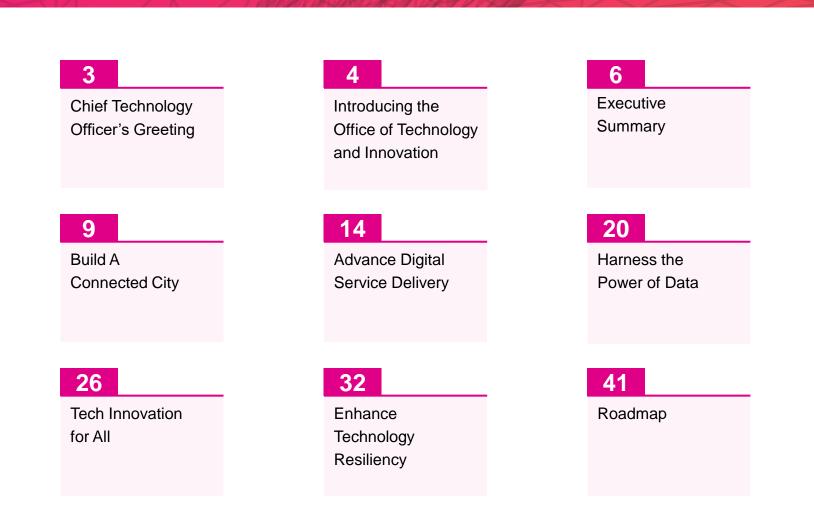
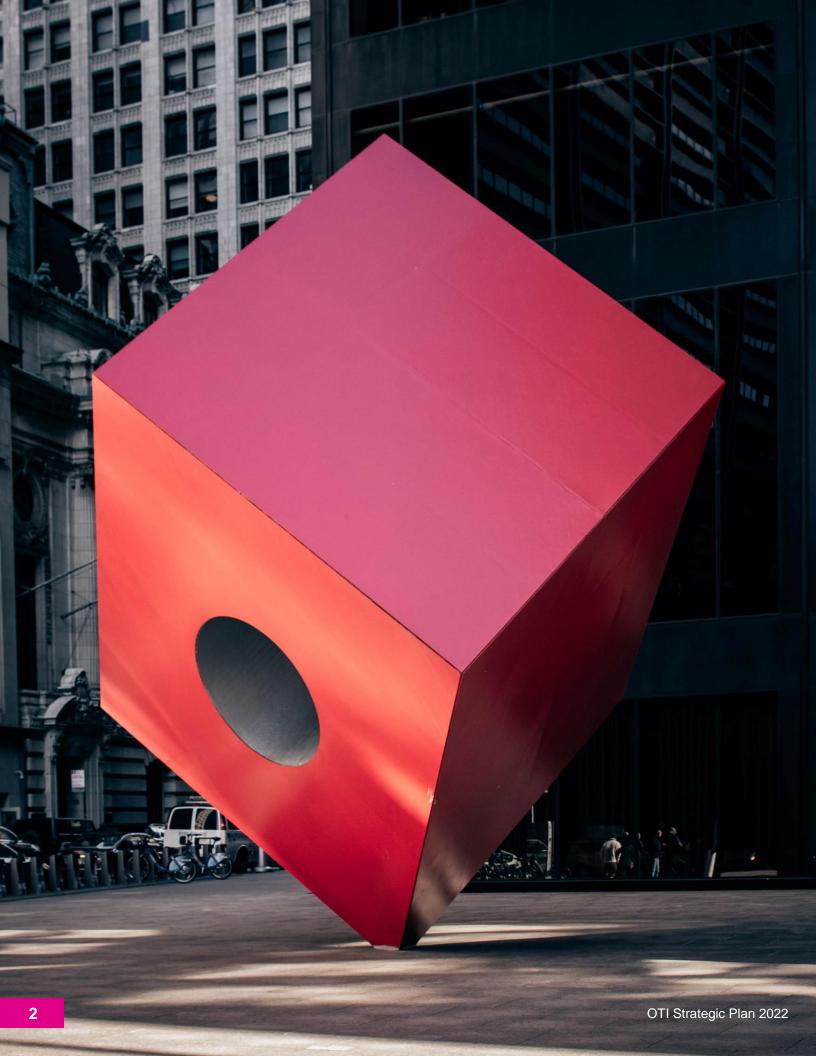




October 2022

# Contents







Matthew Fraser Chief Technology Officer

The future of New York City depends on how we leverage technology to meet New Yorkers' needs today. That's why Mayor Adams consolidated the city's tech agencies and resources under the newly formed Office of Technology and Innovation. This consolidation will allow us to do transformative work toward bridging the digital divide, providing more responsive services to our residents and visitors, and revolutionizing how our city does business. Accordingly, this Strategic Plan ensures our efforts increase the effectiveness and efficiency of our government and outlines the crucial role we will play in realizing Mayor Adams's mandate to "Get Stuff Done" for New Yorkers.

