DEPARTMENT OF INFORMATION TECHNOLOGY & TELECOMMUNICATIONS Jessica S. Tisch, Commissioner



WHAT WE DO

The Department of Information Technology and Telecommunications (DoITT) provides the technology that enables City services for all who live, work, do business in, and visit the City of New York. Whether through DoITT's management and development of the City's 911 voice and text systems, the NextGen 911 transformation program, the City's wired and radio networks, data centers, NYC.gov, the Open Data portal, the citywide rollout of 5G wireless communications on pole tops, administration of the City's mobile telecommunication franchises, oversight of major interagency technology initiatives and procurements, DoITT connects NYC. DoITT's efforts help make City government more accessible, transparent and effective, empower the public, and keep our five boroughs safe, strong, and vibrant.

FOCUS ON EQUITY

DoITT's efforts to strengthen the equitable and transparent delivery of services to all New Yorkers are central to all of our work. In April of 2020, DoITT resumed management of the 311 Customer Service Center, which is the primary gateway for the public to access government services. DoITT has championed the next generation of connectivity—5G—and set conditions with carriers to ensure the equitable rollout of 5G technology across all five boroughs on pole tops. DoITT oversees the LinkNYC franchise program, which provides free access to the internet across the City. DoITT continues to run and grow its robust minority and woman-owned business enterprise (M/WBE) program that encourages more City contracting with M/WBEs. And for the last guarter of Fiscal 2020, DoITT's response to COVID-19 demonstrated its commitment to supporting vulnerable and underserved New Yorkers: working with the Department of Education to procure, configure, and distribute iPads for all public school children who did not have access to an internet connected device (300,000+) to ensure that they could engage in remote learning; building the technology that drives the City's GetFood program which, at its peak, delivered a million meals a day to New Yorkers who were food insecure or otherwise did not have access to meals; and developing the City's contact tracing system, which is a key driver of the City's efforts to trace and contain the spread of COVID-19, a disease that has disproportionately affected communities of color.

OUR SERVICES AND GOALS

- SERVICE 1 Deliver City IT services including hardware, software and technical support.
 - Goal 1a Provide quality service delivery and performance monitoring.
 - Goal 1b Resolve all service disruptions within targeted levels.
 - Goal 1c Ensure all application development and IT infrastructure projects are delivered on time and within budget.
- SERVICE 2 Support sharing and management of citywide data and information.
 - Goal 2a Increase the public's use of City government information through NYC.gov.
 - Goal 2b Increase the number of publicly available datasets.
- **SERVICE 3** Regulate franchised cable services.
 - Goal 3a Ensure customer complaints are resolved positively.
- SERVICE 4 Regulate provisioning of public telecommunication services on City streets.
 - Goal 4a Maximize usefulness, operability and cleanliness of public telecommunication services on City streets.

HOW WE PERFORMED IN FISCAL 2020

SERVICE 1 Deliver City IT services including hardware, software and technical support.

Goal 1a Provide quality service delivery and performance monitoring.

Technology was the key to enabling City government to continue functioning during the COVID-19 pandemic, particularly in the months following the emergency declaration. During that time, DoITT worked with nearly every City agency and office to stand up services in areas ranging from public safety to social services, from education to economic development:

- DolTT developed the City's COVID-19 contact tracing application, released in June of 2020, to support the City's Test & Trace Corps. This work is an essential part of the City's efforts to contain the spread of the virus.
- DoITT also developed the technology that powers the GetFood program, which has been used to deliver more than 100 million meals to New Yorkers in need.
- DoITT worked with DOE to procure, configure, and distribute 300,000+ iPads to enable remote learning for the City's
 public school children who did not have access to an internet connected device. This project was completed in less than
 two months from the start of the pandemic.
- In early March, DoITT built out the infrastructure that enabled more than 100,000 City employees to remotely access the City's network to quickly facilitate the safe transition to a work-from-home model.
- DoITT procured and architected the technology to enable tele-visits for incarcerated individuals.
- DolTT assisted the Fire Department in an initiative to transfer low-acuity calls to telemedicine providers during periods of unprecedented 911 call volume.
- DoITT built the City's main COVID-19 portal, consolidating links to resources and information from dozens of agencies.
- DoITT built the Help Now NYC portal, which enabled donations and signups for appropriately skilled persons to volunteer at the height of the pandemic.
- DoITT built the City's first online marriage license system.

