Federal Data Strategy Next Steps Emphasize Maturity, Momentum


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The Office of Management and Budget is expected to release the Federal Data Strategy 2021 Action Plan by the beginning of January with calls for emphasis on maturing data management, tightening cross-agency collaboration and furthering data-skills training, Deputy Federal CIO Maria Roat told GovernmentCIO Media & Research.
Roat, who is one of the key leaders behind the data strategy, hinted that the new plan will largely continue the momentum built this year. Roat, while CIO at the Small Business Administration, was co-lead of the Data Strategy Development Team, which drafted the initial [2020 Action Plan](#) and Federal Data Strategy launched at the end of last year.

The Federal Data Strategy is a 10-year plan to leverage data as an asset across federal agencies. Civilian agencies have spent 2020 executing on 20 action items outlined within the first-year action plan of the overall strategy. Those items called on agencies to complete agency-specific, community of practice and shared interagency responsibilities throughout the year.

While agencies largely met the actions of the 2020 plan — especially in the community-based and shared items — agencies will continue working toward maturing data governance in 2021, Roat said.

“Even though 2020 was a foundational year, we’re building on that foundation in 2021,” Roat said. “We recognize the agencies have diverse needs, resources; they have different missions. So even as we’re looking at the execution of all of those milestones, we have to keep in mind that agencies are at different levels of maturity.”

### 2020 Action Plan Milestones

Though federal agencies faced various tech challenges across the board this year with the onset of the pandemic, agencies and data leaders successfully stood up the Federal CDO Council, the OMB Federal Data Policy Committee Data Ethics Framework and Data Protection Toolkit, on top of other actions to mature respective data skills and standards.

According to the data strategy [progress dashboard](#), agencies initiated all of the 20 action items and completed nearly all of the shared and community action items.

Amid that progress, Roat said the demand for information and insights derived from data amid COVID-19 pushed agencies to accelerate momentum around data use and cross-agency collaboration around data.
“Not only were agencies executing on their actions plans, but they were also using data for the pandemic response,” Roat said. “Agencies were able to use data across horizontally, as well as vertically, and I think what came out of that, in just a high level, is that we achieved a ton of momentum with data usage. When you look at [the Department of Human Services] and the work they did with the states and the medical facilities and others — they were able to pull that data up, aggregate it, look across so they could understand what was going on with the pandemic.”

Roat also emphasized the role of cross-collaboration with data in executing the Paycheck Protection Program this year, as the SBA and Department of Treasury exchanged information to support businesses struggling during the pandemic. (At the start of the pandemic, Roat was serving as CIO at SBA before her appointment to her current role in May.)

That cross-agency data collaboration manifested in a more permanent and coordinated structure with the 2020 Action Plan’s call to form a Federal CDO Council, chaired by Department of Agriculture CDO Ted Kaouk. The council spent this year developing individual agencies’ internal data governance structures, management and use, and also established data governance bodies to create data roadmaps.

In support of the pandemic response, the CDO Council established a COVID-19 Working Group, Roat said, and the council also collaborated with other groups outside of its own membership to support those partners’ respective initiatives. Some of these groups included data leadership at smaller agencies that aren’t on the council and data-specific communities around geospatial and financial data.

The CDO Council, in partnership with the Federal CIO Council, also worked on the Federal Data Strategy’s goal to build up the data workforce and data science skills across government by initiating this fall a six-month data science training program. Roat said that this round of the program involved 61 participants across federal agencies and geared those individuals’ training toward real-world problem-solving projects across government.
“The idea is to take people who understand data, and know how to use data, to bring their skills to another level,” Roat said. “They will have the data science curriculum and a capstone project, and the idea is for them to work with each other, especially on the capstone project, to demonstrate interagency collaboration to solve actual problems. … The need is for not just doing things with data, but to train people and teach them how to use data in more meaningful ways as we’re trying to advance technology.”

Beyond the pandemic response, federal organizations are applying data and data skills to serve the country and enhance informative decision-making.

