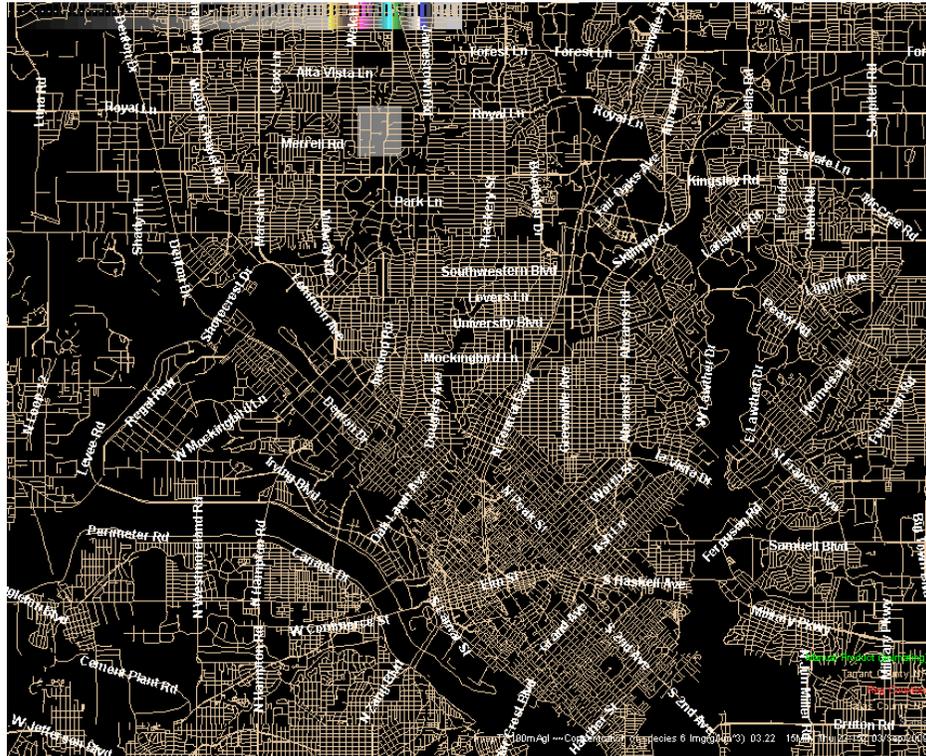


Integrated Public Alert and Warning System (IPAWS) + Geo-Targeted Alert System (GTAS)



February, 2010



FEMA



Geo-Targeted Alerting System

- ▶ What Is GTAS
- ▶ Why GTAS
- ▶ How GTAS Works
- ▶ GTAS Connectivity
- ▶ GTAS Locations
- ▶ Future of GTAS
- ▶ Wrap up



What is GTAS?

- ▶ GTAS is a joint “pilot” project between NOAA and FEMA providing Emergency managers with a new software tool in their tool belt;
- ▶ Integrates NOAA’s advanced weather information and warning infrastructure with FEMA IPAWS dissemination systems;
- ▶ It’s a JAVA based system providing the customer a graphical user interface.
- ▶ Provides targeted warnings to the public in event of toxic release via reverse 911 technology;

