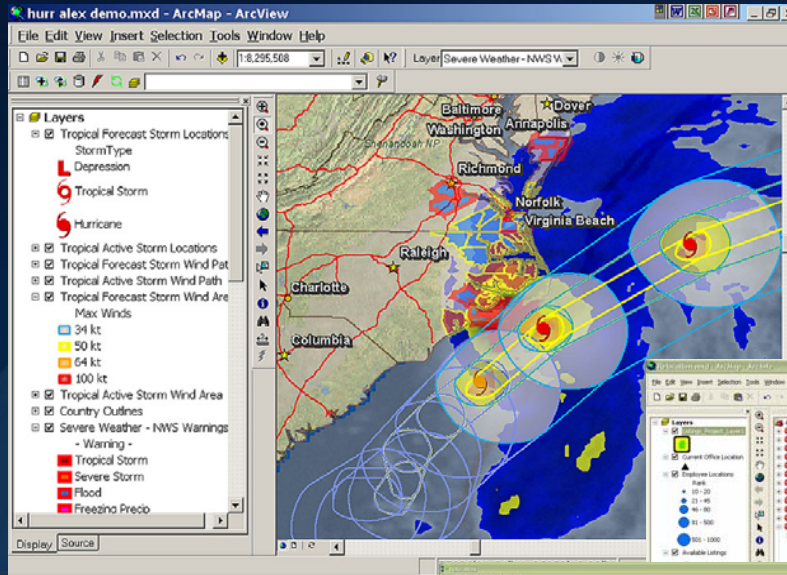




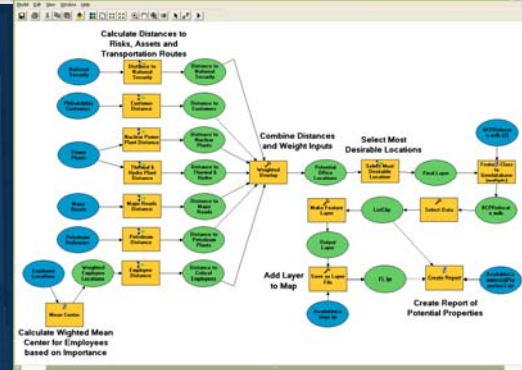
BCP integration with Models

Desktop Authoring

Plumes, Impact Assessment



Forecast models



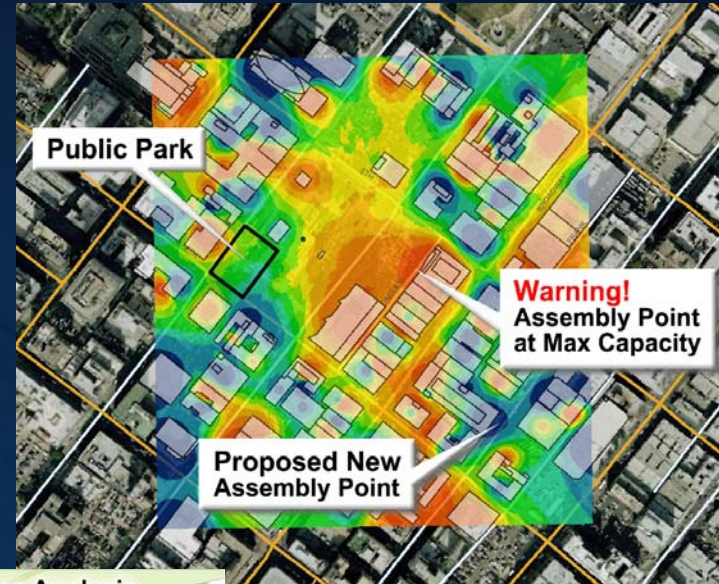
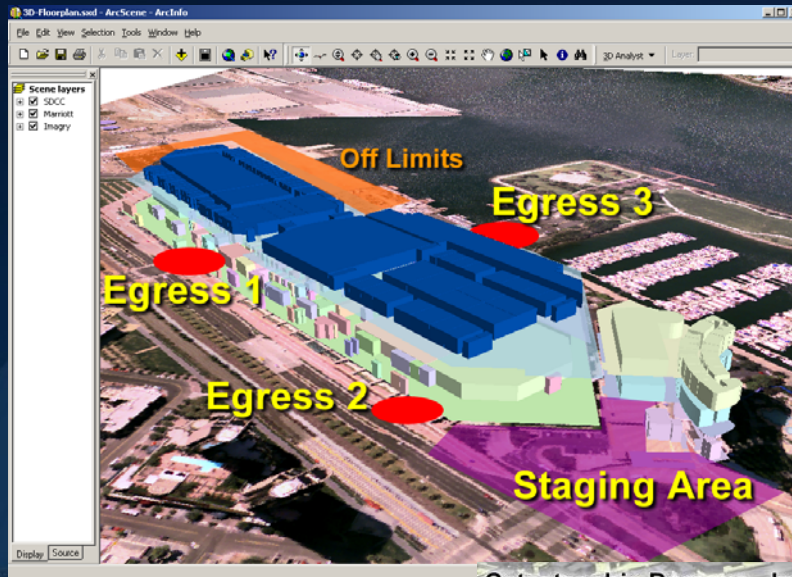
Real Time Events and Triggers