OTI is squarely focused on making a lasting difference across the City by employing technology as a catalyst for the common good. We will:

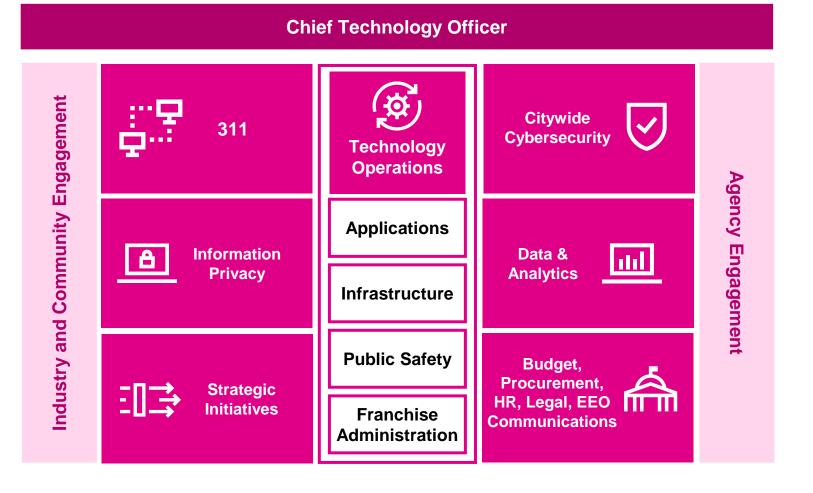
- Build a connected New York where access is available to all.
- Modernize how City agencies deliver services.
- Make data-driven decisions and operations ubiquitous in City government.
- Power-up our tech sector for innovation and diversify participation in the tech economy.
- Create the strongest, most secure, and best value technology services and team necessary to deliver on our priorities.
- Support our technology professionals and create opportunities for them to grow.

New Yorkers expect and deserve the best. OTI will work tirelessly to provide leadership in technology and innovation and make sure that our City leads in the information age as we did in the industrial age. New York City has always embraced the future. Now, we will power the growth of our technical sector and in doing so benefit everyone in our City.

I am honored to lead OTI at this inflection point when NYC is starting to realize its vast potential as a world-class digital city. And I look forward to the tech-inspired leaps we'll achieve together in the years ahead.

# **Office of Technology and Innovation**

The consolidation of the City's technology departments and offices into a single technology organization is designed to help streamline and enhance the services we provide to NYC residents and all City agencies in pursuit of their individual and collective missions. The new responsibilities of the City's Chief Technology Officer (CTO) are designed to provide a comprehensive focal point for how City technology projects, programs and products are planned, governed, and executed. Our team will build partnerships with City agencies large and small to ensure the best possible technology services, tools and guidance are available to drive technology excellence at all levels. Furthermore, we will work with industry, academic and civic partners to enhance the overall technology eco-system of New York City to provide opportunity for those disconnected from the digital economy and make our City a worldleading location for technology innovation, enterprise, and equitable participation.



# For OTI to be successful, we must have clarity on what our future vision for technology in New York City looks like.

To achieve our vision, we must remain relentlessly focused on our mission which must be equally clear. Everything we do will advance technology and innovation in New York City. To that end, OTI completed a strategic planning process with our agency stakeholders across City government. Our vision and mission capture our intent, but we also created strategic priorities aligning OTI with the Mayor's focus on equity, efficiency and making government easy to engage with and understand.

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# Vision

New York City, embracing the future, powered by innovative and secure technology that supports all.

# Mission

Deliver user-centered technology solutions that simplify access to City services and drive innovation.

# **Executive Summary**

# Technology drives the future and OTI is working hard every day to help every New Yorker be part of that future.

The goal of this Strategic Plan is to help make a reality Mayor Adams' vision of New York City as a leading center of technology innovation where everyone shares equally in the benefits that brings.

OTI's Strategic Plan was developed by consulting with numerous experts and stakeholders within OTI and across City agencies to determine which priorities and initiatives would have the greatest impact on the every day lives of New Yorkers and would leverage technology to make City government work better for all.

The Strategic Plan will be a living guide to our work. It will be managed closely by OTI and adjusted as new opportunities present themselves. Technology moves quickly and so will we.

# **Strategic Priorities**

*	Build A Connected City Ensure that all New Yorkers have access to effectively engage with the digital economy and society	<ul> <li>Universal Broadband: Ensure that every New Yorker has access to affordable broadband</li> <li>5G Total Coverage: Drive 5G capability to all City neighborhoods</li> </ul>
	Advance Digital Service Delivery Accelerate and simplify the delivery of City services and modernize supporting technologies	<ul> <li>MyCity Portal: Create a single one-stop shop portal with a common digital experience for accessing all City services and benefits</li> <li>Future NYC311: Further enhance NYC311 citizen interaction channel and integrate further with City service systems</li> <li>Critical Application Portfolio: Ensure long-term health of and identify efficiency opportunities across City applications that support agency missions</li> </ul>
101100 010110	Harness the Power of Data	<ul> <li>NYCStat: Enable immediate, real-time, data-driven decision making and promote transparency and accountability</li> </ul>
	Integrate the City's data assets to develop a unified view of the City; leverage data to track performance in real time and advance data-driven operations	<ul> <li>NYCData: Transform City data governance and infrastructure to develop a unified view of the City including agency clients and physical assets and maximize the public value of City data assets</li> </ul>
<b>@</b>	Tech Innovation for All Develop NYC as a world leading hub for inclusive and innovative technology	<ul> <li>Tech Workforce: Support and coordinate programs across City government to further drive technology workforce development across NYC</li> <li>IncubateNYC: Make technology infrastructure and workspace available to entrepreneurs and build industry partnerships that puts NYC at the forefront of new technologies</li> <li>Civic Innovation: Ensure that City government is poised to take full advantage of new technologies</li> </ul>
	Enhance Technology Resiliency Provide a reliable, consolidated and secure technology foundation for City agencies and the people they serve	<ul> <li>Infrastructure Agility: Enhance the speed to deliver consolidated infrastructure services and provide efficiency and scale for City Agencies.</li> <li>Cybersecurity Advancement: Continue to strengthen the City's cybersecurity capabilities and defensive posture</li> <li>NextGen 911: Improve system resiliency and transform emergency communication capabilities</li> <li>Enhanced Agency Engagement &amp; Service: Optimize agency engagement and service delivery to enable partner agency mission and innovation</li> <li>BuyIT: Further develop procurement processes and partnerships to create IT procurement efficiencies and leverage citywide buying power</li> <li>TeamTech: Ensure the City builds and supports its most important resource - its employees, with engagement, recruitment, career management, training and forward planning</li> </ul>





