OFFICE OF INNOVATION & TECHNOLOGY FISCAL YEAR 2019 BUDGET TESTIMONY APRIL 10, 2018

INTRODUCTION

Good afternoon, President Clarke and Members of City Council. I am Mark Wheeler, interim Chief Information Officer. I am joined today by Chris Donato, Chief Financial Officer, Sandra Carter, Chief Operating Officer and Steven Robertson, Chief of Staff. I am pleased to provide testimony on the Office of Innovation and Technology's Fiscal Year Fiscal Year 2019 Operating Budget.

I would like to first share some of OIT's accomplishments for 2017.

- Completion of a \$2.8 million replacement of the Vesta 9-1-1 Call Processing system, which is the system used by the City to receive and log 911 calls. The replacement system will allow the City to provide "Next Generation 911" services, such as the ability to report emergencies via text message.
- Installation of a new Multi-Biometric Identification System (MBIS) for the Philadelphia Police Department used to collect biometrics during the booking process. The new system provides the capability to cross-reference the biometric information with criminal history.
- Administration of a multi-year agreement between the City and Comcast for an Institutional Network. The agreement results in significant upgrades in speed and capacity to over 225 City facilities including courtesy internet accounts for the City's recreation centers presently operating without internet services. As of January 2018, implementation of the network is well underway, with 71 percent of 225 scheduled facility upgrades completed.
- Launched a host of new spatial technology initiatives including Atlas.phila.gov and its reusable MapBoard framework for customized Phila.gov mapping applications like CleanPHL.org. Atlas is an all-in-one tool to search by address and find cross-referenced data including deeds, permits, property violations, zoning and other property data maintained by the City. Atlas replaced multiple web applications with one tool and integrates Cyclomedia custom street view imagery, "birds eye view" Pictometry imagery, more than a decade of aerial imagery (2017 to 1999) and historic map images including from 1960, 1942, 1910, and 1860 and more. Finally, OIT created a custom basemap of local landmarks, and embarked on a comprehensive address point database to provide first responders with entry-specific locations for Next Generation E-911 operations.
- OIT's Innovation consulting program held 19 sessions with City departments with the goal of assisting agencies to build problem-solving capacity and resolve challenges ranging from improving internal communication to process improvement to long-term strategic planning.
- Supported the Chief Administrative Officer in launching an electronic signature platform (DocuSign) to streamline contract approvals, and provided project management and technical support for the implementation of several large IT systems, including eCLIPSE for the Department of Licenses and Inspections (L+I), the Data Warehouse and Case Management

system for the Department of Revenue, and improvements to Philly311 system.

- Expansion of the City's enterprise ePay service, so that all tax types are now payable through ePay. In total, the ePay service now collects \$481 million in revenue annually. In a benchmarking exercise, City staff found that compared to six U.S. cities, Philly ranked second in the number of ePayment options offered and collects 61 percent of all bill/tax revenue online. This compares to 65 percent for New York City and 22 percent for Boston.
- Installation of an additional 50 video surveillance cameras for the Philadelphia Police Department, bringing the total number of cameras to 405.
- Finally, in February 2017, Philadelphia was one of five cities awarded the Smart Cities Council Challenge Grant, which provide resources to help cities apply smart technologies to improve urban livability, workability and sustainability. With a Knight Foundation grant, OIT hosted the City's first Smart Cities Readiness Workshop to kick-off development of a strategic roadmap for SmartCityPHL. Over 190 attendees participated in discussions about smart affordable housing, the future of public safety, improving government efficiency through sensor technologies, and more.

DEPARTMENT MISSION & PLANS

Mission: The Office of Innovation and Technology (OIT) provides technology to help City employees do their work better and more effectively and efficiently, as well as to enable the various City agencies to better serve the public. OIT also oversees most major technology projects for the City of Philadelphia. The Office provides information technology (IT) services to City employees so they can communicate with each other and with the public; manages the bulk of the City's technology assets, including computers, printers, scanners, and more; delivers services which automate and simplify business processes and workflow, and provide easy-to-use business intelligence tools; monitors and updates security to keep information safe; finds new ways to use technology to modernize how City government operates; and offers digital design guidance and technical support for the City's website.

