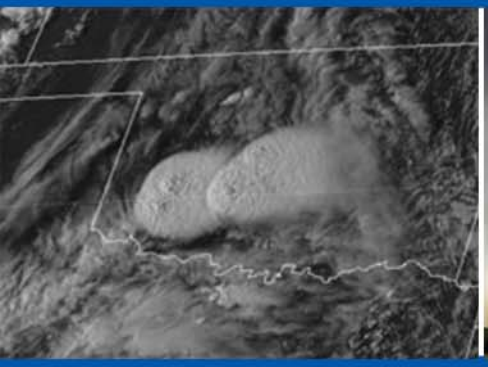
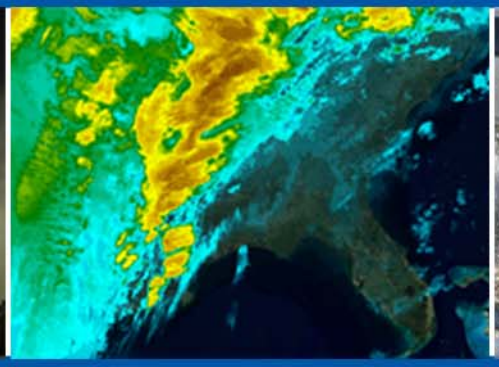
NOAA's National Weather Service 2009 President's Budget Rollout






Jack Hayes
NOAA Assistant Administrator &
Director, National Weather Service

National Weather Service, Silver Spring, MD
February 27, 2008

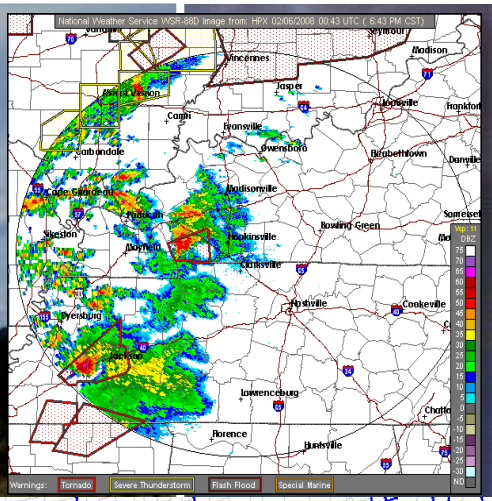
Protecting Lives and Livelihoods

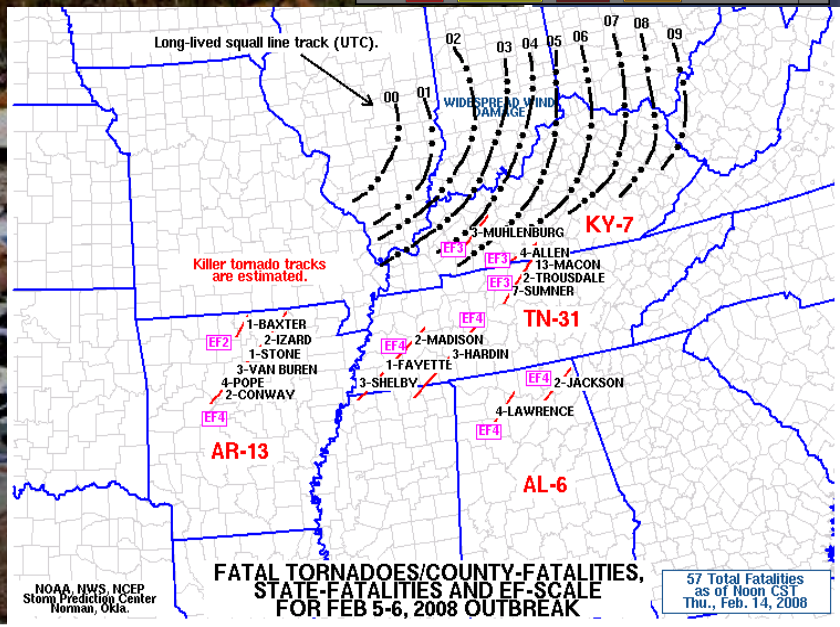
Severe Weather:

- 2008 is 27th deadliest for tornadoes since 1950 (65 fatalities)

  …It's only February!