# BUILD A CONNECTED CITY

Ensure all New Yorkers have access to effectively engage with the digital economy and society

# **Build a Connected City**

Build A Connected City



Advance Digital Service Delivery

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Harness the Power of Data



Tech Innovation For All



Enhance Technology Resiliency

# All New Yorkers deserve access to affordable high-speed broadband internet service.

Broadband is key to driving opportunity and ensuring everyone is included in our digital society, and yet over 1.5 million New Yorkers, mostly in underserved neighborhoods, lack access to high-speed broadband. Our schools also lack the broadband capability necessary for students and teachers to take advantage of the latest in digital educational technologies. OTI will lead the charge in implementing programs that provide free and affordable broadband where access is most challenging.



## **Universal Broadband**

Ensure every New Yorker has access to affordable broadband

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<b>5G</b>	

## **5G Total Coverage**

Drive 5G capability to all City neighborhoods



### **Universal Broadband**

Ensure every New Yorker has access to affordable broadband

Ensure affordable broadband access for all New Yorkers. This will include providing free or lowcost options for NYCHA and other affordable housing residents, promoting financial assistance programs, improving access in City schools, and providing free access in every publicly accessible City facility.

### **Big Apple Connect**

Ensure that free high-speed broadband service is available to every NYCHA residence. Beginning with a small pilot group of developments, successful implementation will be scaled throughout NYCHA.

### **Broadband Access Program**

Develop and promote citywide affordable broadband access options especially for lowerincome City residents. Work with our New York State and Federal partners to maximize the impact of existing programs such as ConnectALL and the Affordable Connectivity Program. Continue to explore other opportunities, such as franchise arrangements and public-private partnerships to accelerate the speed and capability of broadband deployment, particularly in underserved neighborhoods.

### Long-term Broadband Equity

Explore the creation of a permanent entity to establish strategic management of City assets and ensure revenue streams are directed to funding equitable access to the latest broadband technologies for all New Yorkers.

#### **NYC Schools Broadband Enhancement**

Increase broadband speed in all NYC public schools to maximize digital educational capabilities by September 2023.

### **City Facility Broadband**

Enhance and expand broadband access to publicly available City facilities in a prioritized way, focusing on where access is needed most. This includes extending free broadband access in City homeless shelters, parks, recreation centers, older adult centers, and client service centers.



**5G Total Coverage** 

Drive 5G capability to all City neighborhoods

Through partnerships with wireless service providers, ensure all New Yorkers — especially in underserved neighborhoods — are covered by next generation 5G wireless capability. This includes deploying Link5G and leveraging the City's wireless franchise agreements to expand coverage.

#### Maximize 5G Coverage

Leverage telecommunications franchises to maximize reach of latest generation wireless communications technology, especially in underserved neighborhoods, with emphasis on higher band 5G.

#### Link5G Deployment

Extend the LinkNYC network with 5G capability to bring the latest generation wireless communication technology to more New York City neighborhoods, especially those that are currently underserved. Work closely with the LinkNYC franchisee to ensure that deployment plans and execution align with contractual expectations.





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# ADVANCE DIGITAL SERVICE DELIVERY

Accelerate and simplify the delivery of City services and modernize supporting technologies

# **Advance Digital Service Delivery**

Build A Connected City



### Advance Digital Service Delivery

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Harness the Power of Data



Tech Innovation For All



Enhance Technology Resiliency

# New Yorkers deserve an outstanding digital experience with the City for services and benefits.

Digital technologies create opportunities for speedier and more effective delivery of City services. Whether it be childcare, housing, workforce development or the many other services provided, New York City will become a leader in utilizing digital technology to better serve residents, businesses, visitors, and all others who depend on the many important services provided by City agencies. By simplifying and streamlining service delivery, OTI will make digital government a reality in New York City.



# **MyCity Portal**

Create a single one-stop shop portal with a common digital experience for accessing all City services and benefits



# Future NYC311

Further enhance NYC311 citizen interaction channel and integrate further with City service systems



# **Critical Application Portfolio**

Ensure long-term health and identify efficiency opportunities across City applications that support agency missions

### **MyCity Portal**

Create a single one-stop shop portal with a common digital experience for accessing all City services and benefits

Create a platform to enable a single, service-driven, mobile-friendly internet portal for all City services and benefits. This will include integration with existing public-facing websites, including 311 and nyc.gov, to create a unified digital front-end for City residents, businesses and visitors. Agencies will also be able to quickly and cost-effectively design and deploy solutions on the platform. The MyCity Portal will set the standard for enabling City residents, businesses and visitors to guickly access the services they need.