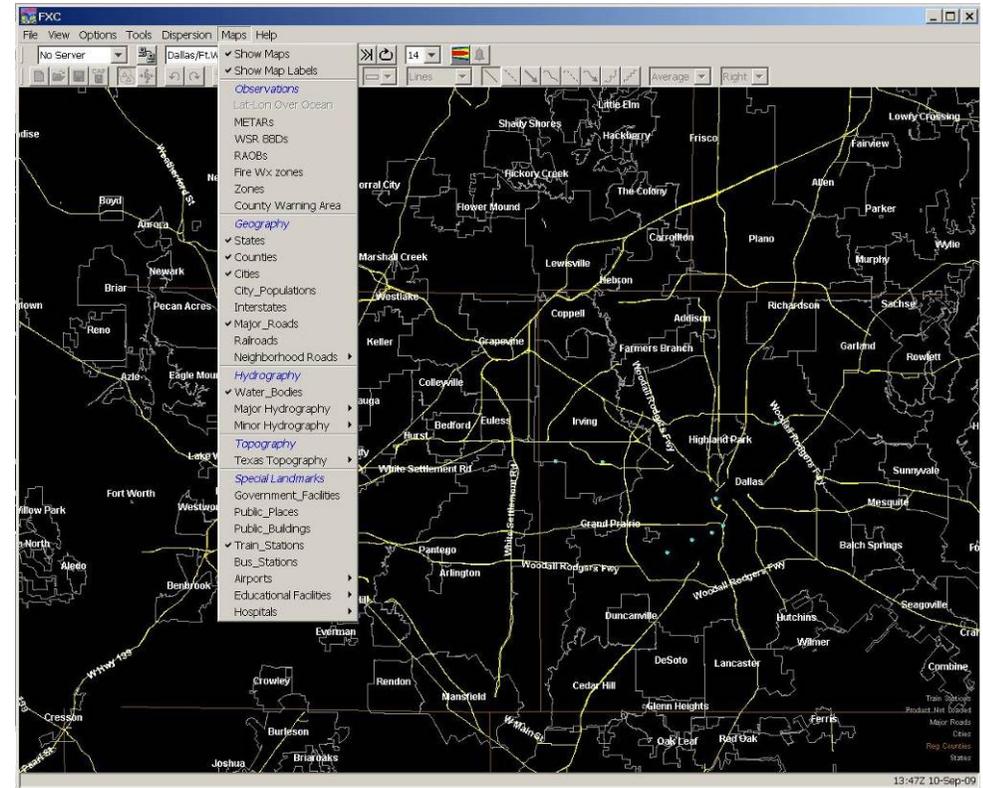


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How GTAS Works?

- ▶ Provides targeted warnings to the public in event of toxic release via reverse 911 technology (ETN);
- ▶ Integrates NOAAs advanced weather information and warning infrastructure with FEMA IPAWS dissemination systems;
- ▶ Interface to Commercial Mobile Alert System via CAP messages.