Even with all of the COVID-related projects, the general work of the agency did not slip:

- DoITT reached a major milestone in June of 2020 with the launch of Text-to-911. This service ensures that people in need of an alternative to placing a voice call to 911, particularly the deaf and hard of hearing and survivors of domestic violence communities, have access to police, fire, and emergency medical services when they need it most.
- Additionally, in Fiscal 2020, DoITT decommissioned the NYCWiN network and replaced it with wireless telecom offerings.
- DoITT also drove two major IT transformation projects that were substantially completed in Fiscal 2020, and fully completed shortly into Fiscal 2021: the migration of many City agencies from older, less secure email solutions to Office 365, and the implementation of multi-factor authentication at 40 agencies. These initiatives were key to securing the City's infrastructure, especially with the transition to work-from-home.
- DoITT negotiated and registered the technology contracts that are key to building out the City's NextGen 911 system over the next several years.

DoITT completed Fiscal 2020 with no critical public safety outages. The Fiscal 2019 public safety outages were a NYCWiN outage that lasted approximately 15,840 minutes and a Verizon outage that affected the 911 system for less than one minute.

| | | | Actual | | | Tai | get | Tro | end |
|---|--------------|------|--------|--------|------|------|------|---------|----------------------|
| Performance Indicators | FY16 | FY17 | FY18 | FY19 | FY20 | FY20 | FY21 | 5-Year | Desired Direction |
| ★ Systems DoITT manages | 192 | 223 | 241 | 255 | 352 | * | * | Up | * |
| \bigstar Newly completed projects that provide new services to the public | 23 | 27 | 36 | 43 | 91 | * | * | Up | * |
| \bigstar Incidents that directly impact services provided to the public | NA | NA | NA | NA | 106 | Û | Û | NA | Down |
| ★ Critical public safety outages | 0 | 0 | 0 | 2 | 0 | Û | Û | Neutral | Down |
| ★ Total outage time for critical public safety infrastructure (minutes) | 0 | 0 | 0 | 15,841 | 0 | Û | Û | Neutral | Down |
| ★ Critical Indicator "NA" Not Available ① Ū Direct | ional Target | * No | ne | | | | | | |

Goal 1b Resolve all service disruptions within targeted levels.

This year, DoITT is reporting the number of incidents by severity level and the average time to resolve by Service Level Agreement. This change will provide greater transparency in the number of incidents and in the City's performance in resolving them.

In general, as systems age, the number of service disruptions associated with them increases.

| | | | Actual | | | Tar | rget | Tr | end |
|--|------------|--------|--------|--------|--------|------|------|---------|----------------------|
| Performance Indicators | FY16 | FY17 | FY18 | FY19 | FY20 | FY20 | FY21 | 5-Year | Desired Direction |
| ★ Incidents by severity level - Critical | 183 | 159 | 132 | 89 | 157 | Û | Û | Down | Down |
| Incidents by severity level - High | 1,764 | 1,675 | 1,496 | 1,495 | 1,997 | * | * | Neutral | Down |
| Incidents by severity level - Medium | 6,077 | 10,513 | 8,035 | 7,333 | 8,199 | * | * | Neutral | Down |
| Incidents by severity level - Low | 28,426 | 39,769 | 38,390 | 34,060 | 30,852 | * | * | Neutral | Down |
| ★ Average incident resolution time by SLA level (hours) - Critical | 4 | 5 | 5 | 5 | 5 | Û | Û | Neutral | Down |
| Average incident resolution time by SLA level (hours) - High | 9 | 16 | 13 | 6 | 10 | * | * | Down | Down |
| Average incident resolution time by SLA level (hours) - Medium | 34 | 57 | 29 | 23 | 24 | * | * | Down | Down |
| Average incident resolution time by SLA level (hours) - Low | 13 | 18 | 39 | 15 | 21 | * | * | Up | Down |
| ★ Critical Indicator "NA" Not Available û む Directio | nal Target | * None | ! | | | | | | |

Goal 1c Ensure all application development and IT infrastructure projects are delivered on time and within budget.