#### **Drive Government as a** Platform through the MyCity Framework and **Standards**

Establish architectural, user experience (UX) and other standards, including Digital Service Standards, to ensure common development decisions and practices. This will position the MyCity platform for effective and high-quality delivery of City services and benefits. We will also define the platform's conceptual architecture, including integration architecture and related standards for legacy systems, identify and access management protocols, and master data management. Furthermore, we will build a strong user research capability with associated business processes, policies and resources.

### Launch MyCity Initial Service Offerings

Demonstrate impact of MyCity through deployment on key mayoral initiatives, such as the Child Care Quality and Innovation Initiative. We will also build out a phased plan for designing, developing and launching additional individual services on MyCity.

### **Expand MyCity as a Platform** for all City Services

We will incrementally build out platform services and capabilities based on the established phased plan for launching individual services. We will continue building out the NYC Digital Service as a critical resource for development of the MyCity platform capability, including engagement with M/WBE and small tech enterprises.





Future NYC311

Further enhance NYC311 citizen interaction channel and integrate further with City service systems

The NYC311 call center, website, mobile application, social media and other channels are being continually improved to help City residents and visitors more seamlessly access government services. OTI will ensure the NYC311 system's on-going health and will continue to enhance system capabilities, including further integration with City services.

### **Maintain NYC311 Application Health**

Monitor NYC311 technology architecture, implementing regular updates to ensure the long-term health and operational effectiveness of the NYC311 system and supporting tools. Continue to identify further integrations and enhancements to the NYC311 system. Based on identified gaps and risks, develop and execute an NYC311 system health plan.



NYC311 19th Anniversary Special Logo – February 2022



## **Critical Application Portfolio**

Ensure long-term health of and identify efficiency opportunities across City applications that support agency missions

Assess critical City applications and implement appropriate modernization strategies that align with the City's public safety, public health and financial management priorities as well as with industry standard methods and tools. This will include assessment of application portfolio health and the incremental consolidation, migration and re-platforming of agency applications, the development of common standards and components, and the implementation of advanced product-centric models for application management and future development.

### Establish the Critical Application Portfolio (CAP) program

OTI working in conjunction with City agencies will build a Critical Applications Portfolio (CAP). We will review and classify City applications according to the level of criticality and impact on City services. Based on that review, we will create a prioritized portfolio of essential applications. The Critical Application Portfolio will be reviewed with OTI and agency stakeholders and adjusted based on feedback.

#### Conduct Critical Application Health Assessment and Modernization

As the Critical Application Portfolio is built, OTI will work with City agencies to assess application health, capturing the future needs for each application to optimize in support of expected performance.

OTI will further work with agency partners to develop and execute prioritized support for these applications including identifying opportunities to modernize and enhance application infrastructure and capabilities. This will also include coordination with MyCity portal. Critical application health and enhancement plans will be regularly reviewed with OTI and agency stakeholders.

### Introduce Product-Centric Operating Model

In alignment with industry best practices, and to improve our focus on customer outcomes, OTI will introduce an advanced, product-based operating model for managing CAP applications.



# HARNESS THE POWER OF DATA

Integrate the City's data assets to develop a unified view of the City; leverage data to track performance in real time and advance data-driven operations

# Harness the Power of Data

Build A Connected City



Advance Digital Service Delivery

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Harness the Power of Data



Tech Innovation For All



Enhance Technology Resiliency

# The City's ability to provide quality services hinges on quickly bringing together different data sources to turn data into insight.

OTI will set the standards and structures that govern data sharing, enhance the infrastructure needed to enable data sharing at scale, and provide analytic tools and skills to support a citywide data-driven management process using real-time data.



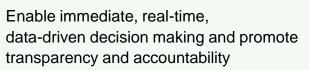
# **NYCStat**

Enable immediate, real-time, data-driven decision making and promote transparency and accountability

# NYCData



Transform City data governance and infrastructure to develop a unified view of the City, including agency clients and physical assets, and maximize the public value of City data assets **NYCStat** 



Promote the development of analytical management capabilities across all agencies and consolidate performance metrics for City leadership and public engagement. This will facilitate common performance metrics and dashboard standards as well as enable agency analytics technologies.

### Enable a Citywide data-driven management process

Provide self-service tools and models that go beyond aggregated performance metrics locked in a period of time and enable real-time data with meaningful drill-downs that provide value to both decisionmakers and the public particularly in 'stat' management models.

#### Establish Data Literacy Program

Establish a citywide data literacy program that provides both creators and consumers of analytic information an understanding of the data systems, tools, and business skills needed to deliver datadriven business change. The data literacy training program will also focus on understanding links between available data, analytics models, and business outcomes as well as promoting a data-driven organizational culture.

#### Launch Data Visualization Community of Practice

Develop a citywide data visualization Community of Practice with representation from OTI and City agencies to provide leadership, leading practices, research, support and training focused on the development of agency performance tools. The Community of Practice will develop clear design principles and best practices related to data visualization focusing on usability, accuracy, and timeliness and incorporating data storytelling.

