

Tackling the digital divide in Philadelphia

Doing more with less

The COVID-19 pandemic amplified the challenges that cities were confronting before 2020 and created new ones. For Philadelphia, it deepened the commitment to provide connectivity and digital tools to citizens.

The pandemic is one of the top three disruptions that Philadelphia faces today, alongside social unrest and deglobalization, according to our survey of 167 cities worldwide. With more people studying and working from home than ever before, providing digital access has been one of the city's priorities, but also a difficulty because of limited funding.

“Philly is not unique in the crises we face, just the setting. We have our challenge of being the largest poor city in the US, and of having massive budget cuts,” said Emily Yates, smart city director for the city of Philadelphia. “The need to do more with less for more people now is a big challenge.”

Connecting the city

Before COVID, the city knew that approximately a quarter of the population didn't have quality access to the Internet. When the pandemic hit, those residents had to transition to remote learning and working with low connectivity. Many also didn't own essential tools like desktop or laptop computers. For families with several people at home, the challenge was even greater. The city has deployed several pilots to address the digital divide while also promoting sustainability.

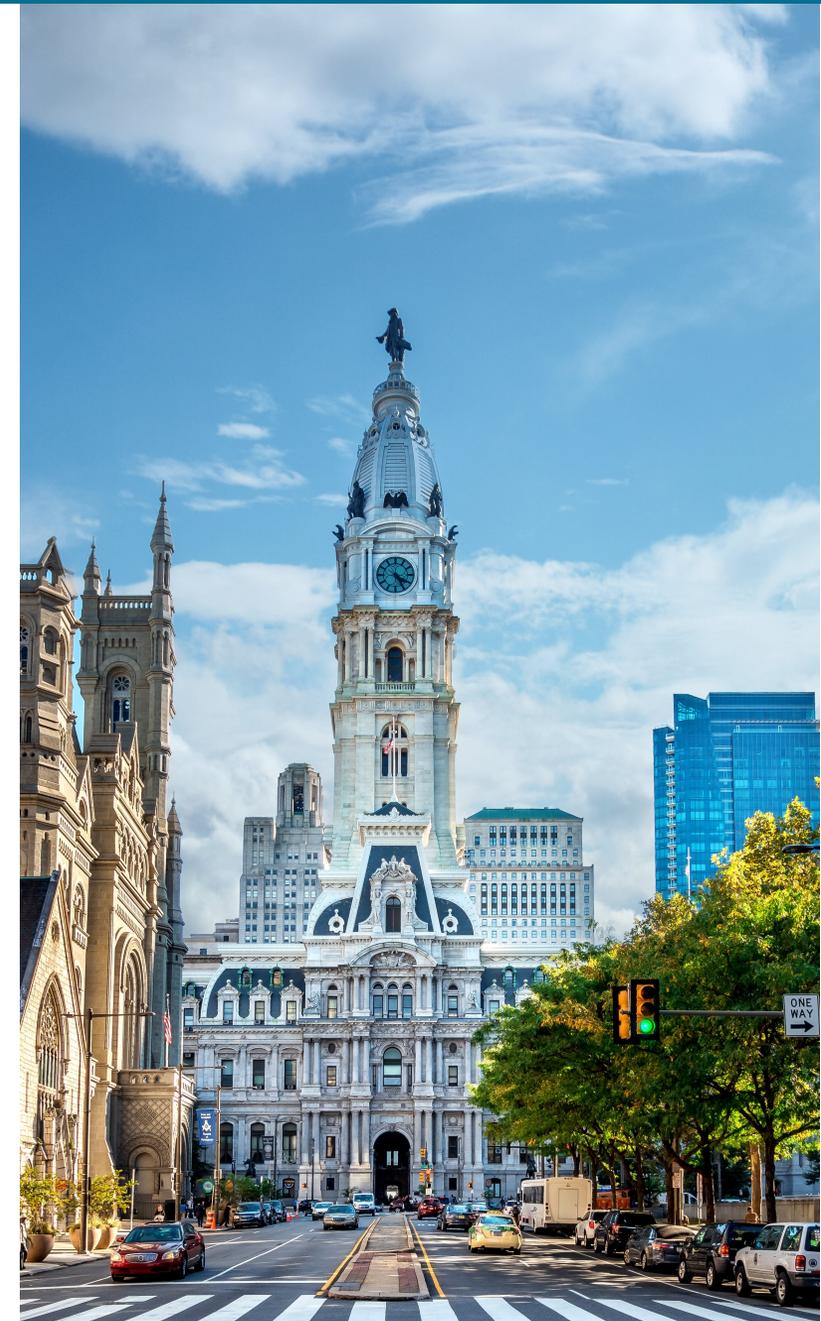
Partnering with a company that provides a no-contact pick-up system, the city began collecting unwanted computers from city residents and businesses and sharing them with local refurbishers. The partnership, called PHL-Donate-Tech, collected over 600 computers in less than two months and donated them to citizens in need.

