

To: Commission on Government Efficiency, COGE, a Charter Revision Commission

From: Jordan Shapiro, Associate Board Program Manager

Re: Written testimony for Modernizing Government and Streamlining Government Technology



Thursday, 11 June 2026

To Chair Gaspard, Executive Director Cheng, and commissioners,

My name is Jordan Shapiro, Associate Board Program Manager with BetaNYC. Thank you for this opportunity to testify. This document has been prepared with the assistance of BetaNYC's staff.

For nearly seventeen years, BetaNYC has worked at the intersection of civic technology and democratic participation in New York City. In that time, we have:

- Worked with council members to bring the Charter, Rules, and Administrative Code online in machine-readable formats.¹²
- Helped digitize the community board application process.³
- Produced the Boundaries Map, the only map enabling any New Yorker to identify their political and administrative districts by address.⁴⁵
- Helped address technology and service needs for community boards across all five boroughs via BoardStat.⁶⁷⁸

¹ BetaNYC. "nyc-charter-laws-rules." GitHub repository. Accessed June 10, 2026. <https://github.com/BetaNYC/nyc-charter-laws-rules>.

² Noel Hidalgo, "New Digital Democracy Tools for AI — MCPs for the Charter/Laws, Council, the City Record, and Checkbook," BetaNYC, May 21, 2026, <https://www.beta.nyc/2026/05/21/new-nyc-digital-democracy-tools-for-ai/>.

³ Noel Hidalgo, "Re: Oversight – Community Boards and Appointments," BetaNYC, February 28, 2023, <https://www.beta.nyc/2023/02/28/re-oversight-community-boards-and-appointments/>.

⁴ BetaNYC. "NYC Boundaries Map." Accessed June 10, 2026. <https://www.beta.nyc/featured-tools/boundaries-map/>.

⁵ BetaNYC, "SLA Mapper (SLAM)," accessed June 11, 2026, <https://www.beta.nyc/featured-tools/slam/>.

⁶ BetaNYC. "NYC BoardStat." Accessed June 10, 2026. <https://boardstat.beta.nyc/>.

⁷ Noel Hidalgo, "Press Release – Manhattan Borough President Brewer, BetaNYC Launch BoardStat, New Data Research and Visualization Tool for Community Boards and Everyday New Yorkers, at NYC311 #datajam," BetaNYC, September 26, 2017, <https://www.beta.nyc/2017/09/26/press-release-manhattan-borough-president-brewer-betanyc-launch-boardstat-new-data-research-and-visualization-tool-for-community-boards-and-everyday-new-yorkers-at-nyc311-datajam/>.

⁸ BetaNYC, "BoardStat," accessed June 11, 2026, <https://www.beta.nyc/featured-tools/boardstat/>.

- Built RADAR a civic help desk to connect New Yorkers and government offices with open data analysis, mapping, and research support.⁹

Our work has taught us one consistent lesson: digital sovereignty, the city's ability to own and freely control its own digital infrastructure, is not a technology preference. It is the foundation of government efficiency.

As long as New York City pays private vendors and consultants for the foundational infrastructure that enables the government to run its laws, data, and services, we are leaving efficiency on the table. Every licensing fee paid for external software is a dollar diverted from more critical services. Every vendor dependency is a potential point of failure in security or privacy.

We are here today to ask this Commission to dedicate time and resources to digital sovereignty as a core component of this efficiency mandate. New York City is closer to this goal than this Commission may realize. Charter §20-f, §20-u, and §1072 already reflect this idea but in fragments; this Commission has the opportunity to unify them into a streamlined operating principle about how we manage and run our digital services.

This is already reflected in our charter and laws.

In the 1840s, New York City built the Croton Aqueduct, treating clean water as a civic right. By the end of that century, the city had codified a clear procurement doctrine into the Administrative Code:

“No patented hydrant, valve or stop-cock shall be used by the department of environmental protection unless the patentee or owner of the patent shall allow its use without royalty.” ([Section 24-313 of the New York City Administrative Code](#))¹⁰

Can you imagine a water system where every time a fire hydrant opened, the city paid a licensing fee? New Yorkers would rightfully call that outrageous and inefficient. Yet this is precisely the situation we are in with how our digital infrastructure serves our laws, our data, and our services.

We urge the commission to establish a unified digital sovereignty mandate for New York City Government by proposing the following charter updates to voters:

⁹ BetaNYC, "Research and Data Assistance Requests (RADAR)," accessed June 11, 2026, <https://www.beta.nyc/featured-tools/research-and-data-assistance-requests/>.

¹⁰ New York City Administrative Code § 24-313, American Legal Publishing, accessed June 10, 2026, <https://codelibrary.amlegal.com/codes/newyorkcity/latest/NYCAAdmin/0-0-0-44611>.

