Boston City Council
Committee on Ways and Means
Dockets #0524-0531 FY22 Budget
Docket #0545 PEG Access Fund
Department of Innovation & Technology
Working Session: Friday, May 21, 2021, 10:00 a.m.
Hearing: Thursday, June 3, 2021, 10:00 a.m.

The following is a collection of questions that were asked by the Committee regarding the Department of Innovation & Technology's budget at the Working Session on Friday, May 21, 2021 at 10:00 a.m. Recording here: https://youtu.be/Aml3Vd97nuA

The Administration is requested to respond to all questions in one of three ways:
1. Verbally at the hearing on Thursday, June 3rd, at 10AM.
2. For factual questions, through written responses supplied prior to June 3rd, including budget book page numbers or other references where appropriate.
3. By deferring to a specific scheduled departmental budget hearing.

Please annotate and return this information request before June 3rd, indicating how each question will be answered.

<u>Department of Innovation & Technology Budget Questions</u>

Councilor Kenzie Bok, Chair, asked:

- **In terms of your FY21 stated goals, you had said it was a goal to reduce contracted services in FY21. But contracted services seem to have increased in FY21 and are budgeted for another increase in FY22. Please explain the reasons for this increase and why the goal wasn't achievable.**

  The goal in FY21 was to reduce our reliance on third party services (contractors) by realigning the skillsets of our full-time employees. We gradually and successfully did this across many of our teams, but unexpected needs (e.g. Service Desk support for remote work) led to an immediate need for extra headcount, which we used contractors for. Moving forward we will continue our work to decrease our reliance on contracted services and move towards investing in full-time employees. The increase in contracted services this year is related to the expansion of our digital equity grant funds and the expansion of maintenance on Wicked Free Wifi.

- **Another goal of FY21 was an operational audit in FY21 to ensure DoIT has the optimal structure, staffing, and resources to accomplish its mission. Please explain the findings of this audit.**

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Due to the constraints the pandemic put onto DoIT staff, we were unable to perform the audit this fiscal. As operations return to a new normal, we will work with the Administration and Finance Cabinet on a plan to conduct this audit.

- **It appears that many of the responsibilities of the department are increasing with new goals and investments. Do you have adequate staff and resources to carry out your work? What has your strategic planning been around prioritization given there has been so much growth in digital infrastructure?**

  The Administration & Finance cabinet has been overly supportive in making sure we have adequate staff and resources to accomplish our goals and support the growth of IT at the City. In support of our digital infrastructure, we have expanded the headcount and skillset of our networking team to cover the demand for around-the-clock support and wireless connectivity. As digital infrastructure grows, so do the City's cyber security risks, and we have expanded our cyber security team to account for this growth (in the next couple of months, we'll be hiring the City's first network security engineer). To support our digital equity initiatives, we are in the process of recruiting a broadband and digital equity advocate.

- **Regarding the surveillance oversight ordinance before the Council, there has been discussion about the work necessary to make it compatible with current City processes. Please provide an update on what resources would be needed if this passed and how you're thinking about this proposal and how something along those lines would be implemented.**

  DoIT has been involved in the working sessions regarding the Surveillance Ordinance and has begun internal discussions about the resources that would be needed to comply. We would like to wait until the feedback and review process has been completed before making a formal request – we'll have a better idea of the headcount and resources we'll need after going through the review process.

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- **Is Wicked Free WiFi the best approach for providing widespread free wifi for residents or should we be investing more in municipal broadband? It seems like municipal broadband is a heavy lift in the immediate term, but could then be a critical piece of City infrastructure for decades to come.**

  Wicked Free Wi-Fi is a complimentary service designed to help people out in public or in neighborhood business districts. Similarly, other City Wi-Fi deployments exist in city buildings (300), schools (6,000) and libraries (150) offer the same. Combined, all are designed as public space resources, not residential, because all require connection to our fiber network to be active.