The National Weather Service, for instance, has used drones to evaluate and track hurricanes, gathering data from the drones to more accurately determine hurricane paths as they come through the Gulf of Mexico.

“The National Weather Service nailed the hurricane track, but it really informed where should resources go when you think about a hurricane track and the federal response adjustments that could be made,” Roat explained. “The better the data that’s coming in, the better you can track where hurricanes are going to land and at what intensity level. You can have the resources staged and ready to go to help people on the ground.”

The Department of Veterans Affairs [ramped up its telehealth capabilities](https://www.vets.gov/services/healthcare/telehealth) this year thanks to increased understanding and visibility of its customer data, Roat said. This allowed the agency to stand up its remote health care infrastructure and strategy effectively.

“They have to use data to understand their customer base and where their customers are, so as you have the data on your customers, how do you build out that telehealth program to interact with people who cannot come into a hospital or come into a clinic or come into a brick-and-mortar facility?” Roat said. “How do you engage with them, and how do you know what that distribution is around the country so that you can serve up that community better, so using that data to inform decisions on how you meet your customers [is critical].”

**Maturity and Momentum in 2021**
With 2020 being the foundational year for the Federal Data Strategy, agencies will begin fostering maturity across the data communities and continuing momentum in the new year.

Since agencies began this year with varying levels of handling, maturity and governance around data, Roat said that less mature agencies will be catching up to those excelling in data-driven initiatives and use.

“There are pockets even within some of the bigger departments and agencies that are more mature, and the foundational items are really building to get agencies to at least commonality across the board,” Roat said.

The differing levels of maturity have impacted each agency’s status in meeting the 2020 plan's goals established at the individual agency levels. A recent Government Accountability Office report surveyed four agencies representative of a range of data governance experiences, including the National Science Foundation and departments of Agriculture, Commerce and Housing and Urban Development. The report found that although each agency made progress in establishing data governance, they missed certain action plan milestones.

In light of the current status of each agency, Roat envisions a number of ways to accelerate less mature agencies forward, especially in interagency collaboration and an increase in information-sharing. Roat sees federal interagency councils (like the Federal CDO Council) as key players in disseminating best practices, maintaining communication across leadership and fostering an educational environment.

As agencies look to mature their own organizations, Roat said agencies need to examine their inventories and quality of their data assets to continue informing their strategic planning. Throughout this work, she hopes that agencies will aim toward developing master data management programs.
“Looking at the maturity gaps and continuing to fill those and bringing in that data and infrastructure maturity within their environments — what does that maturity model look like for agencies?” Roat said. “They’ve done some work on that, but continue to finish that initial assessment, build that data strategy, those roadmaps and moving into a plan for those data assets. I think this is part of getting to a master data management program, if you will, adopting what that is and continuing to build.”

2021 will also be a year to continue moving forward with filling the data skills gap. Even though the Federal CDO and CIO Councils initiated a data skills training program, there’s still work to do around adding personnel who are skilled in data science and in normalizing the use of data across the enterprise. Ensuring that individuals are literate in data and are able to understand and make decisions off of it are key goals for Roat and agencies in the coming year.

“Whether it’s just data skills in general or overall data science, there’s going to be continued emphasis, because regardless of your job, you use data, and understanding the importance of that data, the quality of data and what could be done to improve it,” Roat said. “Increasing staff data skills is going to continue to be a push.”

The initiatives Roat highlighted are also those GAO echoed in its report, signaling broader consensus with the future paths and plans for agencies overall. GAO encouraged agencies to push for stronger data assessments, infrastructure maturity, and personnel data literacy evaluations.

While these efforts are among the immediate projects agencies will pursue in the year ahead, Roat said executing on the Federal Data Strategy is only one piece of a longer journey in IT modernization.

“There is need for continued, sustained IT modernization across the federal government,” Roat said. “You have to have that multi-year funding and that vision to continually keep up with and leverage the changes in technology.”