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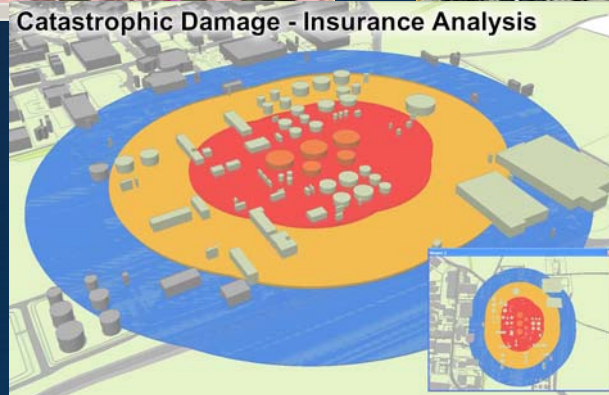


BCP Visualization and Information Fusion

Preparedness Planning



Emergency Mgmt

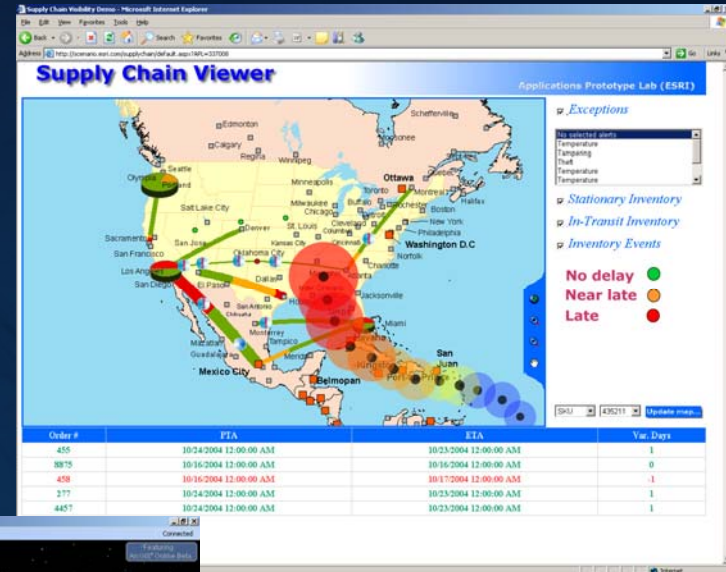
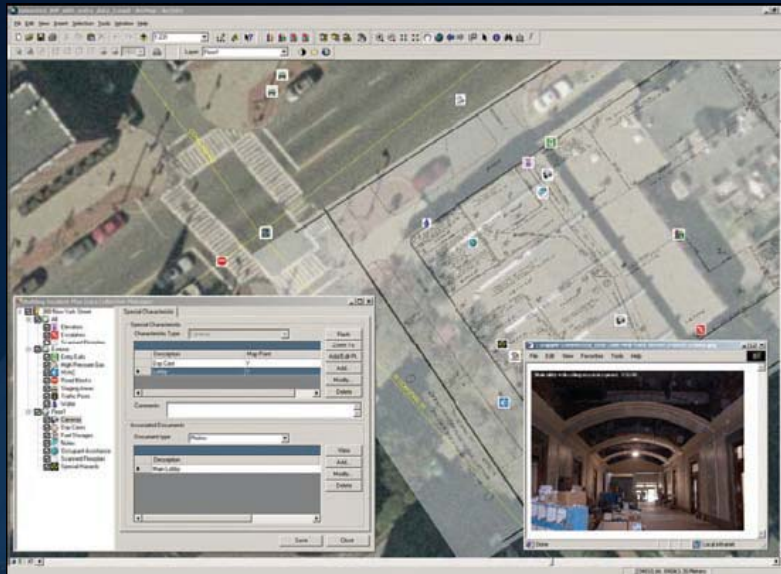