Another initiative, PHL-Connected, is tackling the same issue but focuses on K-12 students. Partnering with Comcast Internet Essentials and T-Mobile hotspots, the city raised enough funding to connect any students who were without reliable and consistent Internet connections. The hotspots were particularly important in providing Internet service to housing insecure families, which face an added obstacle to connectivity.

With the same approach of utilizing tools the city already has, Philadelphia is exploring how to leverage infrastructure and assets to provide more connectivity options, such as placing Wi-Fi towers on rooftops.

“Despite reducing the cost barrier, there are still many obstacles to getting folks connected. Some of that is on our end, some of it is just the complications of the Internet, and some of it is just the complications of people's lives and whether they are able to actually complete the process and get logged on.”

—Juliet Fink Yates, Digital Inclusion Fellow, Philadelphia



New opportunities created by the pandemic

Despite the hardship it created, the pandemic encouraged donors to help city leaders cope with the digital divide and drive other sustainability initiatives.

“Everyone came to us and asked how we were going to get people connected. We were doing this for a long time and couldn’t get others to pay attention to this issue,” said Fink Yates. “Suddenly funders were interested, and the different ISPs and telecoms firms wanted to do more. It really opened the doors for talking about this issue at all levels of government and across the city.”

Even as Philadelphia looks to the future with new projects in place, and there is renewed attention

from donors and others in the community, it still needs to work on challenges such as coordinating its initiatives, according to Andrew Buss, the city’s deputy CIO for innovation management. The city has traditionally undertaken many projects but will need to coordinate across its network to work between departments and collectively advocate for funding.

“From a sustainability perspective, that’s really the key for me. It’s what I always call the people infrastructure. I think that’s true for all the other work we do in our group, not just digital equity,” said Buss.

Circular construction in Philadelphia

Another project the city is developing is a tool around urban mining and data. Using data collected, the city can identify where waste is being created based on housing types, where there is a demand for reused material, and which materials are the most valuable. The hope is that the waste is allocated to where it’s needed. The goal also is to help facilitate a circular construction and demolition waste stream that will create jobs and reduce waste going to landfills. This is an important project given that construction is one of the largest contributors to greenhouse gas emissions.

“Often smart cities are not getting at the structural inequities that we see. They’re not leveraging data to really dig down and peel back the layers of how the city’s been operating and how we can move forward in a more effective and strategic way to address inequities.”

–Emily Yates, Smart City Director, City of Philadelphia

Philadelphia’s main challenges in achieving the SDGs

Unclear implementation roadmap and ROI	Inadequate data, analytical, and planning tools	Difficulty coordinating efforts across city departments
Data security and privacy risks	Complex policies, regulations, and procurement procedures	

Philadelphia’s biggest lessons from the pandemic

Smart city programs and digital transformation are crucial for the future of our city	Operational continuity planning and agility are critical in today’s fast-changing world	Flexible and remote working can improve employee productivity and engagement	Crisis management and emotional intelligence are vital skills for city leaders and workers
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