  Boston has studied the idea of a Muni-broadband buildout such as Chattanooga, TN many times over the last 20 years. Muni-broadband is a great platform for addressing both community Wi-Fi and home broadband in cities and towns that lack robust competition and full buildout by broadband providers. The critical element to successfully deploying muni-broadband is for the community to own a Municipal Light Plant (MLP.) Owning the poles and conduit eliminates the need for lengthy (10+ years) and costly ($~2 billion capital) construction.

  Fortunately, Boston's broadband providers -- Comcast, Verizon and RCN -- have built out the City at least twice over, providing both access and competition. In addition, two wireless networks -- Starry and NetBlazr -- can build-out to new buildings by line-of-site. Lastly, all the big wireless providers -- Verizon, AT&T and T-Mobile -- are ubiquitous in Boston.

Councilor Liz Breadon asked:

- **With an increase in cyber attacks on municipalities, where is DoIT in terms of cyber security? Please speak to your current resources and/or needed resources to stand up a robust defense against attacks. What policies are in place in the event of an attack that holds us ransom?**

  Over the last few years, DoIT has continued to grow our cybersecurity function both in personnel and in project funding. Although no organization will

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ever be 100% secure–there is no "silver bullet" when it comes to protecting against cyber threats–the City of Boston focuses on three high-level categories:

- o **People**: Build a community of experts and improve employee and constituent competency through security education, training and awareness
- o **Process**: Create the appropriate governance and policy, process and standard
- o **Technology**: Implement robust, resilient and scalable security architecture and solutions

We additionally follow our incident management policy and processes when responding to any technology incident; including a ransomware incident.

Councilor Matt O'Malley asked:

- **DoIT has done an amazing job as the City has advanced technologically over the past decade. I would like to hear about how we're going to continue to be as user friendly to citizens as we can, bringing more constituent services online (e.g. paying bills, requesting documents, etc.) How do we take technological advances we've made/adapted during the pandemic and make them permanent? Will this kind of expansion require more funding?**

While some of our work over the last year was reactive to the immediate needs of the City, we were able to move forward really impactful projects to keep the community connected. Thanks to wonderful partners in City Council and the City Clerk's Office, we are close to launching a new legislative management system that will make it easier for constituents to interact with City Council and, down the road, other public bodies as we onboard them to the system. We have continued to expand our fiber network to bring wireless connectivity to schools and libraries. We completed a major upgrade of our online permitting and licensing system that will keep us current and ensure resiliency.

The DoIT Team has always worked to design our digital resources around the needs of our constituents. The past year has emphasized the importance of providing constituents with user-friendly, online options to do City business without having to come into a City building. A big piece of being user-friendly is being accessible: we work closely with the Language Access team to support

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translations wherever we can – specifically around COVID-related information – and are always working to ensure that content on Boston.gov is at an 8th grade reading level or below. There are some online processes stood up during COVID – like the appointment process – that we'll analyze to determine if this is something the City will keep long term. We'll also be looking at the online tools created during the pandemic (e.g. different forms for things like street openings) to plan for how we can better support processes from an enterprise application perspective.

Councilor Ed Flynn asked:
- **I was in a hearing recently with the Human Rights Commission talking about digital equity. We've seen this digital divide grow even deeper during the pandemic. What are the plans to expand free WiFi across the City, or municipal broadband?**

On Wicked Free WiFi: Echoing our answer to Councilor Bok's question above, Wicked Free W-Fi acts as a public resource because it requires a connection to our fiber network. We currently connect City buildings, schools, and libraries, and have successfully built out the infrastructure to expand.