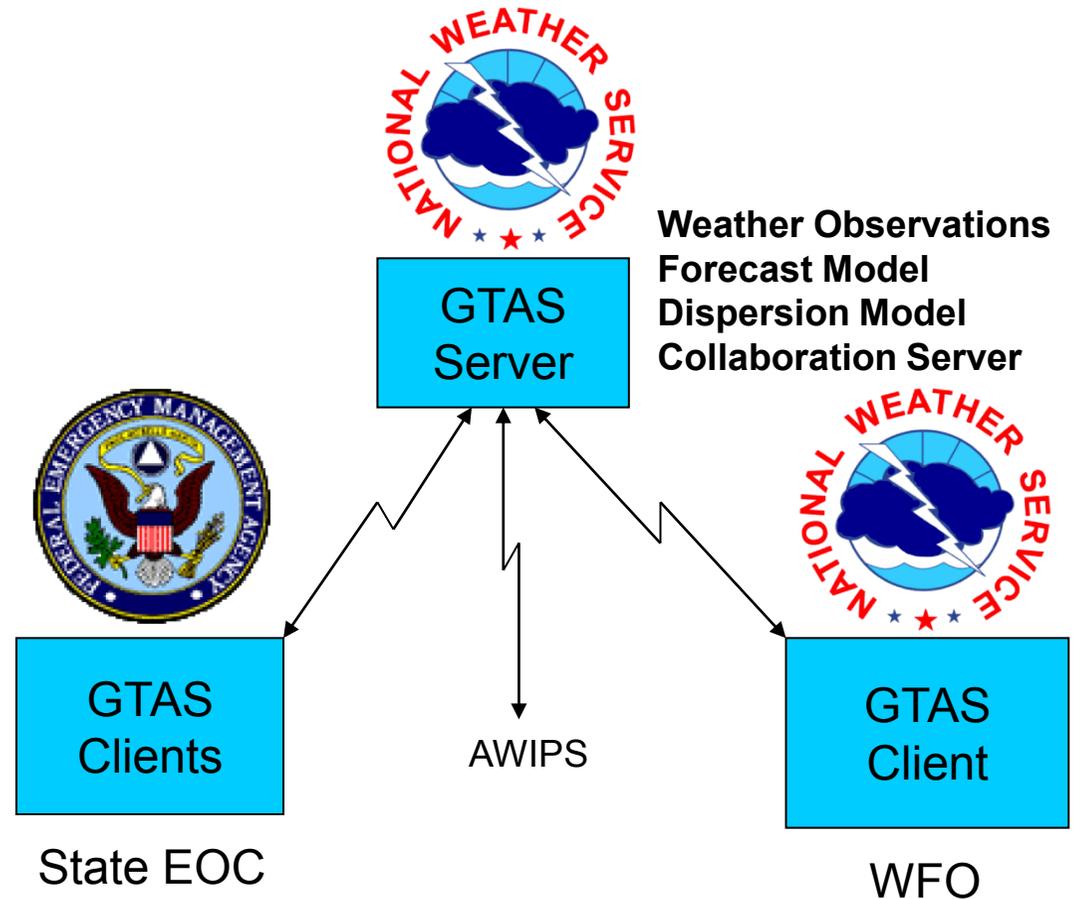


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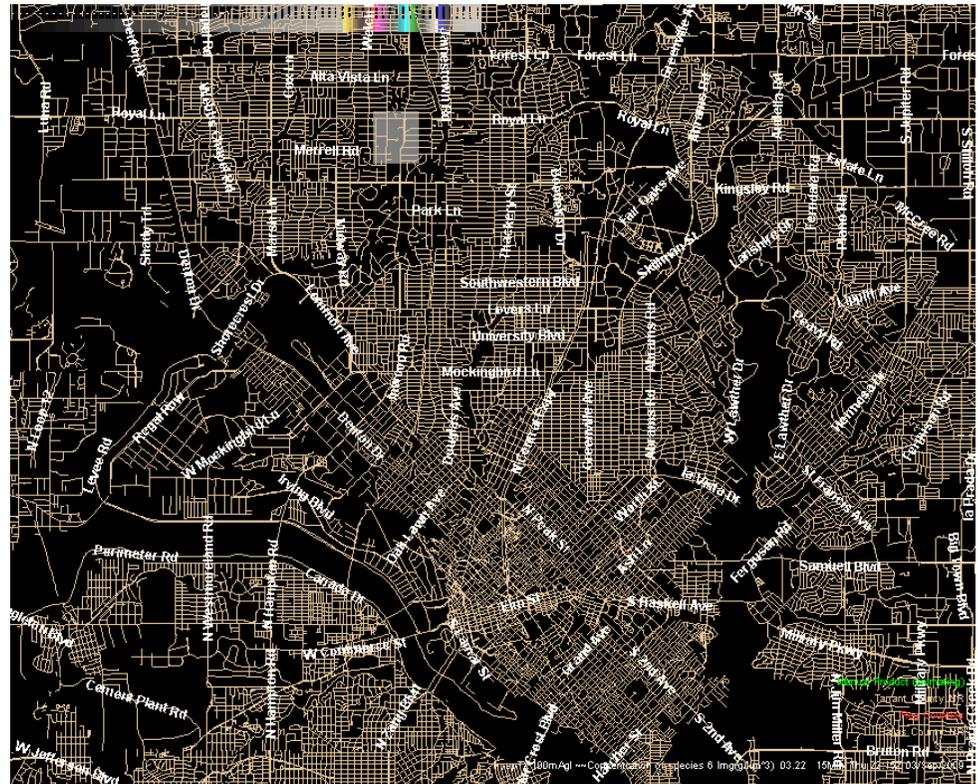
GTAS Provides Emergency Manager a Easy to use Tool

- ▶ GTAS provides information the emergency manager needs to quickly identify the public that is at risk;
- ▶ Uses a simple graphical user interface for system managers;
- ▶ Includes collaboration tools, so the EM can work with the experts at a WFO or other location to clarify the information that is being presented;
- ▶ Provides standards based interface to disseminate the message to the public.



