Advances in the access, collection, management, analysis, and use of data across public sector organizations substantially contributed to steady improvements in services, efficiency of operations, and effectiveness of government programs. Data and analytics are no longer “just” for specialists, such as data engineers and data scientists; rather, data literacy -- the ability to read, write, and communicate with data in the context of their role -- is now increasingly recognized as a core workforce competency. In order for agencies to effectively engage in the ever-changing data landscape, organizational data literacy capacity and program models can help ensure individuals across the workforce are supported when solving problems with data.

Looking across the ten pioneers discussed in this report, key lessons emerged that are relevant for government agencies as they design data literacy capacity and programs:

- **Engage Senior Leaders with Clear Roles and Expectations.** Executive leaders set the tone for data literacy and data use in an organization, so ensuring the leadership is clear about shared and individual responsibilities also enables chief data officers, human capital officials, and others to sponsor and implement the data literacy program effectively.

- **Clarify Target Competencies and Personas for Actionable Gap Analysis.** Thoughtful approaches to building data literacy programs include the use of data in assessing existing competencies, personas, capacity, and skills across the workforce, then identifying strategic areas for investment and improvement based on organizational priorities.

- **Cultivate a Common, Shared Language.** Talking about data in a common, relatable way across an organization can drive traction in the application of data skills and expertise for lasting impact.

- **Improve Data Accessibility.** Even with a confident and capable workforce, if data access is unintentionally restrictive and data cannot be readily used in practice, data literacy programs will be limited in their ability to foster a data-informed culture across the agency.
• **Align Data Governance and Data Literacy.** As agencies are maturing data governance policies and practices, data literacy should be adjusted in tandem and vice versa. Key data governance work products including a data catalog, glossary, and data dictionary become critical foundations and dependencies for a successful data literacy initiative.

• **Encourage the Use of Data in Decision-Making.** As organizations build data literacy programs and advance data governance processes, senior leaders will increasingly be positioned to highlight the explicit impact and value of data in decision-making at all levels of the organization.

For organizations seeking to advance data literacy programs and build capacity, the lessons also suggest a series of actionable recommendations, including:

• **Sponsorship.** Agency heads should designate a Chief Data Officer or other official to sponsor the data literacy program and allocate sufficient resources for the initiative, including to staff a program lead position, provide a program budget, support public private partnerships, and to continually analyze staff needs as the program matures.

• **Transparency.** In support of the case for how data literacy supports agency goals, government executives should be more transparent and illustrative in how they use data with agency staff, and support identifying the data gaps through a learning agenda.

• **Incentives.** As agency data literacy programs mature, agencies should intentionally reinforce the cultural values of data- and evidence-informed decisions with incentives for the use of data in grants, regulations, and policy guidance.

The pioneers discussed in this report offer early lessons as other organizations also seek to improve capabilities for using data. Recognizing that program development is a learning process also means that no agency or organization should aspire for a perfect program at the outset; every program will change over time.