- February 5-6, 2008 Super Tuesday Tornado Outbreak
  - *63 tornadoes*
  - *57 fatalities*
  - *Deadliest event since '85*
  - *Outlook issued 6 days prior*
  - *POD 100% for tornadoes occurring in SPC watches*
  - *Average warning lead time 17 min*

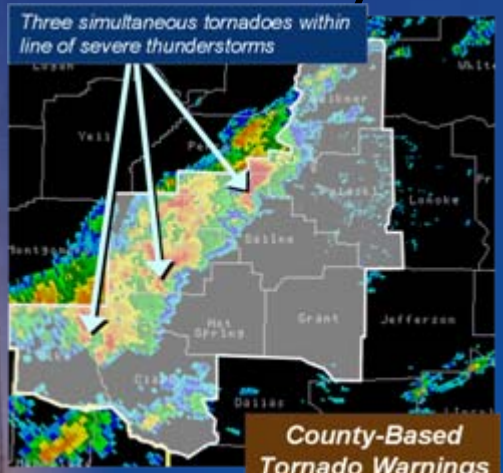




FY 2007 NWS Accomplishments

- U.S. Tsunami Warning Program Initial Operating Capability (IOC) Achieved
- "Storm-Based Warnings" for tornadoes, severe thunderstorms, and flash floods to better pinpoint the areas threatened by storms with greater accuracy
- NOAA Weather Radio All Hazards in every U.S. Public School

Previously



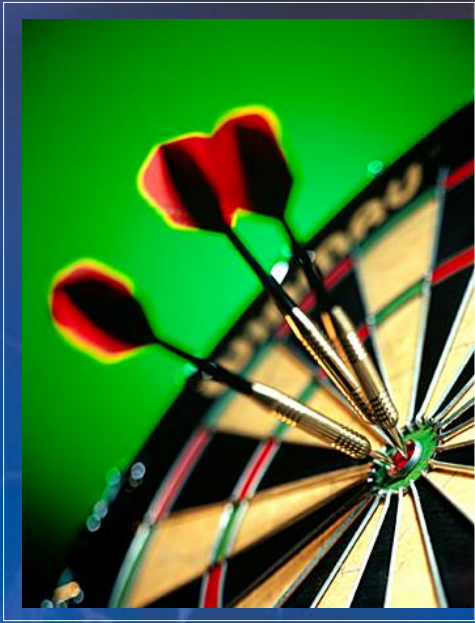
8 Counties under warning
almost 1 million people warned

Currently

70% less area covered
600,000 fewer people warned

FY 2007 NWS Accomplishments

- New Community Hydrologic Prediction System Successfully Demonstrated
- Surpassed goal for Increasing the Number of Heat Health Warning Programs in U.S. Cities
- NWS Incident Meteorologists worked on-scene during the Southern California wildfires
- Average lead time of 15 minutes for 64 tornadoes associated with major severe weather outbreak in southeastern U.S. March 1-2.
- Upgraded Super Computing System to provide 3X computational power



Protecting Lives and Livelihoods: *Where We're Headed*

- Improve extended predictions for severe weather outbreaks a week in advance
- Warn-On Forecasts: Tornado warning lead times increase from average of 13 minutes today to as much as 1 hour
- Severe thunderstorm warning lead times increase from average of 18 minutes to as much as 2 hours

Protecting Lives and Livelihoods: *Where We're Headed*

- Tropical cyclone warning lead times for landfall increase from less than 24 hours to 3 days
- Winter storm warning lead times increase from average of 18 hours to days
- Reduce National Air Space delays through improved aviation weather service collaboration with FAA

Protecting Lives and Livelihoods: *What We Need to Get There*

- **Observations**
  - *Improved spatial, temporal, spectral resolution*
    - Next Generation Satellites
    - Super Resolution and Dual Polarization Radar
- **Modeling**
  - *Fine scale, earth system, ensemble*
    - Weather Research and Forecasting Model
- **Forecast generation**
  - *IT systems & applications*
    - Advanced Weather Interactive Processing System II
- **Service delivery**
  - *Decision support assistance*
    - Incident Meteorologists on-site support for all hazards
- **User Feedback Mechanism**

