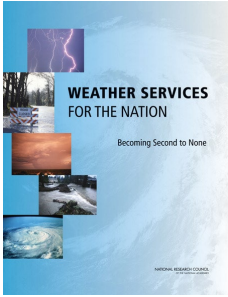# EISWG Statement Concerning Ongoing NWS Data Dissemination Challenges

30 April 2021

Brad Colman and Scott Glenn, EISWG Co-Chairs

Background

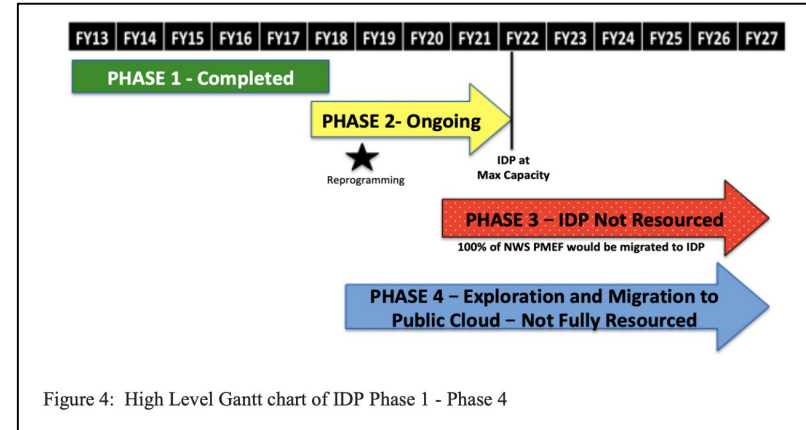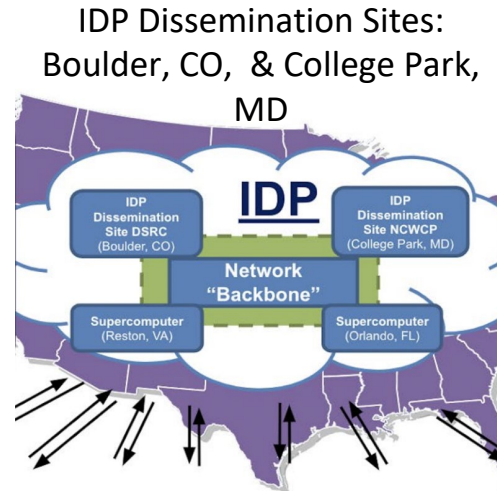*Today's Key Challenge*s ... *faced by the National Weather Service (NWS):*
- ***Keeping Pace*** *with accelerating scientific and technological advancement*
- ***Meeting Expanding and Evolving User Needs*** *in an increasingly information-centric society*
- ***Partnering with an Increasingly Capable Enterprise*** *that has grown considerably*

--from Weather Services for the Nation, Becoming Second to None, The National Academies Press, 2012.

National Oceanic and Atmospheric Administration

National Weather Service

Future Needs of the
Integrated Dissemination Program:
An Implementation Plan

August 2020

IDP Dissemination Sites:
Boulder, CO, & College Park, MD

Figure 4: High Level Gantt chart of IDP Phase 1 - Phase 4

Findings

1. ***Challenge:*** Tremendous growth in demand combined with insufficient growth in delivery infrastructure have resulted in significant production system downtime.

2. ***NWS IDP Plan, Aug 2020:*** The NWS issues their *Future Needs of the Integrated Dissemination Program: An Implementation Plan*

3. ***PNS, Nov 20, 2020:*** Proposes 60 cpm limit to >53 websites within IDP Applications, NOMADS, and FTPPRD.

4. ***SCN, Mar 17, 2021:*** Announces reduced restrictions of 120 cpm limit to 5 websites within NOMADS and FTPPRD (implemented approx. 21 April 2021).

5. ***Rate Limits:*** The limits, and auditing methods, have the potential to negatively Impact the Enterprise supporting a Weather Ready Nation as we enter Fire Weather and Hurricane seasons.

NOMADS: National Operational Model Archive and Distribution System

Recommendations

1. ***Prioritize an emergency response:*** Obtain (reprogram) funds for the increased bandwidth and infrastructure modifications needed to remove restrictions.

2. ***Engage the broader Weather Enterprise:*** Continue successful engagement with external partners; EISWG is ready to help.

3. ***Leverage Content Delivery Networks:*** Effectively moves demand away from NOAA endpoints for data files that do not change once produced.

4. ***Implement user management, product availability announcements, and training:*** Distribute best practices for access, develop methods to identify and notify users.

5. ***Migrate to commercial cloud networks:*** Fund and implement IDP Phase 4.