



# **NWS Science and Technology Plenary Meeting**

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# What Are We Talking About?



- Taking advantage of an opportunity to define the weather service science vision over the next 15-20 years.....
- With key goals to drive science and technology capabilities, research and infusion thrusts...
  - That will inform and enable future operations...
  - With an achievable path to tangible results

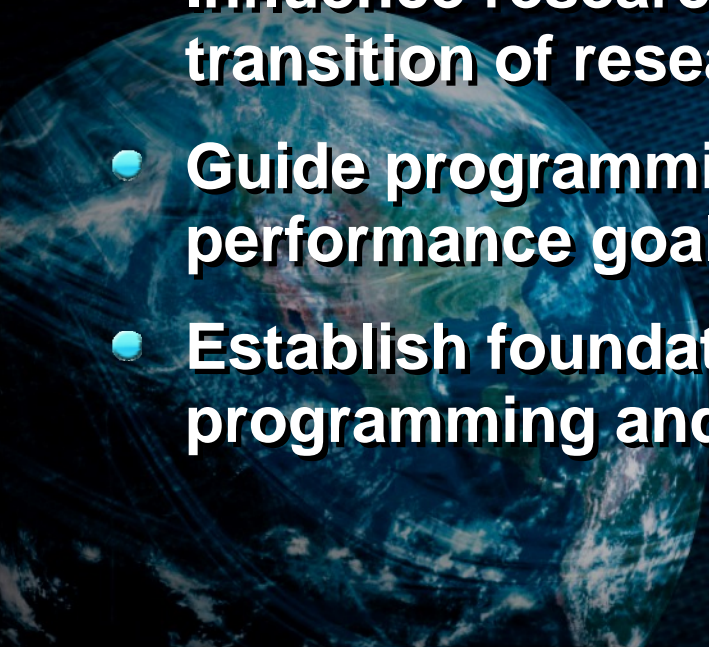




# Why an S&T Roadmap



- Provide a pathway to realize NWS's vision for the future
- Lead planning and infusion of cutting-edge science and technology
- Influence research priorities and improve the transition of research to operations
- Guide programming priorities to achieve NWS performance goals
- Establish foundation for annual planning, programming and budget formation







# Foot stompers



- **Stretch goals for Next Generation Weather Service**
  - *Tied to societal impacts—lives saved, property protected, economic benefits*
  - *Drive enabling capability and service plan needs*
- **Think outside the box; inform operational possibilities**
- **Know and Incorporate:**
  - *NOAA and NWS Strategic Plan Themes*
  - *Existing program plans, studies*
- **Consider existing and emerging operational requirements—OSIP, CORL, etc**





# NWS Strategic Themes (Draft)



- Focusing on Decision Support
- Delivering Customer-Centric Information
- Integrating and Improving Models of the Earth System
- Moving to “Warn on Forecast” Paradigm
- Estimating and Communicating Uncertainty





# Science and Technology Themes



- Warn on forecast for high impact events
- Next generation 4-D Forecast System
- Integrated observing and analysis system
- Customer-centric information architectures
- Dynamic training capabilities
- Tomorrow's dissemination/communication/outreach capabilities
- Incorporate social sciences in communications strategies





# 2025 Stretch Goals



- Each service area will develop some stretch goals
- Some notional ticklers:
  - *60 minute lead time severe thunderstorm warnings*
  - *60 minute lead time tornado*
  - *30 minute lead time initiation of convection (economic—air traffic, boating lives/property)*
  - *1-4 day lead time for solar storms (protect lives/property)*
  - *3-day tropical cyclone warning*
  - *Six hour lead time flash floods*
  - *Low ceiling/visibility*



**Questions?**