In Fiscal 2020, DoITT provided more and a higher level of support for other City agencies and the public than in past fiscal years. This was primarily driven by the need for new applications, some of which were part of the City's response to the pandemic, as well as the growing need for IT infrastructure, security, and public safety initiatives at other agencies.

| | | | Actual | | | Tar | get | Tr | end |
|---|---------------|------|--------|------|------|------|------|--------|----------------------|
| Performance Indicators | FY16 | FY17 | FY18 | FY19 | FY20 | FY20 | FY21 | 5-Year | Desired Direction |
| ★ Active projects for new services to the public | 33 | 37 | 43 | 50 | 99 | * | * | Up | * |
| ★ Active projects to support outside agencies | 25 | 34 | 48 | 64 | 115 | * | * | Up | * |
| ★ Critical Indicator "NA" Not Available ① ↓ Direc | tional Target | * No | ne | | | | | | |

SERVICE 2 Support sharing and management of citywide data and information.

Goal 2a Increase the public's use of City government information through NYC.gov.

In Fiscal 2020, more than 288 million pages were viewed on NYC.gov, which was an increase of 12 percent compared to the prior fiscal year. Similarly, the number of unique visitors (average monthly) increased by 24 percent.

Part of the increased demand for NYC.gov during Fiscal 2020 was driven by the new website, which consolidated information about COVID-19 with resources available to support New Yorkers in need.

| | | | Actual | | | Tar | get | Tre | end |
|---|----------------|-----------|-----------|-----------|-----------|------|------|---------|----------------------|
| Performance Indicators | FY16 | FY17 | FY18 | FY19 | FY20 | FY20 | FY21 | 5-Year | Desired Direction |
| NYC.gov web page views (000) | 271,252.2 | 271,980.0 | 269,955.9 | 257,038.9 | 288,651.9 | * | * | Neutral | Up |
| ★ NYC.gov unique visitors (average monthly) (000) | 4,001 | 4,599 | 4,358 | 4,373 | 5,438 | û | 仓 | Up | Up |
| ★ Critical Indicator "NA" Not Available û | . ↓ Directiona | l Target | * None | | | | | | |

Goal 2b Increase the number of publicly available datasets.

As of the end of Fiscal 2020, DolTT published 2,855 data sets on the OpenData portal, an increase of 9 percent compared to the previous fiscal year. More than 90 percent of these data sets had accompanying data dictionaries; most of the data sets that do not have data dictionaries are historical and no longer updated. DolTT regularly engages with agency OpenData coordinators and continually works to expand both the number and quality of offerings available on the OpenData portal.

| | | | Actual | | | Tar | get | Tre | end |
|---|---------------|-------|--------|-------|-------|------|------|--------|----------------------|
| Performance Indicators | FY16 | FY17 | FY18 | FY19 | FY20 | FY20 | FY21 | 5-Year | Desired Direction |
| Data sets available for download on NYC.gov/OpenData | 1,552 | 1,700 | 2,103 | 2,619 | 2,855 | * | * | Up | Up |
| Datasets with data dictionaries on NYC.gov/OpenData (%) | NA | 26.9% | 91.6% | 91.3% | 91.4% | * | * | NA | Up |
| ★ Critical Indicator "NA" Not Available û む Direc | tional Target | * No | ne | | | | | | |

SERVICE 3 Regulate franchised cable services.

Goal 3a Ensure customer complaints are resolved positively.

During the COVID-19 pandemic, DoITT leveraged its relationship with the cable franchisees to advocate for free internet for households with school-age children and to hold those companies accountable to their public pledges to provide no or low-cost internet options.

| | | | Actual | | | Tar | get | Tr | end |
|---|-------------------|------|--------|------|-------|------|------|--------|----------------------|
| Performance Indicators | FY16 | FY17 | FY18 | FY19 | FY20 | FY20 | FY21 | 5-Year | Desired Direction |
| ★ Video cable complaints Citywide | NA | NA | NA | NA | 2,839 | Û | Û | NA | Down |
| ★ Video complaints resolved Citywide (%) | NA | NA | NA | NA | 77% | Û | Û | NA | Down |
| ★ Critical Indicator "NA" Not Available ① ① D | irectional Target | * No | one | | | | | | |

SERVICE 4 Regulate provisioning of public telecommunication services on City streets.