Vulnerability Analysis



BCP Visualization and Information Fusion

Assets and Supply Chain



Facility Mgmt

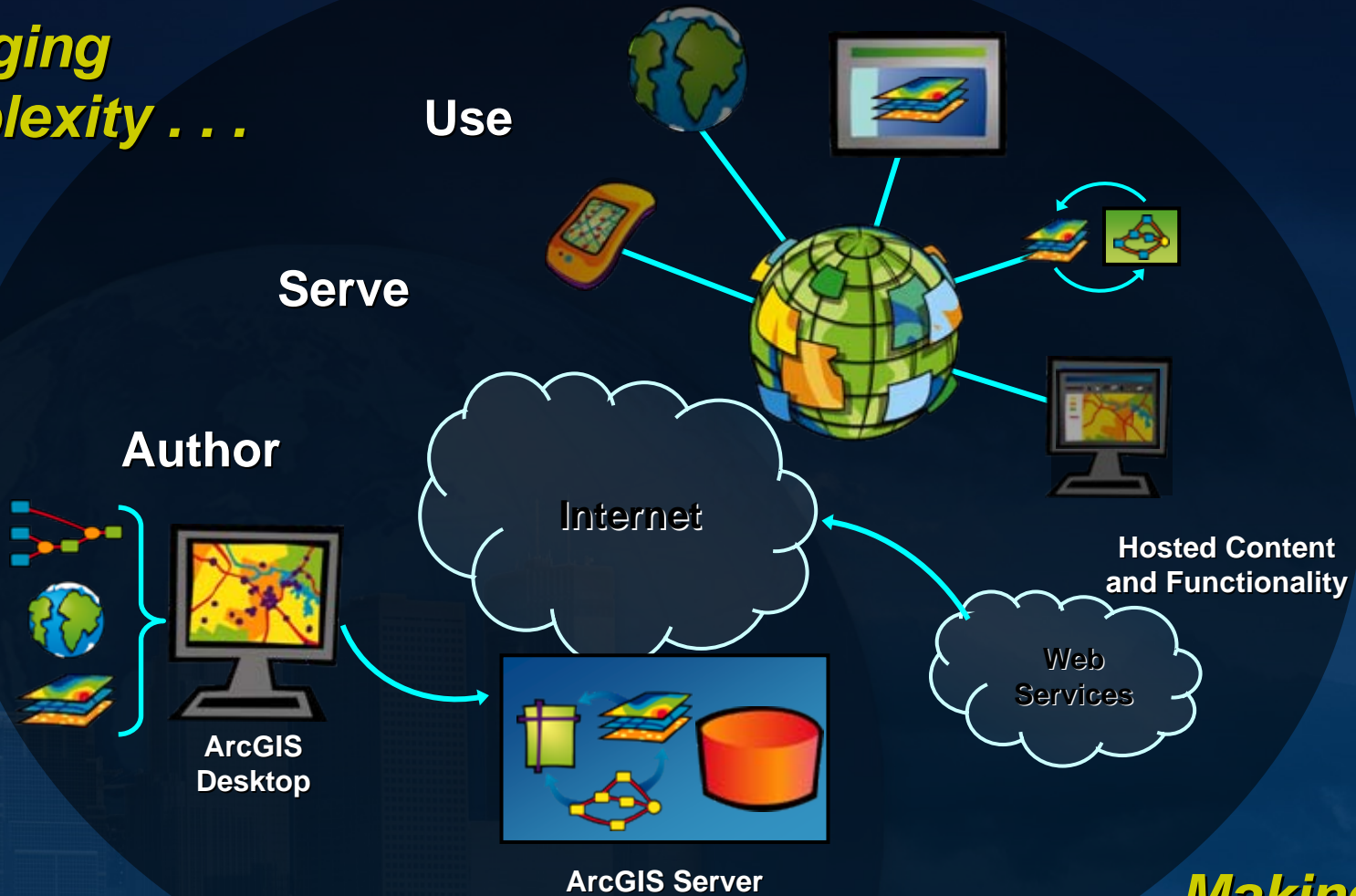


Mitigation Strategies



GIS BCP Architecture

Managing Complexity . . .



*... Making It
All Accessible*



ESRI Support during Hurricane Katrina

Goal: Support Response & Rescue efforts of:

- ESRI user community (emergency management agencies, law enforcement, fire, health agencies, local government)
- Major aid agencies (Red Cross, etc.)
- Major customers in the region (utilities, commercial, oil and gas, hospitals, transport, distribution, etc)
- Affected regional offices
- International distributors and U.S. business partners who are supporting the emergency or disaster
- Mitigating the effects of the emergency or disaster



Disaster Response Implementation

Stand-up a Response Team

- Incident Managers
- Operations Coordination
- Key Industry Resources
- Data Resources/contacts
- Hardware and Systems
- Web Hosting via GOS sub-portal
- Professional Services
- Corporate Internet/Resource listing
- Software support
- Business Partner notification
- International Distributor notification
- Media Coordination
- Regional Managers



Disaster Response Implementation

Stand-up information architecture - web portal

- Establish regular communications (phone, email, web, peer-to-peer) to maintain coordination of teams and users
- Provide software request page
- White papers, Hands-on guides, Training materials
- Subject matter experts contact list
- Links to relevant data, imagery, maps, etc.
- Set up internal information tracking systems
- Work with URISA GIS Corps for volunteers
- Establish business partners who want to volunteer



ESRI Support during Hurricane Katrina



The Mississippi State University Brain Bus
10 seat mobile classroom equipped with laptops borrowed from an ESRI training course in Mississippi and used by the GIS Corps Initial Response Team