Plans for Fiscal Year 2019:

In FY19, the Office of Innovation and Technology (OIT) plans to continue oversight of all major information and communications technology initiatives for the City. OIT remains responsible for identifying the most effective approach for delivering technology throughout the City, improving the value of the City's technology assets, ensuring data security, planning for continuing operations in the event of disruption of IT and telecommunication services, and supporting accountable, efficient, and effective operations across City government.

OIT will manage a complement of seven service areas to further its mission and support the goals of the administration.

Strategic Priorities

- 1. Improve Customer Service and Satisfaction
 - Ensure consistency across all services.

- Increase clarity and timing of communications on support inquiries, projects, and technology changes with customers.
- Finalize a Wi-fi support plan as to outfit core city buildings to increase to support demand for mobility and flexibility in delivery of business operations.
- 2. Elevate IT Governance: Policies and Support Models
 - Develop and socialize standards for IT architecture, data integrations and system customizations across City government and in contracts.
 - Implement a new Enterprise Architecture review board including IT directors from across city agencies to improve engagement and success in system upgrades and new application development and integration across IT units.
 - Develop a cloud services delivery and cost-sharing model with departments.
- 3. Reinforce IT Security
 - Evaluate and test existing security components and protocols for improvement.
 - Implement new technology to comprehensively monitor and respond to threats across multiple levels of the IT network.
 - Implement an identity management solution to streamline city staff access to IT resources and reinforce security.
- 4. Increase OIT's Community Engagement and Collaboration
 - Finalize the Smart City Roadmap while seeking grants, philanthropic, and other sources of funding to begin implementation of the Roadmap with internal and external partners.
 - Finalize and begin implementation of IT Strategic Plan with internal and external stakeholders.
 - Directly engage community groups and civic-oriented organizations on use of City's open data and web mapping and analysis resources.
 - Weave recruitment discussion into all interactions with external groups by demonstrating the value of IT to city operations, diversity of staff and projects, and range of employment opportunities with OIT.

I thank you for the opportunity to brief council on the work of the Office of Innovation and Technology and am happy to respond to your questions.

| Staff Demographics Summary (as of December 2017) (All Funds) | | | | | | | |
|--|-----------|-----------|-----------|-----------|--|--|--|
| | Total | Minority | White | Female | | | |
| Number of Full-Time Staff | 369 | 222 | 147 | 127 | | | |
| Number of Exempt Staff | 239 | 132 | 107 | 88 | | | |
| Number of Executive Staff (deputy level and above) | 8 | 2 | 6 | 2 | | | |
| Average Salary, Full-Time Staff | \$70,904 | \$66,862 | \$77,662 | \$70,335 | | | |
| Average Salary, Exempt Staff | \$74,410 | \$71,205 | \$79,460 | \$72,510 | | | |
| Average Salary, Executive Staff | \$141,040 | \$133,915 | \$143,415 | \$142,830 | | | |
| Median Salary, Full-Time Staff | \$70,000 | \$66,796 | \$74,948 | \$70,000 | | | |
| Median Salary, Exempt Staff | \$70,000 | \$68,728 | \$75,000 | \$70,000 | | | |
| Median Salary, Executive Staff | \$142,830 | \$133,915 | \$142,830 | \$142,830 | | | |

BUDGET SUMMARY & OTHER BUDGET DRIVERS

| | Budgeted | Filled |
|---|----------|----------|
| Number of Full-Time Positions | 405 | 369 |
| Number of Part-Time Positions | 24 | 22 |
| Number of Exempt Positions | 258 | 239 |
| Number of Executive Positions (deputy level and above) | 10 | 8 |
| Average Salary of All Full-Time Positions | \$69,804 | \$70,904 |
| Median Salary of All Full-Time Positions | \$70,486 | \$70,000 |