Goal 4a Maximize usefulness, operability and cleanliness of public telecommunication services on City streets.

DoITT administers the LinkNYC franchise, which replaces outdated public pay telephones with kiosks that provide free, superfast Wi-Fi and offer free domestic calling. By the end of Fiscal 2020, 1,816 Link kiosks were operational.

| | | | Actual | | | Tar | get | Tre | end |
|---|--------------|------------|------------|------------|-----------|------------|------------|--------|----------------------|
| Performance Indicators | FY16 | FY17 | FY18 | FY19 | FY20 | FY20 | FY21 | 5-Year | Desired Direction |
| Cumulative number of LinkNYC subscribers | NA | 1,925,353 | 4,347,631 | 6,925,073 | 8,983,785 | * | * | NA | Up |
| Summonses issued for Link kiosks with inoperable phone service or unacceptable appearance | NA | NA | NA | 24 | 59 | * | * | NA | * |
| Telecommunications advertisement-generated revenue (\$000) | \$18,625.9 | \$25,938.9 | \$26,678.1 | \$33,823.1 | \$0.0 | \$25,600.0 | \$25,600.0 | Down | * |
| ★ Critical Indicator "NA" Not Available ① | □ Directiona | Target | * None | | | | | | |

AGENCY-WIDE MANAGEMENT

| | | | Actual | | | Tar | get | Tre | end |
|--|---------------|------|--------|------|------|------|------|---------|----------------------|
| Performance Indicators | FY16 | FY17 | FY18 | FY19 | FY20 | FY20 | FY21 | 5-Year | Desired Direction |
| Citywide IT professional services contracts in use by agencies (%) | 49% | 43% | 47% | 44% | 49% | * | * | Neutral | * |
| ★ Critical Indicator "NA" Not Available ① Ū Direct | tional Target | * No | one | | | | | | |

AGENCY CUSTOMER SERVICE

| Performance Indicators | | | Actual | | | Tar | get | Tr | end |
|---|--------------|------|--------|------|------|------|------|--------|----------------------|
| Customer Experience | FY16 | FY17 | FY18 | FY19 | FY20 | FY20 | FY21 | 5-Year | Desired Direction |
| Letters responded to in 14 days (%) | NA | NA | NA | NA | NA | * | * | NA | Up |
| E-mails responded to in 14 days (%) | NA | NA | NA | NA | NA | * | * | NA | Up |
| Percent meeting time to close—cable complaint - video service (15 days) | 96 | 86 | 90 | 84 | NA | * | * | NA | * |
| Percent meeting time to close—cable complaint - billing (30 days) | 100 | 98 | 99 | 97 | NA | * | * | NA | * |
| Percent meeting time to close—cable complaint - miscellaneous (30 days) | 100 | 99 | 99 | 97 | NA | * | * | NA | * |
| ★ Critical Indicator "NA" Not Available ① Ū Direct | ional Target | * No | one | | | | | | |

AGENCY RESOURCES

| Resource Indicators | | | Actual ¹ | | | Pla | | |
|---------------------------------------|---------|---------|---------------------|---------|---------|---------|---------|-----------|
| | FY16 | FY17 | FY18 | FY19 | FY20 | FY20 | FY21 | 5yr Trend |
| Expenditures (\$000,000) ³ | \$587.0 | \$637.6 | \$657.9 | \$675.5 | \$862.1 | \$726.0 | \$700.6 | Up |
| Revenues (\$000,000) | \$173.9 | \$184.2 | \$180.9 | \$160.4 | \$150.7 | \$190.2 | \$168.9 | Down |
| Personnel | 1,379 | 1,491 | 1,514 | 1,562 | 1,687 | 1,831 | 1,798 | Up |
| Overtime paid (\$000) | \$1,135 | \$1,845 | \$1,776 | \$1,936 | \$315 | \$315 | \$315 | Down |

¹Actual financial amounts for the current fiscal year are not yet final. Final fiscal year actuals, from the Comptroller's Comprehensive Annual Financial Report, will be reported in the next PMMR. Refer to the "Indicator Definitions" at nyc.gov/mmr for details.