GTAS Provides a Intuitive Graphical Display

- ▶ Advanced Weather Data Appropriate for the Region
 - Radar precipitation intensity data;
 - Advanced short-term predictions of winds, temperature, humidity;
 - 12-hour forecast of where severe weather will occur within the emergency managers jurisdiction;
 - High resolution temporal and spatial information



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The Clients Connect to NWS Regional Servers to Supply Data

▶ Servers installed/managed at NWS Regional HQs

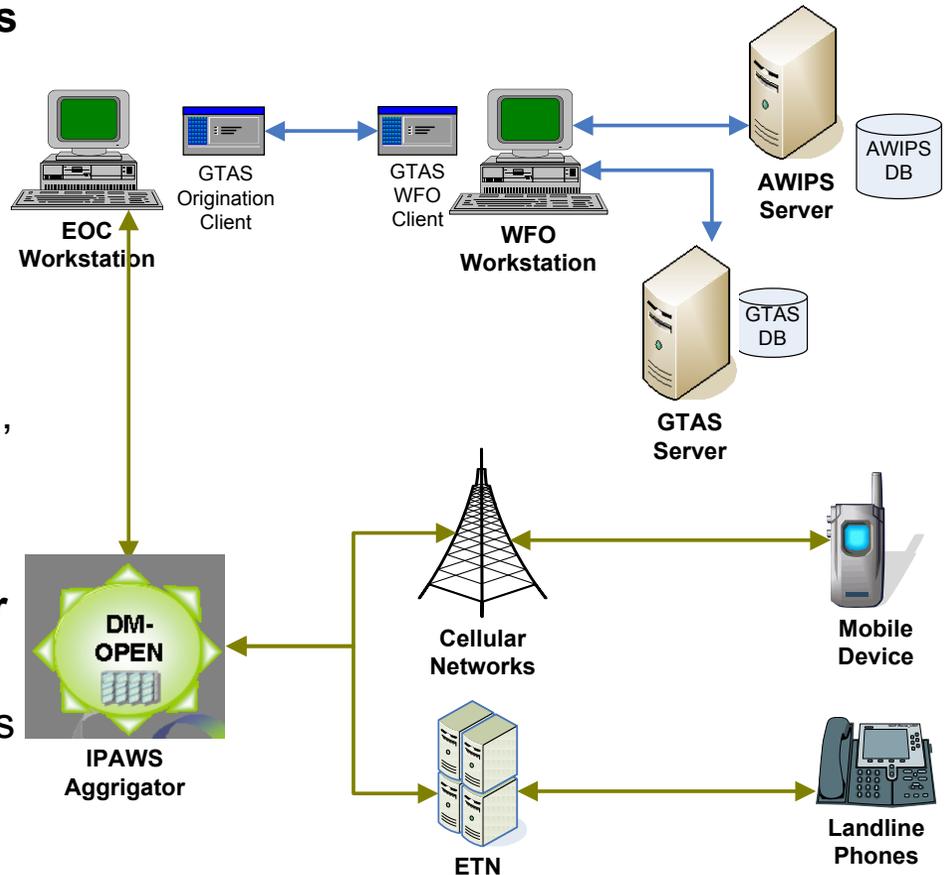
- Servers push weather and model data from NWS weather database to client applications
- Provides collaboration between GTAS clients

▶ Client application is downloaded onto EOC and WFO computers

- Runs on all std Windows platforms (1-2GHz CPU, 1GB Memory)
- Java based interface

▶ Alerts distributed to target area selected by user

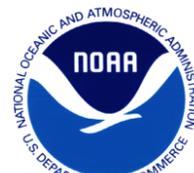
- Sent to the NWS dissemination systems for distribution in the target area by NWS transmitters
- Supports sending alerts to EOC's emergency telephony notification service provider alerting public by telephone
- Alerts will be in CAP format per IPAWS Profile



