TALKING POINTS:

- Good afternoon, it is a pleasure to be a part of this panel on Emerging Policy and Socioeconomic Topics.

- When it comes to improving societal outcomes, meteorology has too often been guilty of the "hammer syndrome"—if all you know is a hammer, everything else looks like a nail.

- In this case, the "hammer" has been our focus on more accurate, timely, detailed, and comprehensive forecasts.

- This strategy has worked for us in many ways, but we are beginning to understand that a "better" forecast really means a forecast that leads to better societal outcomes.

- Delivering accurate, timely and detailed forecasts is only part of what we need to be doing.

NWS priorities for integrating the social sciences

- The people who actually use our information to make critical decisions need forecasts that are easier to understand and more relevant to their decision making.

- If we deliver a forecast that is impact-driven and effectively communicates risk and uncertainty, we give our users the information they need to make decisions

    - This ultimately saves more lives and provides greater economic sustainability.

- As part of the Weather and Climate Enterprise, we must strive to achieve more than just an accurate, scientific forecast.

- We need to move beyond the physical science to more effectively (and efficiently) save lives and property.

- We need a more balanced strategy that continues to invest in improving the

accuracy, timeliness, and detail of our forecasts while investing in communicating our information better, making it more relevant to real-world decision makers, and understanding how the weather and climate enterprise impacts the economy.

Existing Challenges to Achieve these Priorities

- From an economic standpoint, if we are able to quantify the economic value of our information and services to Congress and OMB—in terms of dollars gained or saved—through products that are impact-based and services that focus on decision support, we will be able to argue with greater clarity the cost-benefit of a particular product or service and be better able to prioritize our future investments in science and technology.

- We know weather phenomena can have strong economic impacts (one-third of the U.S. economy—some $4 Trillion—is estimated to be sensitive to weather, water and climate events).

- The December winter storm system that impacted the Northeast corridor during the last weekend of the Holiday shopping season caused a noticeable drop in retail sales.

    - As a result of this drop in sales, many retailers chose to stay open longer and participated in selective in-store promotions for particular categories of goods that were overstocked.

    - If such retailers were able to receive accurate and timely forecasts which also conveyed forecast risk and uncertainty, those same retailers could better capitalize on the information received and make wiser economic decisions about where to place their retail, resulting in greater economic savings for the Nation as a whole.

Examples of use of Social Sciences in Existing NWS Operations

- We're already moving in this direction.

- NWS engaged much more directly with decision-makers at regional, state, and local levels to mitigate the effects of the Red River flooding of last spring.

- Our forecasters provided personalized support to public officials throughout the event

- Over a period of several months, we conducted or participated in numerous webinar conferences, planning meetings, conference calls and GoToMeetings with various local, state, and federal partners, and participated in interviews with local, regional, national, and international (Canadian) media outlets.

- We stepped up efforts to make our local products and information meaningful to our partners and the general public.

- The recognition by our forecasters and partners that a highly accurate and timely forecast combined with expert communication skills, proper conveyance of the forecast risk and uncertainty—and an awareness of what information our partners and the public needed to make decisions—ultimately resulted in decisions that saved lives and property.

Next Steps in Integrating Social Sciences into NWS Operations

- Effective integration of social science into our information and services will not happen overnight.

- NWS is actively engaged in the integration of social science into our information and services.

    - I have named a social science focal point to help us coordinate social science activities throughout NWS and with other NOAA line offices in an effort to leverage existing capabilities and begin the process for long-term social science capacity building throughout NWS.

    - We include a social scientist on all NWS service assessments teams, undertaking social science research into whether we are effectively

conveying risk and uncertainty information in our information and services.

- The NWS has established the Weather and Water Social Science Working Group, which is charged with finding ways to systemically integrate social sciences throughout weather and water products and services.

- NWS employees are participating in the grassroots Weather and Society*Integrated Studies program, known as WAS*IS.

    - Through its relationship with WAS*IS, NWS hopes to build strong communications with this interdisciplinary community.

    - We will gain insight into new and innovative ideas, methods, and examples related to the integration of meteorology and social science.

- Social science methodologies are also important for the NWS to accomplish its goal to help America make better decisions through a new commitment to decision support services.

    - We have a doctoral student at Howard University in Washington DC, Vankita Brown working to examine ways to effectively communicate complex risk assessments across cultures.

- We are looking into how our climate prediction models convey economic value.

- While current funding resources will remain a challenge and extensive allocation of funding toward social science is difficult in a time of competing needs, we have moved forward on various fronts to integrate social science methodologies into our information and services.

Closing Remarks

- We are thankful for the support of our academic research partners such as NCAR's Societal Impacts Program (SIP) and OU's Social Science Woven into Meteorology (SSWIM).

- We intend to continue our support for social science research conducted outside

NOAA and work with those who have social science expertise in the private sector, academic and research sectors.

- As NWS moves toward a more balanced approach between the physical and social sciences, it is my hope you will be encouraged and energized by the discussions of this panel.

- It is also my hope that you will help contribute to NWS's efforts and the efforts of the weather and climate enterprise as a whole as we move forward together in an effort to convey weather and climate information in a manner that provides the user the best socio-economic information from which to make decisions.

- The integration of social science into NWS information and products will enable us to go from a good agency to a great agency by making our information more relevant to decision makers and support estimation of societal benefits as a performance measure.

- As partners in this enterprise, let's go beyond where we are today and provide information and services that not only save additional lives and property, but provide better decision support for our partners, users and the Nation as a whole.