General Fund Financial Summary by Class

| General Funda Summary by Class | | | | | | | | |
|---|----------------|--------------|----------------|----------------|----------------|--------------|--|--|
| | FY17 Original | FY17 Actual | FY18 Original | FY18 Estimated | FY19 Proposed | Difference: | | |
| | Appropriations | Obligations | Appropriations | Obligations | Appropriations | FY19-FY18 | | |
| Class 100 - Employee Compensation | \$20,089,718 | \$19,875,293 | \$21,019,003 | \$20,644,817 | \$20,817,723 | \$172,906 | | |
| Class 200 - Purchase of Services | \$53,130,443 | \$46,997,860 | \$53,127,957 | \$52,665,127 | \$66,655,313 | \$13,990,186 | | |
| Class 300/400 - Materials, Supplies & Equipment | \$22,092,058 | \$10,039,442 | \$9,590,548 | \$9,190,548 | \$14,398,899 | \$5,208,351 | | |
| | \$95,312,219 | \$76,902,374 | \$83,737,508 | \$82,500,492 | \$101,871,935 | \$19,371,443 | | |

| Contracts Summary (Professional Services only) | | | | | | | | |
|--|--------------|--------------|--------------|--------------|--------------|-----------------------|--|--|
| | FY13 | FY14 | FY15 | FY16 | FY17 | FY18 YTD (Q1 & Q2) | | |
| Total amount of contracts | \$16,988,604 | \$34,655,040 | \$19,015,288 | \$26,858,936 | \$20,494,249 | \$21,707,392 | | |
| Total amount to M/W/DSBE | \$2,437,542 | \$6,988,347 | \$4,732,056 | \$7,051,856 | \$5,047,780 | \$3,758,009 | | |
| Participation Rate | 14% | 20% | 25% | 26% | 25% | 17% | | |

| Total M/W/DSBE Contract Participation Goal (Public Works; Services, Supplies & Equipment; and Professional Services combined) | | | | | | |
|--|--|--|--|--|--|--|
| FY17 FY18 F | | | | | | |
| M/W/DSBE Contract Participation Goal 25% 25% 25% | | | | | | |

PROPOSED BUDGET OVERVIEW

Proposed Funding Request:

OIT's proposed Fiscal Year 2019 General Fund budget totals \$101,871,935. This \$101,871,935 is an increase of \$19,371,443 over Fiscal Year 2018 estimated obligation levels. This increase is primarily due to the City's Emergency 911 center for Police and Fire being co-located at 400 N. Broad, and operating support for capital projects.

The proposed budget includes:

- \$20,817,723 in Class 100, a \$172,906 increase over FY18. This funding will compensate OIT's employees performing various tasks which promote OIT's major objectives which are to: implement, manage and service information technology infrastructure that enables efficient and cost-effective application solutions for City departments and improve efficiency and value of City information technology initiatives by providing best practices through ongoing oversight, support activities project management oversight, and strategic planning.
- \$66,655,313 in Class 200, a \$13,990,186 increase over FY18. This funding will support ongoing capital projects in addition to supporting planning efforts on new capital projects. Class 200 funding develops and improves the delivery of City IT services and information. It provides ongoing centralized services and support for the IT infrastructure, data center, help desk, IT network (internet/intranet/WAN and PC desktop), cable TV, telecommunications, system software and maintenance, software development framework (best practices guidelines), and IT training. This funding will also maintain the City's Emergency 911 System.
- \$722,228 in Class 300, a \$418,456 decrease over FY18. This funding will provide the Office of Innovation and Technology with the materials and supplies needed to efficiently function and maintain many of the department's objectives and ongoing daily operations, including those related to IT Infrastructure, Unified Communications and the 911 system.
- \$13,676,671 in Class 400, a \$5,626,807 increase over FY18. This funding will provide major equipment and hardware to support many of the technical systems currently utilized such as Unified Communications and the Emergency 911 System. This funding also provides a replacement of outdated personal computers, printers, laptops, equipment and hardware related to ongoing maintenance associated with telecommunications and infrastructure throughout the City.

STAFFING LEVELS

The department is requesting 413 All-Funds positions (293 General Fund positions) for FY19. This is an increase of 8 positions over FY18.