## **NYCData**

Transform City data governance and infrastructure to develop a unified view of the City including agency clients and physical assets, and maximize the public value of City data assets

NYCData will focus on creating standards and models for data management. Under this approach a unified data model for critical data entities across the City will emerge where data is represented consistently, providing agencies a complete view of their clients, City assets and infrastructure. This consistent data model will support a data-driven New York City that will support operational effectiveness, public access to City data through the Open Data program, and enable the use of more advanced predictive analytics across the City.

### Establish Citywide Data Governance program

A citywide data governance program will lead to a consensus on the meaning of the City's data and ensure appropriate behavior in the creation and consumption of data and analytics. We will establish an executive steering committee that includes agency representation to develop and implement a datasharing strategy that focuses on value and driving the City's goals while protecting privacy.



#### Modernize NYC's Data Infrastructure

Adopt an evolutionary approach to modernizing NYC's data infrastructure to enable organizing, sharing and analyzing city-wide data. Our goal is to achieve an efficient, extensible, and best-fit engineered solution. We will rearchitect, modernize, and migrate NYC's data sharing platform to the cloud, the NextGen Data Platform, as well as incorporate data management tools that support automation and unification of data management processes into the City's data infrastructure, supporting critical programs like Open Data.

#### Develop Predictive Decision Support Capabilities

Explore adopting data-driven technologies and advanced analytics to provide decision support and empower City leaders to make better operational decisions in real-time. We will further develop existing expertise and conduct pilot programs in descriptive, diagnostic (interactive data exploration tools), predictive (machine learning) and prescriptive (optimization, business rule processing and simulation) analytics. Our objective will be to have immediate impacts on agency productivity and increased levels of trust in government decisionmaking.





04

# TECH INNOVATION FOR ALL

Develop NYC as a world leading hub for inclusive and innovative technology

# **Tech Innovation For All**

Build A Connected City



Advance Digital Service Delivery

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Harness the Power of Data



#### Tech Innovation For All



Enhance Technology Resiliency

# OTI will develop partnership networks and programs to cement New York City as a leading hub for inclusive innovation.

These initiatives will center on developing a local, highly-skilled workforce that truly represents the diversity of the City, provide opportunity for homegrown tech businesses to develop and thrive, and position City government as a leader in adopting new technology to support better outcomes for the City.



# **Tech Workforce**

Support and coordinate programs across City government to further drive technology workforce development across NYC



# IncubateNYC

Make technology infrastructure and workspace available to entrepreneurs and build industry partnerships that puts NYC at the forefront of new technologies



# **Civic Innovation**

Ensure that City government is poised to take full advantage of new technologies

### **Tech Workforce**

Support and coordinate programs across City government to further drive technology workforce development across NYC

OTI will support and coordinate programs across City government to further drive technology workforce development across New York City. This will include further development of school, university and corporate partnerships and working with City agencies to build upon current successful programs such as implementing new virtual and physical technology workforce training opportunities and further integration and coordination of existing City programs. These initiatives will provide tech-focused upskilling, job experience, networking and mentorship opportunities, with particular focus on serving schools, youth and underrepresented communities.

#### Support and Coordination of City Tech Workforce Programs

Partnering with City agencies and entities, such as SBS, EDC, and DYCD, there will be a focus on further expanding technology training and identifying opportunities to provide technology experience and opportunities to schools, youth and underrepresented communities.

We will create citywide initiative to coordinate and expand all City and non-profit programs focused on tech training, including how the Talent Portal application will connect clients to tech training and support opportunities. OTI will lead the expansion of tech training pipelines to support recruitment for City IT professional jobs. In addition, working with other City partners, we will focus on identifying and conducting further outreach with potential partners, including schools, universities, tech industry and non-profits, and examine how to expand virtual and neighborhood workforce training programs in underrepresented communities to deliver valuable tech skills while providing networking opportunities.

We will expand City government and private sector technology internship opportunities as part of the NYC Summer Youth Employment Program (SYEP) and throughout the year.



#### Provide Support and Resources for Tech Education with DOE and CUNY

Working closely with other City partners, including DOE and CUNY, we will assess and identify gaps in current STEM programs with current tech education needs (such as Cybersecurity, blockchain technology, etc.).

OTI will support the development of curricula and educational content in support of educational programs in schools and in higher education.

We will seek to leverage public-private partnerships to provide tech programming at under-resourced public schools and support for students attaining technology certifications.

## IncubateNYC

Make technology infrastructure and workspace available to entrepreneurs and build industry partnerships that puts NYC at the forefront of new technologies

Leveraging City and commercial assets, provide access to workspace as well as secure technology infrastructure, including cloud computing services and sandbox environments, so that small businesses and NYC's technology community can experiment and test their ideas. Convene a coalition of government, academic and industry leaders to help the City capitalize on emerging technology innovations by assessing the implications of emerging technologies for the City and how they can be best used in NYC.

#### Launch NYC Innovation Hubs

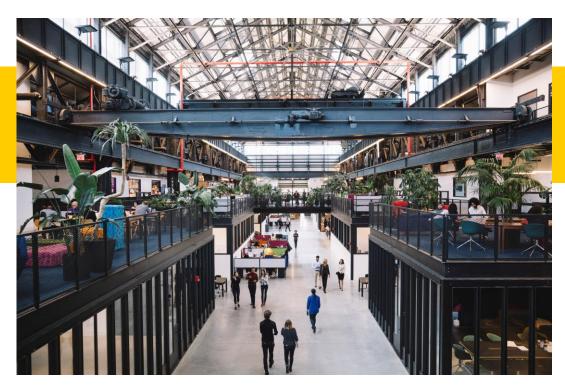
Work with City partners to assess existing hubs and to identify space for and develop additional hubs in underserved areas to provide accessible workspaces where entrepreneurs can launch, operate, and collaborate on their tech business ideas.