On Municipal Broadband: Boston has studied the idea of a Muni-broadband buildout many times over the last 20 years. It's a great platform for addressing community Wi-Fi and broadband in cities and towns that lack robust competition and full buildout by broadband providers. The critical element to successfully deploying muni-broadband is for the community to own a Municipal Light Plant (MLP.) Owning the poles and conduit eliminates the need for lengthy (10+ years) and costly ($~2 billion capital) construction. Fortunately, Boston's broadband providers -- Comcast, Verizon and RCN -- have built out the City at least twice over, providing both access and competition. In addition, two wireless networks -- Starry and NetBlazr -- can build-out to new buildings by line-of-site. Lastly, all the big wireless providers -- Verizon, AT&T and T-Mobile -- are ubiquitous in Boston.

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- **We need free WiFi in many residential areas, especially public housing developments and low income communities.**

  Expanding on our answer above, we connected almost all BHA buildings to our fiber network this year and are planning with the BHA to expand WiFI access. The BHA additionally issued a separate RFP and is exploring wireless deployment by one of Boston's providers.

- **What are the department's thoughts on municipal broadband?**

  Reiterating our answer above, municipal broadband is a great platform for addressing Wi-Fi and broadband in communities that lack robust competition and full buildout by broadband providers. The critical element to successfully deploying muni-broadband is for the community to own a Municipal Light Plant (MLP.) Secondly, the capital cost of ~$1 - 2 billion is probably prohibitive. Lastly, the engineering hurdles to attach city fiber to thousands of Eversource/Verizon poles could be technically infeasible.

  Fortunately, Boston's broadband providers – Comcast, Verizon and RCN -–have built out the City at least twice over, providing both access and competition. In addition, two wireless networks -- Starry and NetBlazr -- can build-out to new buildings by line-of-site. Lastly, all the big wireless providers -- Verizon, AT&T and T-Mobile -- are ubiquitous in Boston.

- **What grants are available to address digital equity and help low income families with procuring devices or the internet. Who is eligible for help?**

  The [Digital Equity Fund](#) is preparing to award $250,000 in grants to Boston-based non-profit organizations working to increase digital equity. The awards will range from $5,000 to $35,000 to organizations working to implement community-based digital equity initiatives, including support for Boston residents needing assistance and training in technology devices, equipment, and internet access. This work is being funded in partnership with Age Strong. One hundred agencies applied for the grant (3x the amount of past rounds), which has allowed us to get important insight into the current needs of the community. This funding round marks a

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250% increase from past digital equity grants. Outside of the DoIT-specific grant opportunities, we have been proactively notifying non-profit organizations in this space about other resources available, like the Federal Emergency Broadband Benefit (EBB)

Additional informaiton about Emergency Broadband Benefit:
The **Federal Communications Commission's Emergency Broadband Benefit (EBB)**, a temporary (~1+ year) FCC program to help households struggling to afford internet service during the pandemic, which just became active on May 12, 2021,

The FCC's Emergency Broadband Benefit Program (EBB Program) is a $3.2 billion fund established by Congress in the Consolidated Appropriations Act of 2021, to provide subsidies toward the cost of high-speed internet services and devices for eligible households during the COVID-19 pandemic. Providers participating in the EBB Program can begin enrolling eligible households into the program, and households will be able to check their eligibility directly using the National Lifeline Eligibility Verifier consumer portal, starting on May 12, 2021. The EBB program was created by Congress as part of the Consolidated Appropriations Act of 2021 and was designed "to lower the cost of high-speed internet service for those struggling to get the connectivity they need during the ongoing pandemic," according to acting FCC chairwoman, Jessica Rosenworcel. The EBB aims to provide for $3.2B in broadband subsidies (up to $50.00/month/hshld) for connectivity and up to $100 for a connecting device.

Eligible households will be able to enroll in the program to receive a monthly discount off the cost of broadband service from an approved provider ($50./month subsidy and $100 towards a connecting device.). More details can be found below in the descriptive notice form the Federal Communications Commission (FCC.)

The FCC is mobilizing (asking, really) people and organizations to help raise awareness about the Emergency Broadband Benefit. Emergency Broadband Benefit toolkit materials are **[now available for download](#)**.

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