

**BUILDING A WEATHER-READY NATION BY TRANSITIONING  
ACADEMIC RESEARCH TO NOAA OPERATIONS  
A Workshop**

**Goal:** An informed academic community that actively participates in transitioning research to operations (R2O) and operations to research (O2R) to build a Weather-Ready Nation through improvements in NOAA's weather operations.

**Objectives:**

- (1) To inform the academic community about NOAA's transition policies.
- (2) To promote best practices for effective transitions of research from academia and NOAA.
- (3) To explain NOAA's weather transition programs.

**Date: November 1-2, 2017**

**Agenda:**

**Venue:** NCWCP Auditorium and Collaboration Rooms

*Wednesday, 1 November*

Venue: NCWCP Auditorium

8:00 am        Network/Beverage service

8:30 am        Welcome/introduction

- John Cortinas, OAR
- Gary Matlock, OAR
- Antonio Busalacchi, UCAR
- Mary Erickson, NWS

**Session 1: NOAA Transitions: Overview, status and opportunities**

9:00 am        Overview of NOAA Transitions, Gary Matlock, OAR

- Fundamental concepts about transition at NOAA

9:30 am        Review of progress in NOAA transitions, Hendrik Tolman, NWS, and Derek Parks,

OAR

- Review academy report and assess progress
- Intellectual property and licensing

10:00 am        Funding opportunities for NOAA transition, Fred Toepfer, NWS, and John

Cortinas, OAR

10:30 - 10:50 BREAK

**Session 2: Promises and challenges of R2O**

*A series of presentations focusing on the needs, requirements, gaps, successes and challenges of NOAA transition*

10:50 am Observations and instrumentations for NOAA operations, Joe Pica, NWS

11:20 am NCEP production suite: current status and future evolution, Hendrik Tolman and Fred Toepfer, NWS

11:40 am Social science aspects of NOAA operations, Gina Eosco, Cherokee Nation Company

**12:00 - 1:00 Lunch (orders taken in advance)**

1:00 pm R2O in satellite observations, Steve Ackerman, University of Wisconsin

1:20 pm R2O in weather modeling, Robert Fovell, SUNY Albany

1:40 pm The National Water Model: from Research to Operations, Tom Graziano and Ed Clark, NOAA/OWP; Jerad Bales, CUASHI

2:20 pm The roles of NOAA labs and Cooperative Institutes in NOAA Transitions, Jennifer Mahoney, OAR

2:40 pm NOAA R2O through Cooperative Science Centers, Reza Khanbilvardi, City College of New York

3:00 - 3:20 break

3:20 pm R2O beyond weather example: wave models and NOPP, Arun Chawla, EMC

3:40 pm R2O in climate, Dan Barrie, OAR

**Session 3: Support for O2R**

*A series of presentation focusing on the support of operational systems to the research community*

4:00 pm DTC activities in support of O2R2O, Bill Kuo, DTC

4:20 pm JCSDA activities in support of O2R2O, Tom Auligne, JCSDA

#### **Session 4: Open discussion & Set-up of Working Groups**

4:40 pm Set-up the working groups

5:00 pm Adjourn

#### **5:30 - 7:30 Networking and informal discussion at Franklins Restaurant**

5123 Baltimore Ave, Hyattsville, MD 20781

<http://www.franklinsbrewery.com/>

(Heavy appetizers to be provided; beverage on your own)

*Thursday, 2 November*

8:00 am Network/Beverage service

#### **Session 5: Working Group discussion:**

Participants will be broken up into smaller groups (10-15 people in a group) to:

1. identify the issues, and challenges, and
2. provide recommendations.

#### **Questions for the breakout sessions:**

1. From your or your organization point of view, what area of weather has matured research that has not transitioned to NWS operations? For example, new observational techniques, numerical modeling techniques, data assimilation techniques etc. Can you list two or three R2O priorities that you think NOAA should focus in the next five years?
2. What are some of the biggest gaps in the current weather forecasting that NOAA needs to focus on transitioning in order to fill these gaps in the next five to ten years?
3. From the perspective of your organization, what is the biggest challenge your organization faces in transitioning research to operations, other than the funding issue.
4. Testbeds play a crucial role in transitioning research to operations. Do you know anything about the testbeds? Are the current testbeds serving the intended purpose? Are they readily accessible to the academic and private sector?

8:30 - 10:00 Working Group discussion - I

10:00 - 10:20 Break

10:20 - 12:00 Working Group discussion - II

12:00 - 1:00 Lunch

**Session 6: Working group reports**

1:00 - 3:00 Reports from working groups

3:00 - 3:20 Break

**Session 7: Wrap - up and next steps**

3:20 - 4:20 Wrap-up and next steps

4:20 Meeting adjourn