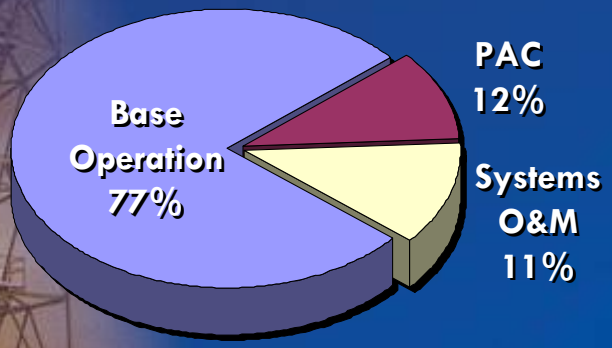
FY 2009 NWS Budget Overview

- **FY 2009 Budget provides $930.7M for the NWS – a $27.2M (2.9%) increase over the FY 2008 President's Budget, and a net increase of $19.3M (2.1%) over the FY 2008 enacted level**
- **$14.5M for inflationary adjustments to base**
- **$37.2M in program changes including $10.1M in base program restorations**

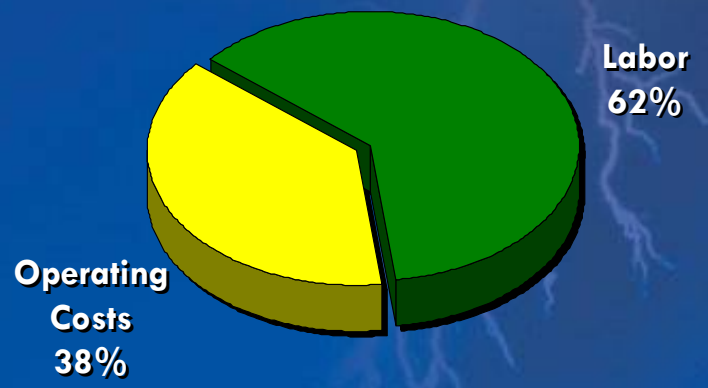
Adjustments to Base: +$14.5M

- Highest NWS Priority
- NWS operations budget is 62% labor
- Funds 2.9% federal pay raise

FY 2009 NWS Budget Plan $910.5M



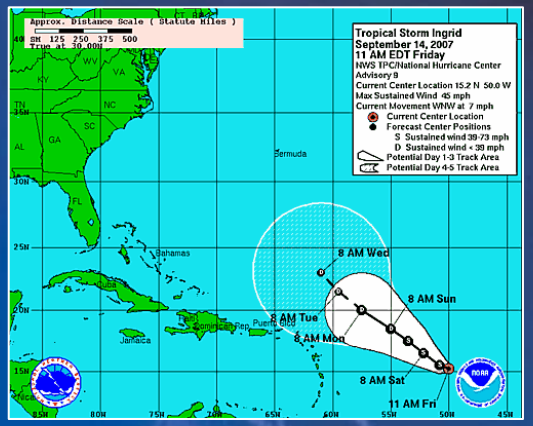
FY 2009 NWS Budget Plan (ORF) $804.5M



Improving Weather Warnings & Forecasts

	Request Amount	Program Change
	($ in millions)	
Local Warnings & Forecasts Base Restoration	$10.1	$10.1
Hurricane Supplemental O&M	$5.6	$4.2
All Hazards NOAA Weather Radio	$11.3	$2.9
AWIPS Technology Infusion	$19.1	$6.6
Profiler Network Conversion	$9.7	$4.8
Hurricane Forecasting Improvements*	$5.3	$5.3

