

Congress of the United States

House of Representatives

COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY

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February 13, 2018

The Honorable Gene Dodaro
Comptroller General
Government Accountability Office (GAO)
441 G Street, N.W.
Washington, D.C. 20584

Dear Mr. Dodaro:

The National Weather Service (NWS) has been engaged in an ongoing effort to improve the accuracy, timeliness, and effectiveness of its weather forecasts. This is based in part on requests by Congress, and recommendations from reports produced by the National Academies of Science, Engineering, and Medicine (NASEM), and the National Academy of Public Administration (NAPA)¹. We write to you with concerns about some of these activities by the National Weather Service that appear to be occurring without the necessary transparency to Congress and the American people.

As part of this effort to improve its weather forecasts, NWS entered into an agreement with the consulting firm McKinsey & Company in 2015 to conduct an operations workforce analysis (OWA) to provide recommendations as to how NWS can better manage its workforce to meet the evolving needs of the weather service. The National Weather Service spent about eight million dollars on the McKinsey consulting agreement.

The contract contains multiple deliverables and due dates, including a “comprehensive report on the current state baselines and gaps,” a “report with description of alternatives and prioritized selections for planning,” an “implementation tracking progress report,” and a “final report of lessons learned.” We have attached a copy of the contract to this letter, including the “performance work statement” in Appendix A that details the required deliverables.

It is our understanding that the final report, due in April 2017, was not delivered. After repeated inquiries, NWS provided us (and then promptly made public) what they described as a “white paper” which NWS claim represents the final report produced by McKinsey. This paper, which was completed in September 2016, carries no authorship identifiers and does not appear to match the deliverable described in the contract.

¹ *Weather Services for the Nation: Becoming Second to None*, National Research Council of the National Academies, 2012; *Forecasting for the Future: Assuring the Capacity of the National Weather Service*, National Academy of Public Administration, May 2013.

We have asked NWS to provide us with the reports McKinsey delivered pursuant to the contract and were told that many, if not all, of the reports are actually PowerPoint slide decks that have already been provided to Congressional staff through various briefings on the OWA. This explanation, too, would appear to contradict a plain reading of the contract which appears to specify standalone reports as opposed to PowerPoint presentations.

These discrepancies between documents NWS has provided to us and documents McKinsey was contracted to deliver raise questions about the execution of the contract and NWS's transparency with Congress. As a threshold matter, did McKinsey fully perform its obligations under the contract? If so, where are the deliverables? If McKinsey has performed fully, and all requested materials have been provided to NWS, then their performance raises questions about the effectiveness of the OWA itself. Did the OWA meet the intent of both Congress and the National Academies?

Additionally, McKinsey references implementation of the National Blend of Models (NBM) as a key component of future workflow processes to allow forecasters to spend less time "in the grids."² The NBM is a suite of both NWS and non-NWS weather models and model guidance criteria and has become an integral part of NWS's Evolve strategy.³ That strategy involves, "Testing and implementing [NWS's] Operations and Workforce Analysis (OWA) recommendations," advancing "NWS infrastructure, science, and technology," and fostering "partnerships at all levels," that includes proactively harnessing "external advances that benefit the [NWS] mission, and enables the enterprise to grow."⁴

We have attempted to ascertain why and how the NBM became an integral part of the NWS Evolve process, and, have requested and received some information from NWS regarding this issue. This information has only led to additional questions about the processes by which the NBM was both selected, and, is now being implemented by NWS. Is NWS implementing the NBM because it is an improvement over current forecasting processes, making it more accurate, or because implementation will reduce the necessity of the forecaster labor pool or reduce forecaster hours? The justification for using the NBM approach in the Evolve strategy has not been clearly or fully articulated by NWS.

Therefore, we are requesting that GAO undertake a review of NWS OWA activities and provide us with the necessary information to better understand this issue and the decisions made by NWS. The National Weather Service performs a critical function in protecting the American people from the threats of severe and everyday weather events. The efforts of NWS and its employees can save lives and help reduce the economic consequences from devastating storms, hurricanes, floods and other severe weather events.

² OWA Leadership and Congressional Briefings, OWA Deliverables, September 18, 2017, pp.517/629, <https://www.weather.gov/media/nws/OWA%20Combined%20FINAL%2009122017.pdf>.

³ National Weather Service Website: National Blend of Models, accessed on November 13, 2017, https://www.weather.gov/mdl/nbm_home.

⁴ "Status and Future Path of Evolving the NWS," Dr. Louis W. Uccellini, Director, National Weather Service, NOAA Assistant Administrator for Weather Services, January 26, 2017 – NWS Partners Meeting, Seattle, Washington," accessed here: https://www.weather.gov/media/wrn/calendar/NWSDirectorRemarks_2017.pdf

While we support regular improvement and innovation in the National Weather Service it is essential that such advancements be made through a transparent process. In your review, please address the following issues:

First, as it pertains to the development and use of the NBM in Evolve efforts, please examine:

- 1) The stated criteria by which the NBM was selected for use in NWS Evolve activities. This should include a description of any other alternative methods or approaches that were considered for a similar purpose. In addition, it should include a catalog of the individuals inclusive to NOAA and NWS involved in the selection of the NBM.
- 2) A review of any NWS comparison made between the current models and processes being used and the National Blend of Models (NBM) approach.
- 3) A description of the verification process currently used to ensure NBM performance is meeting necessary accuracy benchmarks. This should also include a catalog of the individuals inclusive to NOAA and NWS involved in the verification process of the NBM.
- 4) The potential impact on the NWS workforce from implementing the NBM.
- 5) The potential degradation in current services if the NWS implements the National Blend of Models.

Second, as it pertains to the execution of the McKinsey contract, please examine:

- 1) Both option year contracts and invoices submitted by McKinsey stating the hours worked, and the task completed, to determine what deliverables, if any, were expected to be produced by McKinsey, and, whether all the deliverables were in fact completed and delivered.
- 2) The materials made public by NWS to determine if they can represent, in whole or in part, the deliverables specified in the contract.

Third, as it pertains to the effectiveness of the OWA:

- 1) A review of the Statement of Objectives (SOO) and whether as written it captures the intent of both Congress and the National Academies.
- 2) A review of the selection criteria for the contract and whether there were multiple bids.
- 3) A review of McKinsey's work to determine its responsiveness to the SOO. Specifically whether McKinsey successfully developed "a series of recommendations and actionable plans for an operating model(s), workforce model(s), and organizational structure(s)..."

To discuss this request in more detail, please feel free to have your staff contact Pamitha Weerasinghe of the Committee's Democratic staff at (202) 226-8670. Your assistance in this matter is greatly appreciated.

Sincerely,



Eddie Bernice Johnson
Ranking Member
Committee on Science, Space & Technology



Suzanne Bonamici
Ranking Member, Subcommittee on Environment
Committee on Science, Space & Technology



Paul Tonko
Member of Congress
Committee on Science, Space & Technology



Charlie Crist
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