We will leverage City assets and/or private-sector partnerships to develop physical spaces in underserved areas that foster collaboration and networking.

#### **Develop NYC Technology Test Bed**

Leveraging the innovation hubs, explore how the City can work with partners to create an environment that welcomes technology innovation and one where NYC is seen as a proving ground for new technology.

This includes developing a process for evaluating the emerging technology the City should focus on fostering based on their viability and ability to transform NYC, pursuing strategies that address the barriers to fostering innovative technology in New York City, and identifying specific projects to organize public demonstrations of innovative technology in NYC's environment.



New Lab, located in the Brooklyn Navy Yard d<sup>p</sup>

## **Civic Innovation**

Ensure that City government is poised to take full advantage of new technologies

OTI will be the City's primary technology research driver to identify and understand the full extent of how new technologies can be deployed to enhance government services and outcomes at all levels of government. In partnership with external stakeholders, this centralized research and evaluation capability will allow OTI to drive innovation in government and reduce the costs of technology development and deployment.

# Leverage NYC Innovation Labs to Innovate Government Operations

Assess emerging technologies for their potential to transform government and achieve administration objectives then pilot their use within government. We will create an innovation review process that will help identify, assess, test and deploy new technologies into City government operations.

We will put in place a City User Experience Lab to ensure that new technologies and applications are focused on improving user experience and outcomes.

### Leverage Blockchain in Government

Work with partners across all levels of government, industry, and academia to leverage the potential of blockchain and the innovation ecosystem to improve and transform City services.

We will identify key blockchain-enabled use cases, including initiatives around blockchain for identity management, and will support scaling successful blockchain pilots in City government.

# Embrace City Technology and Innovation Leadership Mentoring

To further support City technology leaders to embrace technology innovation and develop their personal leadership capabilities, OTI will create programs to provide mentorship and training. Working with commercial partners, we will create a mentoring program for top City IT leaders and emerging managers.







# ENHANCE TECHNOLOGY RESILIENCY

Provide a reliable, consolidated and secure technology foundation for City agencies and the people they serve

# **Enhance Technology Resiliency**

# Innovation requires a reliable and secure technology foundation for agencies to achieve their missions.

Having the workforce and skills to meet the growing technology needs of the City is paramount to providing a reliable technology foundation. OTI will invest in our people to create a global leading government technology team. To continue to strengthen the City's cybersecurity capabilities, OTI will fully leverage public and private partnerships, agency Cyber Command Liaisons and the JSOC. To ensure agencies can better leverage technology to deliver critical City services, OTI will drive enhanced agency engagement and deliver more efficient and reliable IT services.



# **Infrastructure Agility**

Enhance the speed to deliver consolidated infrastructure services and provide efficiency and scale for City Agencies

# **Cybersecurity Advancement**

Continue to strengthen the City's cybersecurity capabilities and defensive posture

# NextGen911

Improve system resiliency and transform emergency communication capabilities

# **Enhanced Agency Engagement and Service**

Optimize agency engagement and service delivery to enable partner agency mission and innovation

# BuyIT

Further develop processes and partnerships to create IT procurement efficiencies and leverage citywide buying power

# TeamTech

Ensure the City builds and supports its most important resource with engagement, recruitment, career management, training and forward planning





Advance Digital Service Delivery

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Tech Innovation For All



Enhance Technology Resiliency





## **Infrastructure Agility**

Enhance the speed to deliver consolidated infrastructure services and provide efficiency and scale for City Agencies

Enhance capabilities to deliver fast, flexible and reliable infrastructure services. This includes accelerating infrastructure automation while leveraging governance and controls to enable secure, supportable and cost-efficient deployments.

### Establish Infrastructure Automation Program

Establish infrastructure automation program to develop a consistent, systematic approach to implementing infrastructure automation. We will focus on optimizing speed to delivery, driving efficiency, and enhancing the agency customer experience. This will include collecting relevant data and feedback on current pain points and opportunities for automation, and prioritizing opportunities based on value, alignment with objectives and ability to execute.

#### Build Automated Provisioning Capabilities

Build self-service provisioning capabilities in OTI's hybrid cloud environment to enable agencies and development teams to provision their own virtual machines. We will deploy initially to support self-service, request-based use cases and with targeted customers before expanding.

#### Deploy Server Automation Configuration

Leverage continuous compliance automation (CCA) tools to orchestrate server configuration, enable additional self-service capabilities and streamline application deployment. We will build off server provisioning automation to identify and implement additional use cases for automating server configuration, such as package installation, system hardening.

# Automate Incident Detection and Initial Response

Implement modern infrastructure monitoring capabilities to streamline incident response and reduce downtime of critical services. We will identify critical services and applications with more stringent service levels that would benefit from advanced monitoring and remediation capabilities. This includes integrating monitoring tools with ITSM solution automate incident creation, data collection and trigger the incident response workflow.