* Includes $1.0M for OAR/DTC

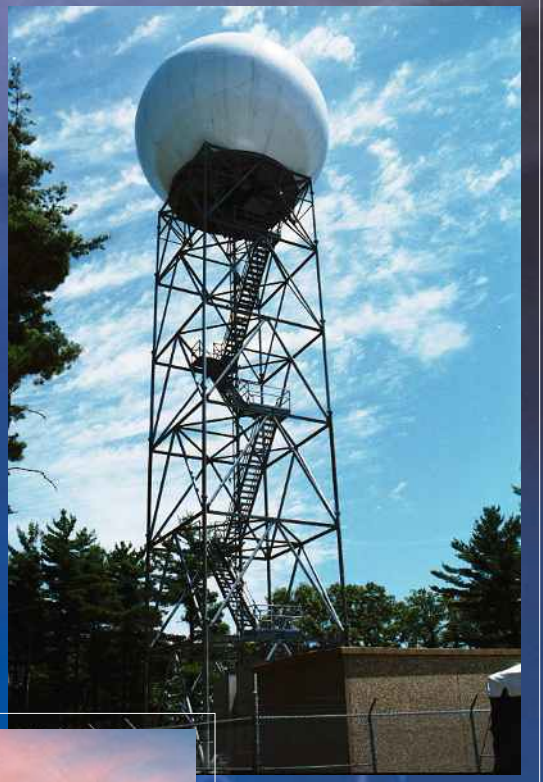


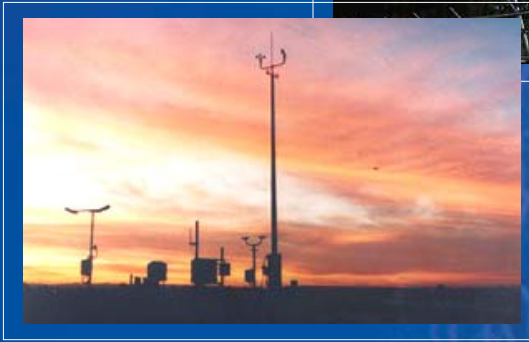
NOAA's forecasts, warnings, and associated emergency responses result in $3 billion in savings in a typical hurricane season

Base and Program Restorations: +$10.1M

What

- **$6.7M reduction in Local Warnings & Forecasts Core Operations and other Programs**
  - *Avoid degradation to current services*
  - *Avoid delays to key NWS programs (Air Quality Forecasting, AHPS, Alaska Data Buoy, WFO Maintenance)*
- **$2.1M reduction to Systems O&M Base**
  - *Avoid degradation to systems availability (AWIPS, NEXRAD NWSTG)*
- **$1.3M reduction to Systems Acquisition and Construction**
  - *Avoid delays to planned product improvements (AWIPS, NEXRAD, NWS Supercomputing)*





NOAA Weather Radio All Hazards: Weather Radio Improvement Project: +$2.9M

What

- Replace non-supportable broadcast equipment
- Use satellite technology for point to multi-point communications capability and network redundancy
- Deploy NOAA Weather Radio Broadcast Management System (NWR BMS) to replace CRS
- Develop system to integrate NOAA Weather Wire Service (NWWS) into consolidated BMS network
- Strategy will provide cost avoidance of $1.7M per year