1. **Establish digital sovereignty as a unified digital governing principle, freeing New York City from dependence on proprietary systems to access its own laws, data, or core operations.** This unifies what §20-f and §20-u already reflect in fragments.
2. **Extend Charter § 20-u's existing machine-readable API requirement for public records requests to the publication of all city laws, rules, codes, executive orders, and other core components of NYC's democracy.** Ensure they are publicly accessible to people and machines alike, on city-owned infrastructure, without a licensing fee.
3. **Expand OTI/DoITT's mandate under §1072 to require embedded service design capacity in all city agencies, coordinated by OTI/DoITT, modeled on the Open Data Coordinator network.**

Digital Sovereignty — ensuring NYC's democracy is owned by its residents.

Sovereignty for critical infrastructure is not a new idea.

New York City refused to pay a licensing fee every time a hydrant opened. That decision was made in the 1800s and still serves New Yorkers today. Today, we have the opportunity to make that same choice for our digital infrastructure.

The Charter already reflects this logic in fragments. What's missing is a comprehensive philosophy in how the City approaches digitalization.

Section 20-f¹¹ requires the city to maintain an open analytics library publishing the source code for its own data projects, so agencies and the public can see exactly how city data is being used. The city owns its analytical work, not the vendor.¹²

Section 20-u¹³, which establishes the Office of Algorithmic Accountability, requires algorithmic transparency and a pre-deployment bias assessment for any AI that could materially impact residents' rights or access to services. The need for this statute reveals what's at stake: when we do not own the algorithms and systems that power our civic infrastructure, we cannot fully account for how they affect residents.

¹¹ New York City Charter § 20-f, American Legal Publishing, accessed June 10, 2026, <https://codelibrary.amlegal.com/codes/newyorkcity/latest/NYCcharter/0-0-0-5025>.

¹² New York City Charter § 20-f, American Legal Publishing, accessed June 10, 2026, <https://codelibrary.amlegal.com/codes/newyorkcity/latest/NYCcharter/0-0-0-5025>.

¹³ New York City Charter § 20-u, American Legal Publishing, accessed June 10, 2026, <https://codelibrary.amlegal.com/codes/newyorkcity/latest/NYCcharter/0-0-0-7771>.

A city that refuses proprietary lock-in on its hydrants, has clear standards for public open data, and requires accountability for public usage of algorithms should also refuse vendor lock-in on its statutes and other critical digital infrastructure.

Services — NYC’s digital democracy plumbing.

For the government to be truly efficient, it must own its digital stack.

Today, the canonical digital version of the NYC Charter and Administrative Code is hosted and maintained by a private company, American Legal Publishing, not by the city. When AI systems, journalists, and residents read city law through software, they are reading through a vendor’s interface, not a city-owned source of truth.

New York City already has some of the open source principles and commitment to machine readability to lead in this space.

Section 3012 of the NYC Charter governing the Department of Records and Information Services states:

“...Each step of the freedom of information law process for each request received, including the following information, which shall be in a machine-readable and externally-searchable format.”¹⁴

We urge the commission to apply the same concepts to the software that hosts our laws and critical services.

Owning the stack is not a new idea.

Washington, D.C.’s municipal code lives on GitHub, in open XML, under a public-domain license.¹⁵ The federal government has reached the same conclusion, for security reasons as much as efficiency ones. The NSA released Security-Enhanced Linux as open source in 2000 because transparency enables the independent security auditing that proprietary software cannot. A Department of Defense report found that “security depends on free and open source

¹⁴ New York City Charter, Chapter 48, § 1072, American Legal Publishing, <https://codelibrary.amlegal.com/codes/newyorkcity/latest/NYCcharter/0-0-0-6584>.

¹⁵ Council of the District of Columbia, "law-xml," GitHub repository, accessed June 10, 2026, <https://github.com/dccouncil/law-xml>.

software”¹⁶ and warned that restricting it would undermine the military's own cybersecurity posture.

Internationally, New Zealand and France have built out open source methodologies for “laws as code”: a purpose built programming language for writing laws and rules precisely and clearly so a computer can understand and apply them.¹⁷¹⁸

New Yorkers should never have to rely on private code and private algorithms to interpret or execute their democratic rights. The groundwork exists. New York City has the technical talent, the civic technology community, the scale, and the precedent to be the domestic leader in this space.

Practices — making digital plumbing work for all New Yorkers.

Owning the stack is not enough if the city cannot maintain and evolve what it builds. New York City’s Digital Services Department needs clear authority to work across agencies.

That requires expanded in-house capacity, not as contractors.

We call on the commission to expand OTI/DoITT's mandate under §1072 to establish citywide service design teams and standards, provide direct technical assistance to city agencies, and report annually on agencies' capacity to deliver service designs and maintain digital services.

NYC’s Analytics Exchange¹⁹, Civic Service Design Studio²⁰, NYC Digital Services, and Town+Gown:NYC²¹ have demonstrated that the pipes work. Now, we need to connect them to every agency.

