Leveraging the Power of Open Data to Improve City Services

Challenges and Choices for the New Mayor

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Mayor-elect Bowser has made open and good government a priority for her new administration. Her transition plan aims to advance accountability, public involvement, and data-driven decisionmaking in government. Today, as the value and availability of data are growing in importance, opening the government's data is a critical step toward achieving these goals. Open data—data that can be freely used, modified, and shared by anyone for any purpose—is key to creating an accountable and effective government.

An effective open data policy can help foster trust in government by allowing citizens and community organizations to monitor and comment on city spending and activities. It gives agencies access to timely and accurate data to make decisions about operations, programs, and policy. And it is critical to accomplishing the mayor's goals of improving health, housing, education, and economic development by helping staff identify emerging issues and trends, craft appropriate solutions, and monitor the implementation of city actions.

The District is an open data pioneer: it launched the first city government open data portal in 2006. Recently, DC has made significant strides in opening its data, including asserting the requirement for proactive data release, creating a chief data officer position, redesigning its two data websites (data.dc.gov and track.dc.gov), and improving the terms and conditions for using the city's open data. These advances in open data policy and practice are a strong beginning to a longer process.

Recommendations

To continue this progress, Mayor Bowser and her staff will need to firmly establish the policy and practice of open data, catalog current data assets, build a supportive culture, and engage external stakeholders.

Establish the Policy and Practice of Open Data

In the short term, the city administration needs to develop a holistic plan for how to improve and open the city's data and maximize its use inside and outside government. In the longer term, the mayor should work with the city council to create legislation codifying open data efforts in DC.

- Develop a comprehensive strategy for how to improve and open the city's data.

The mayor can look to other cities' strategic plans as examples; San Francisco's plan, for example, laid out a vision and broad goals with objectives and clear action steps. Having a strategic plan will set a common and public understanding of the District's vision for open data and guide decisions on how to best spend scarce resources. The strategy also will provide a framework to align plans and activities across agencies.

Open data efforts fall under the purview of multiple city offices. The chief data officer under the Office of the Chief Technology Officer (OCTO) is charged with coordinating the implementation and expansion of the District's open data program. The Office of Open Government (OOG), which is an independent office under the Board of Ethics and Government Accountability, is charged with ensuring compliance with the Freedom of Information Act and helping agencies implement open government practices. In addition, the mayor's transition plan notes her intention to appoint a chief innovation officer to her cabinet. This position could play several roles in data production and uses: supporting best practices, developing agency skill sets around innovation, and helping agencies generate new ideas and work across boundaries. To reduce the risk of fragmentation and duplication, the city's strategy should designate roles in open data for the chief data officer, the OOG director, and the chief innovation officer, as well as other key partners, such as the performance management office.

- Solicit feedback on the plan from city residents and other stakeholders.

Just as an open data policy invites analysts inside and outside government to use data improve government efficiency and services, developing such a plan should invite feedback from interested parties. The mayor's plan should solicit feedback from stakeholders on the format, structure, and release of open data. In addition, national organizations based in the city can share their expertise based on best practices around the country.

- Appoint someone who reports directly to the mayor to lead this work, signaling its importance to agency staff.

The choice depends on how the mayor structures her office, but one option is to designate the chief technology officer as lead, overseeing the development of the plan in close consultation with the chief innovation officer, the chief data officer, and the OOG director. Whichever choice the mayor makes, the person leading the planning needs a solid understanding of the technology used to develop and maintain data platforms and tools, as well as a vision of how open data can be deployed to enhance government accountability, policies, and programs. The lead can also be a powerful advocate for giving managers the necessary budget authority to buy technology and training in order to successfully implement open data plans.

- Create legislation to make open data a permanent operating principle.

Open data should be not just one mayor's initiative, but a permanent operating principle of all parts of city government. To accomplish this goal, we recommend the mayor and her open data leadership team work with the city council on legislation that creates a lasting charge and structure for open data. The legislation should create a framework that describes foundational principles, reinforces the city's progress to date, and sets the stage for improving the release and use of open data. It should also establish responsibility for oversight and implementation. The Sunlight Foundation's Open Data Policy Guidelines and legislation from other cities are good resources. The District's legislation should include the principles motivating open data and who is responsible for overseeing implementation. An open data law can also codify what data should be released and how, with requirements for review of privacy protections and data quality.

Catalog Current Data Assets

To develop a thoughtful open data strategy and responsibly manage operations, local government should first know what data it already collects and stores.

- Learn from other cities that are cataloging their data assets.

In deciding how to conduct an inventory, staff should review the federal metadata schema and speak with chief data officers in other cities who are already undertaking inventories, such as officers in Chicago, Philadelphia, and San Francisco. Chicago's chief data officer, for example, has partnered with Chapin Hall at the University of Chicago to create an open source system that publishes all the city's metadata. The Chicago team is leading a consortium of other city governments—including Houston and Pittsburgh—to use the metadata standard and system. The team is open to adding new city partners with strong commitments to opening their metadata.

- Conduct an inventory of the data that city agencies collect.