New Hires

| New Hires (from 7/1/2017 to December 2017) | | | | | | | |
|--|------------------------------|-------|--------|---------|------------|--|--|
| | Total Number of New Hires | Hindi | French | Spanish | Portuguese | | |
| Black or African American | 11 | 0 | 0 | 0 | 1 | | |
| Asian | 8 | 4 | 2 | 0 | 0 | | |
| Hispanic or Latino | 1 | 0 | 0 | 0 | 1 | | |
| White | 19 | 0 | 0 | 1 | 0 | | |
| Total | 39 | 4 | 2 | 1 | 2 | | |

PERFORMANCE, CHALLENGES, AND INITIATIVES

911 Administration:

| FY19 Strategic Goals | | | | | | |
|--|---------|-----------|---------|---------|--|--|
| • Ensure the sustainability of emergency services systems. | | | | | | |
| FY19 Performance Measures | | | | | | |
| | FY17 | FY18 YTD | FY18 | FY19 | | |
| Measure | Actual | (Q1 + Q2) | Target | Target | | |
| Computer-Aided Dispatch (CAD) uptime availability ¹ | 99.999% | 99.999% | 99.999% | 99.999% | | |
| Percentage of time radio system is not busy, thus preventing | | | | | | |
| calls from going through to the dispatch center (aka "system | 0.001% | 0.001% | 0.001% | 0.001% | | |
| busies") ² | | | | | | |

¹ Availability numbers are excluded when there is scheduled maintenance and downtime. Every CAD vendor requires CAD to be available 99.95% of the time. There are no real Association of Public Safety Communications Officials or 911 standards, however, every CAD vendor installs systems that will have a reliability factor of 99.95%

 2 Availability numbers are excluded when there is scheduled maintenance and downtime. National Emergency Number Association (NENA), a national association that focuses solely on 911 policy, technology, operations, and education issues, requires radio availability for transmitting to not have more than 1% of the transmissions unable to get through. OIT currently exceeds this number every year due to the robust redundancy it has, as well as the number of channels.

Departmental Services:

| FY19 Strategic Goals |
|----------------------|
|----------------------|

• Modernize key services and business applications to better enable departments to improve their service delivery.

| FY19 Performance Measures | | | | |
|---|--------|-----------|--------|--------|
| | FY17 | FY18 YTD | FY18 | FY19 |
| Measure | Actual | (Q1 + Q2) | Target | Target |
| Percentage of all application-related tickets/issues resolved within SLA ¹ | N/A | 71% | 75% | 75% |

¹OIT migrated to a new system in FY17. FY18 represents the first full year of collecting data in the system.

Enterprise Services:

| FY19 Strategic Goals | | | | | | | |
|--|--------|-----------|--------|--------|--|--|--|
| • Streamline technology and improve the City's security posture to provide high quality IT infrastructure. | | | | | | | |
| FY19 Performance Measures | | | | | | | |
| FY17 FY18 YTD FY18 FY19 | | | | | | | |
| Measure | Actual | (Q1 + Q2) | Target | Target | | | |
| Network availability percentage | 99.95% | 99.93% | 99.97% | 99.98% | | | |

Enterprise Administration:

| FY19 Strategic Goals | | | | | |
|--|--------|-----------|--------|--------|--|
| Cultivate a diverse and talented workforce.Elevate IT governance throughout the City. | | | | | |
| FY19 Performance Measures | | | | | |
| | FY17 | FY18 YTD | FY18 | FY19 | |
| Measure | Actual | (Q1 + Q2) | Target | Target | |
| Percent of new capital business application projects on budget ¹ | N/A | 100% | 80% | 80% | |

¹ This is an annual measure. No meaningful data is available for FY17. "New" refers to this current Administration. Every project is counted as an equal for calculation purposes, regardless of the project's size.

Support Services:

| FY19 Strategic Goals | | | | |
|---|--------|-----------|--------|--------|
| • Improve customer service and satisfaction. | | | | |
| FY19 Performance Measures | | | | |
| | FY17 | FY18 YTD | FY18 | FY19 |
| Measure | Actual | (Q1 + Q2) | Target | Target |
| Percent of tickets resolved within SLA terms ¹ | N/A | 70% | 75% | 76% |

¹ OIT migrated to a new system in FY17. FY18 represents the first full year of collecting data in the system.