### **Cybersecurity Advancement**

Continue to strengthen the City's cybersecurity capabilities and defensive posture through a whole of society cybersecurity approach

Continue to strengthen the City's cybersecurity capabilities by fully leveraging partnerships across OTI, NYC Agencies and Cyber Liaisons with a strong focus on public/private partnerships. Drive a whole of society approach to cybersecurity through optimized security processes, technology, roles and responsibilities to drive collaborative and proactive detection, mitigation, response and recovery.

#### **Optimize Cybersecurity Processes**

Review and update cybersecurity processes, policies, roles and responsibilities to ensure they are optimized and standardized to advance the City's cybersecurity posture. This includes identifying opportunities to optimize key cybersecurity process integration points, such as vulnerability management and remediation coordination to ensure OTI coordination to deliver best in class cybersecurity services to City Agencies.

# Advance Cybersecurity Measures at City Agencies

OTI's Cyber Command will leverage the Cyber Command Liaisons to strengthen collaboration with agencies and drive the hardening of agency environments. We will expand incident response capabilities through the Cyber Liaisons as well as expand citywide collaboration through the stand up of a CISO Council and optimize security services provided to agencies through enhanced visibility and security capability deployment.

#### Continue to Develop a Well-Trained Cybersecurity Workforce

Advance and mature the City's cybersecurity posture by continuing to develop a cyber-aware City and welltrained cyber workforce. Implement a comprehensive cyber workforce strategy. This includes sponsoring specialized training for the Cyber Liaisons as the inaugural Cyber Academy class.

### Provide Comprehensive Cybersecurity Services Through NYC Cyber Command

Build upon the implementation of NYC Cyber Command to enhance the coordination of people, process and technology across public/private partnerships to drive collaborative detection, mitigation, risk reduction and response. Develop an information sharing capability to serve public and private partners, and advance collaboration across the Joint Security Operations Center.

NYC Cyber Command, Brooklyn, NY



NextGen911

Improve system resiliency and transform emergency communication capabilities

Modernize critical public safety IT infrastructure to ensure the City's emergency services adhere to National Emergency Number Association (NENA) standards. Replace end-of-life infrastructure with NextGen 911 (NG911) digital technology to improve location information and enable modern emergency communication capabilities.

# Transform Core 911 System from Analog to Digital

Implement Class 1, 2, and 3 of the NG911 Project, which includes ESInet and Core Services, enhanced logging and recording (L&R) and Geographic Information System (GIS) capabilities.

#### Design and Implement Call Handling Subsystem

Design, implement and test the Call Handling Subsystem for NG911. We will upgrade the system to fully integrate with Class 1/2/3 and allow call takers to handle and process voice calls and IP based native NG911 functionality including the ability to receive text and multimedia compliant with NENA standards. We will also integrate NYPD and FDNY Computer Aided Dispatch (CAD) systems, Logging and Recording and Ancillary systems.

### Build and Deploy Key Integrations

Work with vendors and key partners to ensure the successful implementation and testing of key integrations, including exploring opportunities to integrate with neighboring 911 jurisdictions.



New York City Public Safety Answering Center, Bronx, NY

## **Enhanced Agency Engagement and Service**



Optimize agency engagement and service delivery to enable partner agency mission and innovation

Advance agency engagement and service management to provide more efficient and responsive service delivery that meets the needs of City agencies. Ensure OTI works closely with agencies to drive technology standardization and optimize agency benefits. Enhance service portfolio metrics and performance evaluation capabilities by establishing ServiceStat dashboards to drive continual improvement.

### Enhance Agency Solutioning and Scope Development

Ensure OTI is involved earlier in agency solutioning and scope development processes to drive improved outcomes for agencies, standardization and alignment with OTI strategy. We will leverage agency engagement managers to connect agencies with the appropriate OTI resources during initial scoping.

### Launch OTI ServiceStat Program

Identify and define key service metrics for each core service to track service performance and quality. We will baseline and track performance against the service metrics to drive service improvement.

# Drive Ongoing Service Quality and Performance Improvement

Leverage a framework and process to evaluate service quality, value and performance on a regular basis to ensure OTI services continue to meet the needs and expectations of the customers. We will identify the appropriate inputs to the framework to assess the quality, value and performance of each service, such as customer satisfaction, performance against service levels, service cost and alignment with agency customer needs.

## **Optimize OTI's Service Portfolio**

Review OTI's existing services and optimize the portfolio to focus on the services that meet customer needs and provide the most value. We will analyze current services leveraging existing data related to customer feedback and service performance, as well as identify any in-development services or new services that are high priority that should be fast tracked. This will result in a list of core services that best meet customer demand and expectations.





**BuyIT** 

Further develop processes and partnerships to create IT procurement efficiencies and leverage citywide buying power

Support agency technology spending to ensure the City's buying power potential is optimized. This will include the ongoing development and management of standard IT buys and enterprise agreements.

### **Standardize IT Buys**

Establish additional standard technology purchases aligned with OTI's preferred architecture, hardware and software. We will review historical citywide IT spend and survey City agencies on critical needs and near future spending to identify high impact areas for standardization. This includes creating sourcing strategies around each technology standard to guide agencies. This will also include further developing the participation of city certified M/WBE in technology contracting.



Develop additional enterprise agreements around the most high-impact standard IT buys to streamline procurement, enhance the City's buying power, and drive standardization. We will engage agencies to review and rationalize license usage and further pool the City's buying power in citywide agreements.