End State of GTAS



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Where GTAS was Piloted Throughout 2009

- ▶ Southern Region VI (Completed)
 - Weather Forecast Office, Ft Worth, TX
 - Dallas Emergency Operations Center (EOC);
- ▶ Western Region X (Completed)
 - Weather Forecast Office, Seattle, WA
 - City of Seattle EOC
 - Washington State Emergency Operations Center;
- ▶ Eastern Region II
 - Weather Forecast Office, New York City
 - New York State EOC Center
 - New York City EOC Center



- ▶ Central Region VII (In progress)
 - WFO, Pleasant Hill, MO
 - Kansas Emergency Operations Center
 - Kansas City Office of Emergency Management Office



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Where GTAS will be Piloted Throughout 2010

▶ FEMA Region VI

- Lake Charles, LA Emergency Operations Center
- Weather Forecast Office, Lake Charles, LA

▶ FEMA Region VI

- Weather Forecast Office, Houston, TX
- Houston, TX Emergency Operations Center

▶ FEMA Region IV

- Weather Forecast Office, Melbourne, FL
- Melbourne, FL Emergency Operations Center
- NASA Emergency Operations Center



▶ FEMA Region III

- FEMA Headquarters

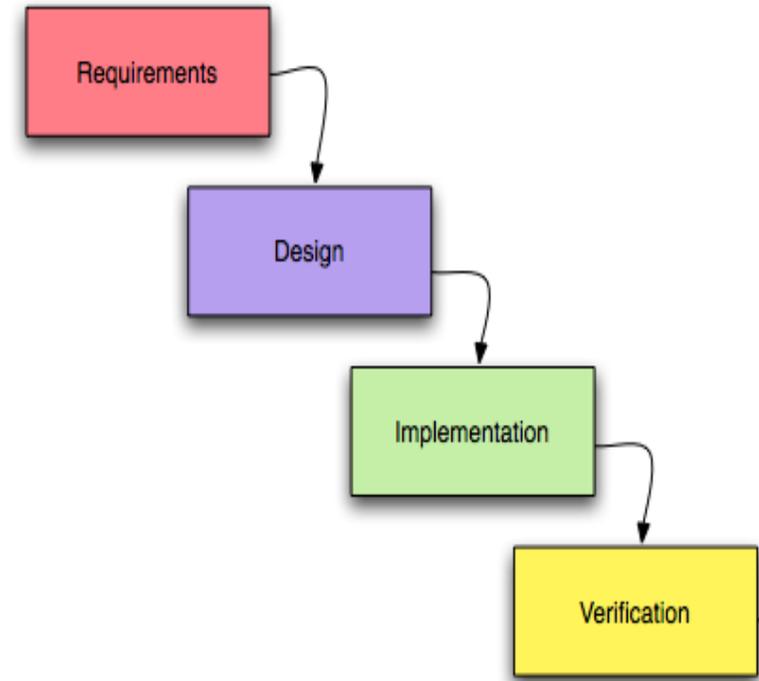


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GTAS Customers Provide Feedback for a Better Product

- ▶ Plume simulations are conducted to exercise the application and make sure participants have the appropriate training to use the tool after installation;
- ▶ The plan is to continue to develop the application until it becomes incorporated into the standard NWS suite of software for the Weather Forecast Offices (WFO) Advanced Weather Interactive Processing System II (AWIPS II);
- ▶ Initial customer feedback from Southern Region is positive and leadership support indicates continued deployment to FY 2012.



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Wrap-up

- ▶ GTAS official website: <http://fxc.noaa.gov/GTAS>;
- ▶ Please provide feedback and address questions to richard.jesuroga@noaa.gov; greg.pratt@noaa.gov; dean.rychlik@dhs.gov and michael.silva@fema.gov;
- ▶ Key NOAA GSD Project Team Members:
 - Rich Jesuroga
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 - Leigh Cheatwood-Harris
 - Herb Grote
 - Jim Ramer
 - Greg Pratt
 - Xiangbao Jing



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