Today, §1072 gives OTI/DoITT broad authority to assist agencies with technology — but it creates no requirement for agencies to develop their own in-house service design capacity. We ask for the Commission to break OTI/DoITT and agencies from outside vendors for every digital change and expand in-house capabilities.

¹⁶ Terry Bollinger, Use of Free and Open-Source Software (FOSS) in the U.S. Department of Defense (McLean, VA: The MITRE Corporation, January 2, 2003), https://dodcio.defense.gov/portals/0/documents/foss/dodfoss_pdf.pdf.

¹⁷ OpenFisca, "OpenFisca Documentation," accessed June 10, 2026, <https://openfisca.org/doc/>.

¹⁸ New Zealand Government, "Better Rules," accessed June 10, 2026, <https://www.betterrules.govt.nz/>.

¹⁹ NYC Analytics Exchange, accessed June 10, 2026, <https://www.nyc.gov/content/oti/pages/data-analytic>
[the Commission to break OTI/DoITT and other agencies away from outside vendors for every digital change and to s/analytics-exchange](https://www.nyc.gov/content/oti/pages/data-analytic)

²⁰ NYC Service Design Studio, accessed June 10, 2026, <https://civicservicedesign.com/about-the-service-design-studio-at-the-mayors-office-for-economic-opportunity-1f8d7c4fc423>

²¹ Town+Gown: NYC, accessed June 10, 2026, <https://www.nyc.gov/site/ddc/about/town-gown.page>

BetaNYC has long called for service design capacity embedded across city agencies.²² We envision service design teams operating the way Open Data Coordinators do: individuals who share a practice across the city while knowing their agency domain intimately. Outsourcing technology, data, and design will not produce the long-term sustainability the city needs. The city must insource people.

Every agency with a service design team can build and evolve its own tools to include features New Yorkers need, not features vendors sell us; those efficiencies compound over time. Amending §1072 to require this capacity, coordinated by OTI with annual reporting on digital service readiness, ensures the city builds long-term, self-maintained expertise, not expertise it rents.

People — the plumbers.

Lastly, we need cycles of leadership in which insights and solidarity are built and passed on to each new generation of civil servants. Every generation needs to believe that democracy and government can serve the people.

BetaNYC proposes a mayoral civic technology fellows program: a structured pathway for early-career New Yorkers to complete tours of duty across city agencies, exploring service design, digital infrastructure, and civic participation before settling into a home agency. This is the civic equivalent of a medical residency — learning by doing, with experienced practitioners alongside.

For over a decade, BetaNYC has hosted civic innovation fellows and apprentices²³. These undergraduates, graduate students, and early-career public-interest technologists have explored complex civic issues. Their work has advanced the city's ability to build digital equity across agencies, community boards, and the public.

Additionally, for civil service staff to grow, they need fundamental digital literacy. This ensures that service delivery teams can work in solidarity with frontline workers.

²² BetaNYC has called for embedded service design capacity across city government in formal testimony before the NYC City Council Committee on Technology:

[Testimony to the NYC Council for FY2027 Preliminary Budget Hearing — Technology \(March 2026\)](#)

[Testimony to NYC Council's Hearing on Open Data \(February 2024\)](#)

[Testimony on NYC COVID-19 Vaccinations and Websites \(February 2021\)](#)

[BetaNYC's Preliminary Budget Testimony for FY2022 \(March 2021\)](#)

[Written Testimony for DoITT/OTI Budget Hearing FY2023 \(March 2022\)](#)

²³ BetaNYC's Workforce Development Program, accessed June 10, 2026,

<https://www.beta.nyc/workforce-development/>

As the City's largest employer, the NYC government should lead by example and ensure that all staff have basic digital literacy skills, an understanding of safe digital practices, and a basic understanding of artificial intelligence.

This is intersectional literacy.

We need fundamental frameworks that enable individuals to enter government and grow.

Conclusion

In the 1840s, our predecessors chose to treat water as a civic right. They built public infrastructure to deliver it without a licensing fee. That decision still serves New Yorkers today.

Digital infrastructure is no different. It is essential to our safety, our freedom, and our privacy. It is how residents reach their government and how the government serves its residents. It is how the law is read and applied. It is an integrated part of modern life. As long as we rely on private vendors for this infrastructure, we are paying a toll on our own operations and leaving efficiency on the table.

We want to build a government for an era where computing is as ubiquitously accessible as clean water. New York City has the tools, the resources, and the skills to change this. What we are asking of this Commission is to act on these charter revisions to achieve a more efficient, unified framework for open-sourced, publicly owned infrastructure.

This testimony will be published on www.beta.nyc and available as a public resource for the commissioners and the New Yorkers this Commission serves. Thank you.

Jordan Shapiro
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In line with BetaNYC's AI policy²⁴, we used Anthropic's Claude models to access BetaNYC's MCPs and assist with text authoring.

²⁴BetaNYC AI Policy, <https://www.beta.nyc/about/ai-policy/>