

## **Computing Clouds: How NOAA's Cloud Migration augments technology and transparency**

The National Oceanic and Atmospheric Administration (NOAA) is primarily known for monitoring oceans, major waterways, and the atmosphere. Its three-pronged mission is to “to understand and predict changes in climate, weather, oceans and coasts; to share that knowledge and information with others; and to conserve and manage coastal and marine ecosystems and resources.” NOAA prioritizes the sharing of its institutional knowledge with the public, private, and academic sectors as a mission-critical objective. In order to make public data like water reports, climate projections, and weather warnings readily available, NOAA has turned to cloud computing technology.

The Cloud Acquisition Team at GSA considers the NOAA Cloud Initiative as a model effort for smart cloud migration. Using the federal cloud strategy [Cloud Smart](#) as its guide, NOAA is effectively leveraging the cloud to support its business and mission operations. According to the [April 2019 NOAA Business Brief](#), “NOAA works with five commercial cloud providers to see how their services can facilitate full and open data access to the taxpayer and to foster innovation by leveraging new automation tools to make data more readily accessible. To date, more than 40 NOAA datasets have moved to commercial cloud provider systems.” The Brief goes on to call for further investment in cloud computing to not only save taxpayer dollars, but also provide for improved performance and cybersecurity.

NOAA’s experience is a clear example of GSA’s cloud acquisition best practices in action. First, the NOAA Cloud Initiative plans to acquire their enterprise-level cloud solution through multiple Cloud Service Providers (CSPs). By doing so, the organization would diversify their technical capabilities and avoid being locked in with one vendor. Secondly, NOAA uses Statement of Objectives (SOO) documents rather Statements of Work (SOW) to illustrate the agency’s cloud goals. For example, the organization desires their CSP “provide Cloud Storage Services that will provide persistent storage, backup service, long term storage, continuity of operations (COOP), and disaster recovery services.” By using this type of capabilities-based acquisition tool, the responsibility for preparing SOW shifts from the government side to solicitation respondents. The NOAA Cloud Initiative package also specifies a desired contract type. In so doing, they let prospective vendors know the right pricing model to propose, which saves time and avoids confusion throughout the process.

If your agency is considering a transition to cloud or is in the process of acquiring a cloud solution, let your plan be anchored in your mission and guided by your business objectives. The acquisition process, though complicated, can be made faster by keeping these best practices in mind. For more cloud tips, cloud acquisition guidance, templates, and general resources, visit GSA’s Cloud Information Center – [gsa.gov/cic](http://gsa.gov/cic).

For more information on cloud, cloud acquisition, best practices, and more, contact GSA’s Cloud Acquisition Team at [cloudinfo@gsa.gov](mailto:cloudinfo@gsa.gov) or call 202-969-7113.