²Authorized Budget Level

³Expenditures include all funds

"NA" - Not Available

* None

SPENDING AND BUDGET INFORMATION

Where possible, the relationship between an agency's goals and its expenditures and planned resources, by budgetary unit of appropriation (UA), is shown in the 'Applicable MMR Goals' column. Each relationship is not necessarily exhaustive or exclusive. Any one goal may be connected to multiple UAs, and any UA may be connected to multiple goals.

| Unit of Appropriation | Expenditures FY19 ¹ (\$000,000) | Modified Budget FY20 ² (\$000,000) | Applicable MMR Goals ³ |
|---|--|---|-----------------------------------|
| Personal Services - Total | \$144.4 | \$156.7 | |
| 001 - Personal Services | \$131.2 | \$137.9 | All |
| 009 - Mayor's Office of Media & Entertainment | \$7.0 | \$7.3 | * |
| 013 - New York City Cyber Command | \$6.2 | \$11.5 | * |
| Other Than Personal Services - Total | \$531.1 | \$705.5 | |
| 002 - Other Than Personal Services | \$466.8 | \$604.9 | All |
| 010 - Mayor's Office of Media & Entertainment | \$11.4 | \$25.8 | * |
| 014 - New York City Cyber Command | \$52.9 | \$74.7 | * |
| Agency Total | \$675.5 | \$862.1 | |

¹Comprehensive Annual Financial Report (CAFR) for the Fiscal Year ended June 30, 2019. Includes all funds. ²City of New York Adopted Budget for Fiscal 2020, as of June 2020. Includes all funds. ³Refer to agency goals listed at front of chapter. "NA" Not Available * None

NOTEWORTHY CHANGES, ADDITIONS OR DELETIONS

- During part of Fiscal 2020, Eusebio Formoso served as Acting Commissioner. In December 2019, Jessica S. Tisch was appointed Commissioner.
- Goal 1a was revised from previous MMRs to strike the clause "for DoITT managed systems" because it was redundant.
- The indicator "Systems DolTT manages" was added to more accurately convey the scope of the numerous systems (i.e., associated sets of appliances, networks, servers, and applications) that DolTT supports citywide.
- The indicator "Newly completed projects that provide new services to the public" was added to better communicate DoITT's role as the shared IT services provider for City agencies and DoITT's contributions to enhance services provided to the public.
- The indicator "Critical public safety outages" was added to provide greater transparency in understanding the status of life safety systems for the public.
- The indicator "Total outage time for critical public safety infrastructure (minutes)" was added to provide greater context on the actual impact of outages to life safety systems managed by DoITT.
- The indicators "Uptime of telecommunications network (Voice over Internet Protocol) (%)," "Uptime of NYC.gov (%)," "Uptime of 800 MHz network (%)," and "Uptime of Citywide Radio Network (%)" were removed because they are imprecise indicators of DoITT's actual day-to-day performance and the services DoITT provides to the City and the public. Each of these systems is composed of a large number of IT appliciances, applications, servers and circuits which individually may have incurred outages. A single percentage does not directly capture the downstream impact to users.
- The indicator "Uptime of NYCWiN (%)" was removed because NYCWiN was fully decommissioned in Fiscal 2020 and the indicator is no longer required.
- The indicator "Outages Resolved" was retired because it lacks context of the actual impact to DoITT services. For
 example, an outage in a backup, redundant system may not lead to actual user impact. The indicator "Incidents that
 directly impact services provided to the public" was added to provide greater context for the actual impact of outages
 on service delivery to the public.