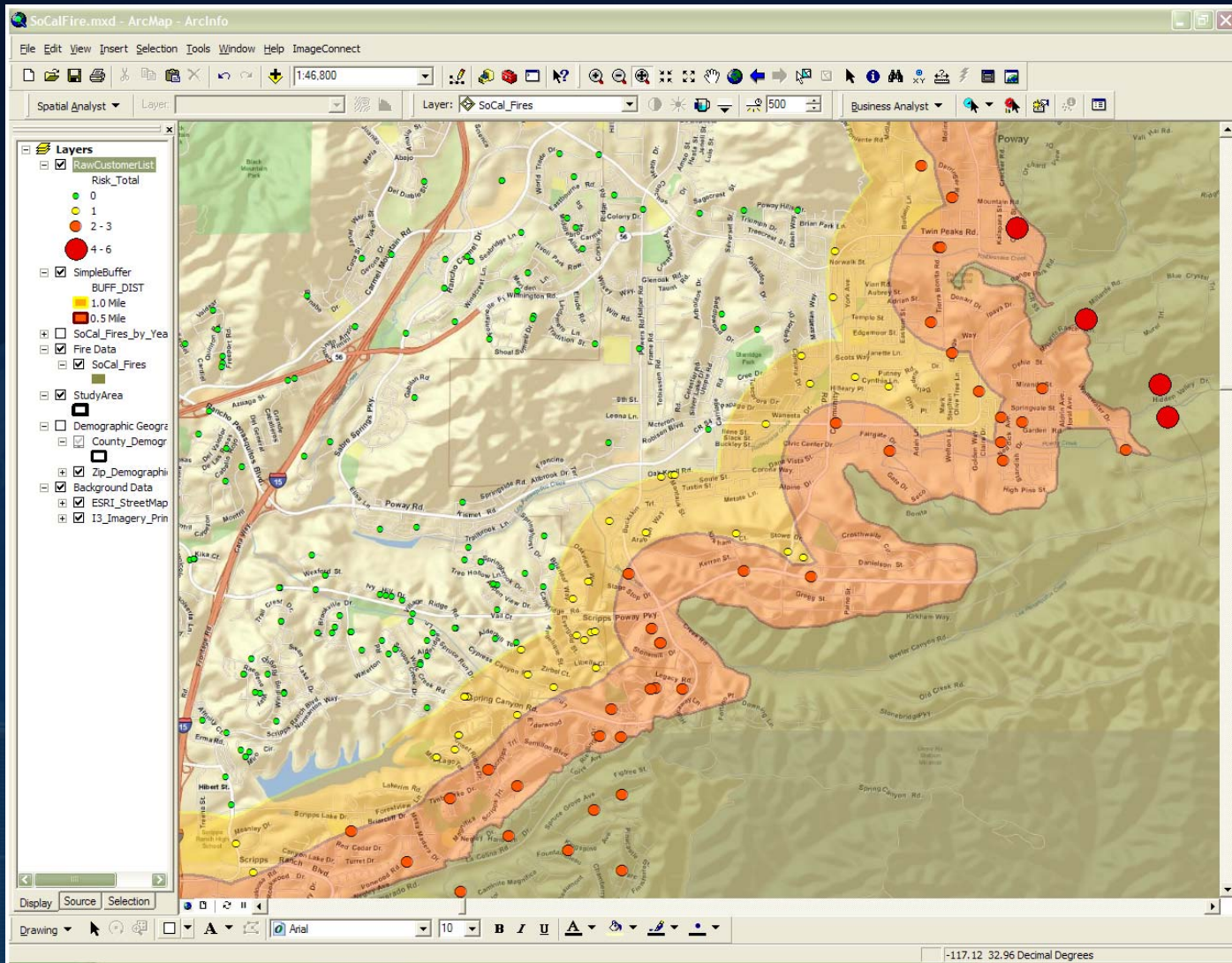
ESRI Disaster Support

National and International

- 2007 California Wild Fires
 - Data Portal
 - FEMA Response Center
 - Corporate Response Team (Redlands, Ca)
- 2006/07 US Wildfires, European Floods
- 2005 Christmas Day Tsunami - Indonesia
- 2005 Gulf Hurricane Season
- Others: 9/11, 7/07 Tavistock Square, Australian Fires, UK Floods, Space Shuttle Columbia Disaster, SARS...



California Wild Fire Support





GeoExtended BCP – Benefits and Value

- Tracking and report services for regulatory compliance
- Minimize risk of unplanned expenses
- Improved collaboration and communication
 - Command, control, and response teams
- Reduced data redundancy and improved accuracy
 - Management integrity of geographic information
- Increased ability to analyze and respond to events
 - Provision of a single, common view of operations
- Improved analysis, visualization, and decision support
- Repurposing of knowledge for other enterprise uses