Unified Communications:

| FY19 Strategic Goals | | | | | | | |
|--|--------|-----------|--------|--------|--|--|--|
| • Provide more agile telephone services, improving abilities for City staff to communicate via mobile solutions. | | | | | | | |
| FY19 Performance Measures | | | | | | | |
| | FY17 | FY18 YTD | FY18 | FY19 | | | |
| Measure | Actual | (Q1 + Q2) | Target | Target | | | |
| Uptime for video camera (VSS) coverage/network ¹ | 94% | 96% | 95% | 95% | | | |
| VoIP enabled uptime – initially focus on the five (5) major | 100% | 100% | 100% | 100% | | | |
| Center City buildings ¹ | 100% | 100% | 100% | 100% | | | |
| Time to resolve telecom incident tickets/issues within SLA ² | N/A | 95% | 85% | 85% | | | |

¹ Availability numbers are excluded when there is scheduled maintenance and downtime.

² OIT migrated to a new system in FY17. The target was reduced to capture the impact of the transition to the new system. FY18 represents the first full year of collecting data in the system. OIT may revisit the target after obtaining a full year's worth of data.

OTHER BUDGETARY IMPACTS

Federal and State (Where Applicable)

The City receives funds annually from the Pennsylvania Emergency Management Agency (PEMA). PEMA funds are apportioned to all counties based on a set funding formula that includes a population basis and an average of the last five years of a PSAP-Public Safety Answering Point's 911 expenses (Philadelphia is a single PSAP). The City receives approximately \$33 million per year and these funds are used to solely to support E-911 technology and telecommunication operations for Fire and Police. PA Act 12 requires that the PEMA funding formula be reviewed every two years. The current formula is now under review by a 911 Funding Committee, who is evaluating potential changes to take into account new variables. Should the funding formula change, and potentially reduce the annual funding to Philadelphia, operations and planned expenditures to support the co-location at 401 N. Broad for E-911 operations for both Police and Fire would be negatively impacted.

CONTRACTING EXPERIENCE

| M/W/DSBE Participation on Large Professional Services Contracts | | | | | | | | | | | |
|---|-------------------------|---------------------------------|-------------------|------------------------|------------------------|---|--|---|--|---|--|
| Top Five Larges | st Contracts, FY18 | - | | | | | | | | | |
| Vendor Name | Service Provided | Dollar Amount of Contract | RFP Issue Date | Contract Start Date | Ranges in RFP | % of M/W/DSBE Participation Achieved | \$ Value of M/W/DSBE Participation | Total % Participation - All DSBEs | Total \$ Value Participation - All DSBEs | Local Business (principal place of business located within City limits) [yes / no] | Waiver for Living Wage Compliance? [yes / no] |
| | | | | | MBE: 10% - 15% | 6% | \$557,729 | | | | |
| Ciber Global. | Workforce Management | | | | WBE: 10% - 15% | 4% | \$820,190 | - | | | |
| LLC | System | \$13,106,539 | 7/29/2013 | 12/1/2017 | DSBE: 0% | 0% | \$0 | 11% | \$1,377,918 | No | No |
| | | | | | MBE: 20% - 35% | 19% | \$816,904 | - | | | |
| | IT Staff | | | | WBE: 20% - 35% | 22% | \$913,461 | - | | | |
| Unitary* | Augmentation | \$5,000,000 | 3/25/2015 | 11/1/2017 | DSBE: 0% | 0% | \$0 | 41% | \$1,730,365 | Yes | No |
| | | | | | MBE: 20% - 25% | 8% | \$257,327 | - | | | |
| Computronix, | L&I eCLIPSE | ** ** * *** | | | WBE: 20% - 25% | 4% | \$128,664 | | | | |
| Inc. | Project | \$3,216,590 | 7/4/2012 | 4/1/2017 | DSBE: 0% MBE: 10% - | 0% | \$0 | 12% | \$385,991 | No | No |
| | | | | | 15% | 27% | \$183,891 | - | | | |
| Unisys | Message Switch | | | | WBE: 10% - 15% | 7% | \$50,707 | | | | |
| Corporation | Implementation | \$691,904 | 12/31/2014 | 6/30/2017 | DSBE: 0% | 0% | \$0 | 34% | \$234,598 | No | No |
| | | | | | MBE: 20% - 25% | 0% | \$0 | - | | | |
| Information Consulting | basis2 Water | | | | WBE: 20% - 25% | 20% | \$116,800 | | | | |
| Svcs | Billing Mgmt | \$584,000 | 7/2/2015 | 10/25/2017 | DSBE: 0% | 0% | \$0 | 20% | \$116,800 | No | No |

*2 of 23 vendors are a local business; 1 is WBE.