# Promote Standard IT Buys and Enterprise Agreements

Promote new and existing enterprise agreements with City agencies. We will develop playbooks for the new enterprise agreements so agencies and support staff have instructions for leveraging agreements. This includes advertising the standard IT buys and agreements in the OTI service catalog for relevant services and working with MOCS to ensure PASSPort catalogs include standard IT buys and enterprise agreements.



Ensure the City builds and supports its most important resource – its employees, with engagement, recruitment, career management, training and forward planning

Implement a multi-faceted talent strategy that includes engagement and recognition, rotational programs, career path development, standardized training and the further development of IT professionalization within the City. This will also include expanded partnerships with local universities for recruitment and graduate training along with new partnerships to enhance the City's IT capabilities.

#### **Enhance Employee Engagement**

We will launch new platforms to allow for peer-to-peer recognition and expand opportunities for formal recognition programs, including the annual Innovation Awards. We will organize and encourage social and team-building events to engage IT professionals across City agencies. Through these engagements, OTI will gather feedback and explore other incentives to help retain tech talent in City government.

#### **Develop Career Paths**

Develop technology career paths to provide City IT employees a framework for growing their capabilities and advancing their careers within the organization. We will prioritize critical IT roles and other roles that are difficult to recruit.

# Define and Implement Training and Development Opportunities

Define training and development opportunities, particularly those that align with career paths. We will identify training opportunities focused on the skills identified for the critical roles highlighted in the career paths as well as link training opportunities to certifications, where possible, to provide additional incentive and promote broader career development.

#### **Establish Rotational Program**

Establish IT rotational program to develop and engage existing talent, enable employees to explore new opportunities within the organization, and promote a shared culture across IT teams. We will focus on enhancing skill sets, engaging high performers, and improving retention rates.



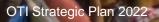
#### Expand Partnerships to Enhance City IT Capabilities

We will focus on leveraging partnerships to address specific skill gaps, as well as to highlight development opportunities and unique experiences to candidates. We will also leverage the Tech Workforce initiative to further enhance the talent pipeline for OTI and other City agencies.

OTI Strategic Plan 2022

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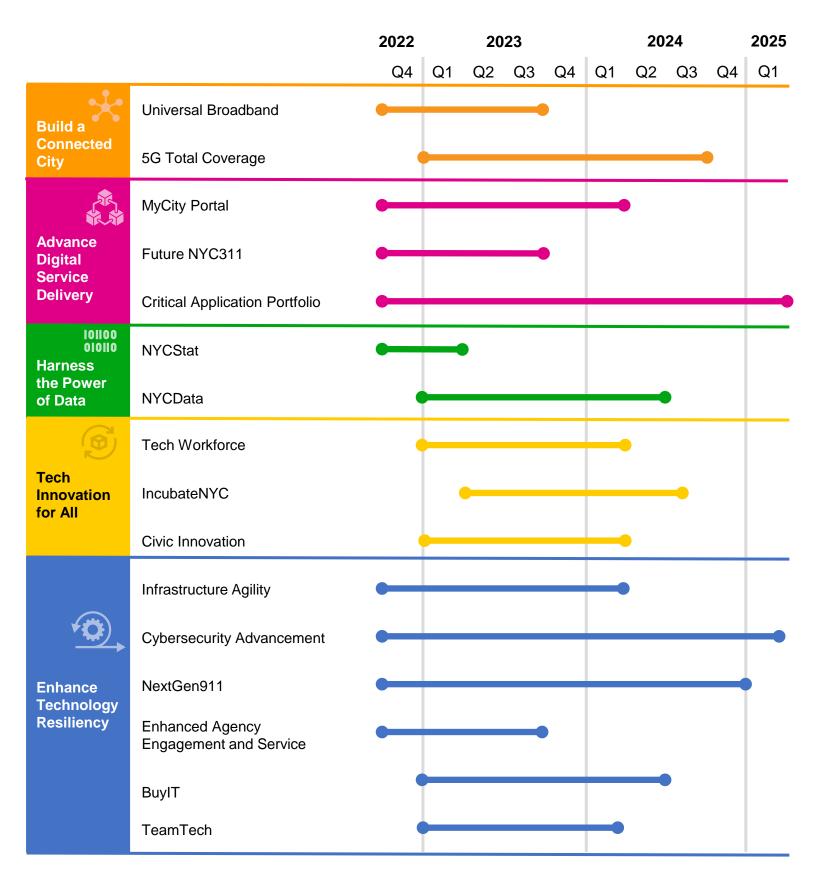
# ROADMAP



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# **OTI Roadmap**

The durations in this roadmap are focused on activities related to initiating and developing the various programs. Once the timeframes are completed, programs will continue to be operational into the future.





# **Get IT Done**

By focusing on these strategic priorities and supporting initiatives, OTI will deliver user-centered technology solutions that simplify access to City service and drive innovation. Accomplishing these objectives and achieving the desired impact will require gaining the support and buy-in of City leaders and partners in the public and private sector as well as dedication to continuous improvement.

This plan will be continually updated and modified based on our progress and further input from key stakeholders. OTI will measure and monitor outcomes and performance indicators associated with each strategic priority and initiative and issue regular progress reports.

We look forward to getting to work on turning this plan into a reality for a New York City that will embrace the future, powered by innovative technology that supports all.