This inventory should include data that can be released, as well as internal, confidential data that will not be released. The catalog should describe the purpose, format, and applicable laws governing the

release of this data. This inventory process will be ongoing, likely collecting minimal information and then circling back to create more detailed documentation. Knowing that the inventory will be a work in progress, the open data team should aim to publish the first draft of the list by mid-2015. External stakeholders can use the published list of data to request additions to the catalog.

- Use the inventory to improve data-collection practices, inform the mayor's initiatives, and improve interagency collaboration.

With a full picture of the city's data environment, the city can improve efficiency by standardizing documentation practices, flagging data quality issues, and eliminating any duplicate data collection. This inventory will also help ensure that confidential data is handled consistently and responsibly across agencies.

In addition, city leadership can use the catalog to identify datasets that can inform the mayor's policy initiatives and note urgent needs for data improvements, such as modernizing rent control records. Finally, the inventory will promote internal collaboration, as each agency can see which data collected by other departments could provide insight for their own decisionmaking.

Build a Culture That Values Open Data

To effectively implement open data policy and practice, the mayor and her leadership team should send early and clear messages in support of open data efforts. This includes managers who oversee staff assignments and can set a tone to reinforce open data as an agency priority. Frontline staff should also be brought into the fold as they are often responsible for collecting and processing government data and may have insights into quality issues and how the data may be better put to use.

- Establish a mix of directives and incentives to drive home the value of open data.

In the near term, the mayor and her staff will need to issue explicit directives and work with agencies in developing open data–related performance targets. Over the long term, the mayor can set a positive tone to shift the motivation from merely complying to recognizing the benefits of opening data. Both efforts will help staff at all levels change their everyday habits and processes to prioritize open data activities and better use their own data.

- Use open data as part of the performance management process to evaluate and improve government services.

To get managers' buy-in, performance management—described in the mayor's transition plan and rooted in public measurement—should be a collaborative process, where teams examine data to provide better services. Inevitably, imperfect data will be released, but managers need to be confident that their commitment to transparency and improving data quality over time will be acknowledged. Several Urban Institute publications can provide resources for structuring the city's performance management efforts, including *Transforming Performance Measurement for the 21st Century*.

- Provide training on policies, technologies, and data analysis.

Training will require money and time but can pay off in enhanced willingness and capacity to share and use data; it can also help create a culture where open data is valued and prioritized. Frontline staff, in particular, may benefit from training because they are responsible for much of the data collection and analysis. Training should cover data analysis, data visualization and how to communicate findings and analysis, and lessons on new infrastructure and technology.

- Recognize agency staff who practice open data.

Public recognition can be a powerful tool to influence government culture. The mayor should highlight the accomplishments of agency staff who exceed expectations in implementing open data. And she should share stories of how the data are being used by internal and external actors. These stories can demonstrate improvements that result from sharing data and show how good data stewardship results in more effective policy.

- Clearly convey to agencies the importance of the annual open government reports.

This is one concrete way to encourage agencies to pay attention to their open data practices. The Open Government Advisory Committee is charged with reviewing and suggesting improvements based on the first round of open government reports from the agencies. The mayor should clearly convey the need to incorporate this guidance and other feedback to improve the quality of the tracking and public reporting of progress on open data.

Engage External Stakeholders

The continual improvement of open data initiatives depends on an ongoing exchange of ideas between the city and external constituencies. The District should take advantage of the unique wealth of expertise in the city, including civic technology groups, world-class academic and nonprofit policy institutes, and open government advocates.

- Seek input on technology and design.

Opening data is about not just posting more data online, but making relevant data easier for people to find, access, and analyze. The city can seek input on how to deploy technology and user-centered design to best disseminate data to different audiences. The wider community is also critical to expanding the use of open data through apps, visualizations, and analysis. External groups can also help build the capacity of nonprofits and government agency staff to understand and interpret the data.

- Develop an explicit plan ongoing engagement with different groups.

The Open Government Advisory Group offers the administration a formal mechanism to receive guidance and feedback, and it should be continued. The roster should be expanded to include additional nongovernment members to represent different types of stakeholders, such as open data experts and data users from local universities. Also, the new open data leadership should actively participate in local data-related meetings and events.

- Build relationships with chief innovation officers and data offices around the country.

Through these contacts, the administration can learn about best practices and ongoing efforts to expand open data in other cities. Relationships can be built through one-on-one outreach to individuals or by participating in formal networks like the Project for Municipal Innovation, online forums like Code for America's Government Network or the Ash Center's Government Innovators Network, or national conferences like Transparency Camp. Over time, the administration will also be able to share our innovations with other cities as our open data efforts mature.

Conclusion

An effective open data policy is about more than creating, processing, and releasing more data to more people. It is about using data more effectively and enabling more people—both inside and outside government—to use those data in order to help improve government services and better understand how policy affects our families, jobs, and neighborhoods. By embracing the benefits of an open data policy, the new mayor can foster transparency, promote collaboration among government agencies, and better engage and serve DC residents.

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