AWIPS Technology Infusion: +$6.6M

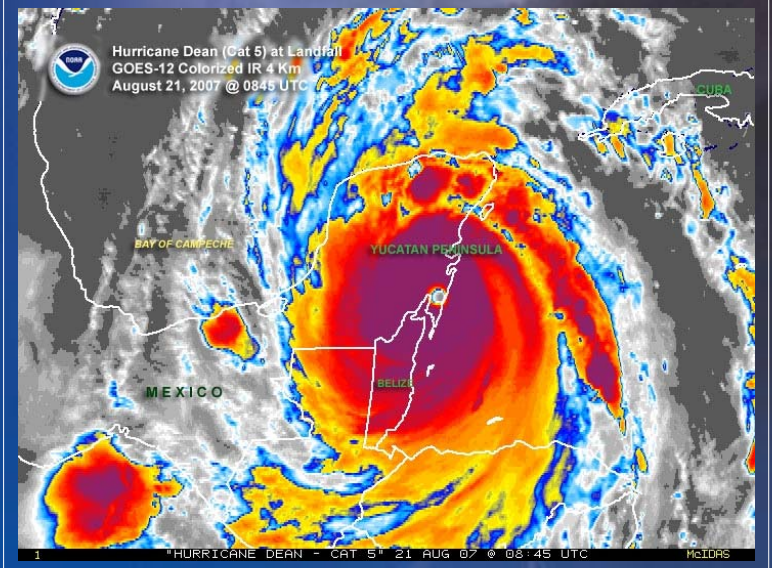
What

- **Transform NWS service delivery through AWIPS Tech Infusion initiatives**
  - *Improve data delivery capability*
  - *Deliver graphical collaboration tools for NWS field forecasters, Emergency Managers, NOAA components and partners*
  - *Deliver customer-centric formats and standards and create the flexibility to adapt with customer changes*
  - *Develop an integrated remote service delivery capability to support Emergency Mangers (EM) and Fire Weather*
  - *Consolidate AWIPS subsystems*
- **Accelerate transition from research to operations**
- **Improve forecast and warnings for real-time decision making**

Hurricane Forecast & Storm Surge Modeling: +$5.3M*

What

- Upgrade the Global Forecast System for improved track and intensity forecasts to 5 days
- Implement upgrades to storm surge models
- Accelerate transition of research into operational hurricane forecast system hurricane ensembles for reducing hurricane forecast uncertainties



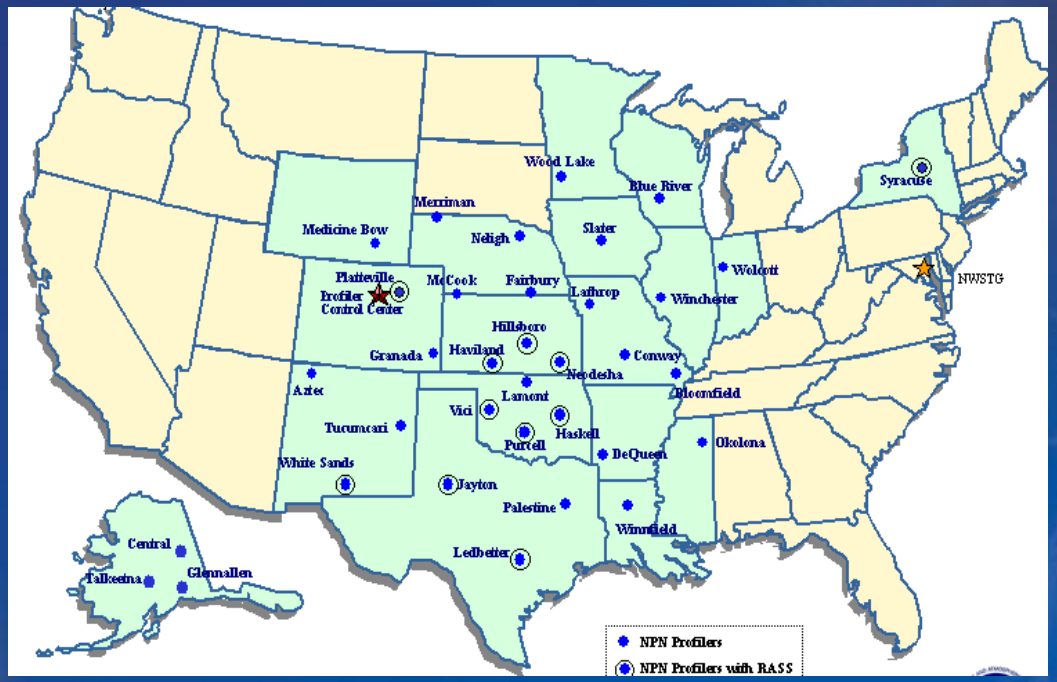
- Reduce error in model based forecast accuracy for hurricane by 50% by 2015
- Reduce error in model based forecast accuracy for hurricane intensity by 30% by 2015

* Includes $1.0M for OAR/DTC

NOAA Profiler Network: +$4.8M

What

- Convert 12 operational sites from 404MHz to 449MHz
- Provide technology refresh to 20 year old equipment



Dialogue

What is your #1 issue?