- The indicator "Average duration of resolved outages (hours)" was retired because it was an artificially low number of resolved outages, as opposed to all service disruptions, and it was not a transparent representation of DoITT's overall performance. The current register and documentation of outages only goes back to Fiscal 2018 and does not account for all critical or high level tickets taken by the Citywide Service Desk.
- The indicator "Incidents by severity level" was added to provide greater transparency and context on DoITT's incident response times.
- The indicator "Average incident resolution time by SLA level (hours)" was added to provide greater transparency and context to disruptions in service experienced by end-users.
- The indicator "Service Disruptions" was retired because it did not provide enough detail on the different types of service disruptions.
- The indicators "Critical priority incidents resolved within 2 hrs (%)," "High priority incidents resolved within within 6 hours (%)," "Medium priority incidents resolved within 3 business days (%)," "Low priority incidents resolved within 7 business days (%)" were retired because they did not reflect what is occurring in DoITT-hosted environments without the breakdown of the number of incidents within each SLA.
- Goal 1c was revised from previous MMRs to strike the clause "led by DolTT's project management office" because the office has been eliminated.
- The indicator "Active projects for new services to the public" was added because the new definition is broader in scope than just the subset of projects previously managed by the DoITT Project Management Office (PMO).
- The indicator "Active projects to support outside agencies" was added to better communicate the role DoITT performs in standing up new systems, supporting existing systems, or refreshing end-of-life or past-vendor-support systems for agency customers.
- The indicators "Projects on schedule (%)" and "Projects completed on time (%)" were retired because these metrics only captured a subset of all projects and did not have any relationship to the projects' original timetables.
- The indicator "Active projects" was retired because not all projects were managed by the DoITT PMO and the indicator did not accurately represent DoITT's entire project portfolio. This metric also did not provide any meaningful context to the impact on DoITT customers. For example, an 'active project' to expand storage in a data center may have less tangible impact to customer experience than a new application such as GetFood NYC.
- The indicator "Datasets with data dictionaries on NYC.gov/OpenData (%)" was added because it is an important metric for the usability of published datasets from the perspective of an analyst trying to interpret the data. The responsibility for supplying the data dictionary lies with the originating agency.
- The indicator "Video complaints reported as resolved in <30 days by cable franchisees (%)" was retired and the indicator "Video cable complaints Citywide" was added because it is a better metric for measuring the service accountability for franchisees. Reporting only a percentage fails to communicate the volume of complaints that the City receives.
- In Goal 3a, the phrase "in a timely manner" from previous MMRs was replaced with "positively" because it is not helpful to New Yorkers for their complaints to be resolved in a timely manner if the problem is not actually fixed.
- The indicator "Average time to resolve all video cable complaints, as reported by cable franchisees (days)" was retired and the indicator "Video cable complaints resolved Citywide (%)" was added because it provides greater clarity to how these complaints are handled by the franchisees. DoITT had previously followed the franchisees in considering any cable complaint closed after 30 days.
- The indicators "Responses to 311 Service Requests for video service cable complaints," "Responses to 311 Service Requests for billing cable complaints," and "Responses to 311 service Requests for miscellaneous cable complaints" were added because reporting the total number, as opposed to a percentage resolved within a time period, will make it easier to compare year-over-year trends.

- The indicator "Citywide service desk requests" was retired because a single total does not properly communicate the impact of those requests to services that directly impact the public. Similar to most other service desks, the largest category of user requests are password resets which have no direct customer impact.
- Fiscal 2020 data for the indicators "Percent meeting time to close—cable complaint—video service (15 days)", "Percent meeting time to close—cable complaint—billing (30 days)" and "Percent meeting time to close—cable complaint—miscellaneous (30 days)" are not available. Service request recategorization that occurred as part of the transition to 311's new Customer Relationship Management (CRM) system affected reporting in this service area. 311 customer service/SLA reporting will be revised in the Preliminary Fiscal 2021 Mayor's Management Report.

Data Quality Issues

- After a review of the number of incidents reported to the Citywide Service Desk, DOITT has newly standardized its classification of ticket severity levels and improved data quality.
- In previous MMRs, franchisees considered any cable complaint resolved after 30 days and DOITT followed this convention. DoITT now is measuring whether the cable complaints are resolved.
- Local Law 107 of 2015, which required providing data dictionaries, went into effect in Fiscal 2016.
- The historical counts of active Link NYC kiosks were revised for Fiscal 2017 and Fiscal 2018 to accurately report the historical number. Deployment of new Link NYC kiosks ceased in 2018.
- The historical numbers for the "Citywide IT professional services contracts in use by agencies (%)" were input incorrectly last year and have been corrected.
- The "Letters responded to in 14 days (%)" and "E-mails responded to in 14 days (%)" indicators were incorrectly reported in previous years. In Fiscal 2020, DoITT did not receive any letters. From January 2020 through the end of Fiscal 2020, DoITT responded to 94 percent of e-mails within 14 days.

ADDITIONAL RESOURCES

For additional information go to:

- NYC.gov: http://www.nyc.gov/
- NYC Open Data: http://nyc.gov/opendata

For more information on the agency, please visit: www.nyc.gov/doitt.