EMPLOYEE DATA

| | cs (as of December | | | T 1 0 0 | | |
|--|--------------------|-----------|-----------------|------------------|-----------|--|
| | Full-Time Staff | | Executive Staff | | | |
| | Male | Female | | Male | Female | |
| | African- | African- | | | African- | |
| | American | American | | African-American | American | |
| Total | 84 | 62 | Total | 1 | 1 | |
| % of Total | 23% | 17% | % of Total | 13% | 13% | |
| Average Salary | \$65,449 | \$66,041 | Average Salary | \$125,000 | \$142,830 | |
| Median Salary | \$60,000 | \$61,546 | Median Salary | \$125,000 | \$142,830 | |
| - | White | White | | White | White | |
| Total | 110 | 37 | Total | 5 | 1 | |
| % of Total | 30% | 10% | % of Total | 63% | 13% | |
| Average Salary | \$77,842 | \$74,914 | Average Salary | \$143,532 | \$142,830 | |
| Median Salary | \$75,000 | \$70,000 | Median Salary | \$142,830 | \$142,830 | |
| | Hispanic | Hispanic | | Hispanic | Hispanic | |
| Total | 13 | 2 | Total | 0 | 0 | |
| % of Total | 4% | 1% | % of Total | 0% | 0% | |
| Average Salary | \$66,419 | \$42,000 | Average Salary | N/A | N/A | |
| Median Salary | \$70,000 | \$42,000 | Median Salary | N/A | N/A | |
| | Asian | Asian | | Asian | Asian | |
| Total | 30 | 20 | Total | 0 | 0 | |
| % of Total | 8% | 5% | % of Total | 0% | 0% | |
| Average Salary | \$66,184 | \$77,091 | Average Salary | N/A | N/A | |
| Median Salary | \$66,138 | \$79,920 | Median Salary | N/A | N/A | |
| | Other | Other | | Other | Other | |
| Total | 5 | 5 | Total | 0 | 0 | |
| % of Total | 1% | 1% | % of Total | 0% | 0% | |
| Average Salary | \$73,170 | \$72,672 | Average Salary | N/A | N/A | |
| Median Salary | \$74,742 | \$74,742 | Median Salary | N/A | N/A | |
| | Bilingual | Bilingual | | Bilingual | Bilingual | |
| Total | 26 | 18 | Total | 0 | 0 | |
| % of Total | 7% | 5% | % of Total | 0% | 0% | |
| Average Salary | \$69,918 | \$75,543 | Average Salary | N/A | N/A | |
| Median Salary | \$69,963 | \$76,000 | Median Salary | N/A | N/A | |
| ······································ | Male | Female | | Male | Female | |
| Total | 242 | 127 | Total | 6 | 2 | |
| % of Total | 66% | 34% | % of Total | 75% | 25% | |
| Average Salary | \$71,206 | \$70,335 | Average Salary | \$140,443 | \$142,830 | |
| Median Salary | \$70,000 | \$70,000 | Median Salary | \$142,830 | \$142,830 | |

Office of Innovation & Technology

LANGUAGE ACCESS

1) Has your leadership received language access training?

No, however, training is scheduled for May 2018.

2) Do you currently have a language access coordinator?

OIT does not have a designated language access coordinator due to very limited interaction with the public. OIT follows the overarching Chief Administration Office Language Access Plan for language services, as needed.

3) Has your department written a language access plan and is it posted online?

OIT has adopted the overarching plan of the Chief Administrators Office.

4) Explain what your department has done to improve language access services over the past year.

OIT is developing an E-911 outreach program for non-English speaking communities. This program is expected to make it easier for non-English-speakers to use E-911 in an emergency.