City Council Budget and Oversight Hearing on the

FY 2020 Preliminary Budget

Testimony given by

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Good morning. Thank you, Chair Dromm and the members of the Finance Committee, for the opportunity to testify today.

My name is Jacques Jiha, and I am the commissioner of the New York City Department of Finance. I am joined today by First Deputy Commissioner Michael Hyman.

I'll begin by providing you with an update on the city's financial position.

Through February, the city's revenue totaled $46.5 billion, which represents a 1.2 percent increase over last year—well below the Office of Management and Budget's fiscal year growth forecast of 2.6%.

This under-performance has been driven by weakness in the personal income tax, especially in the area of estimated payments, and a softness in the unincorporated business tax.

In light of these weaknesses and the recent inversion of the yield curve which, if continued, could signal a recession, we should approach the FY20 executive budget and financial plan with caution. We will continue to closely monitor tax collections, and we will brief the Council as warranted.

The past four years have been a transformative period for the Department of Finance.

Increasingly, we have been relying on sophisticated data analytics and artificial intelligence, in particular cognitive and machine learning, in order to mitigate operational risks, reduce inefficiencies and costs, and make better decisions. Along the way, we have conducted our business in accordance with the agency's four key pillars: fairness, efficiency, transparency, and exceptional customer service.

Like any business, cities that do not provide good service at competitive prices will lose customers. In our case, this means residents, businesses, and visitors—and the revenue they generate.

City agencies cannot settle for providing merely adequate service. Our customers are also customers of Apple, American Express, Chase Bank, and many other private companies which are providing state-of-the-art products and services. They have grown accustomed to a certain level of service, and they will not accept anything less. Therefore, our services must be on par with the services they receive from private sector businesses.

When a customer walks into our business centers, they expect the same treatment they receive at a bank branch. They don't want to wait a long time to conduct a transaction. That's why we re-engineered our operations to reduce wait times at our business centers from 45 minutes to five minutes four years ago.

When customers must pay their parking tickets or property taxes, they expect the same level of service and convenience they receive from major retailers, banks, and other businesses. That's why we have introduced new payment methods such as mobile apps and Apple Pay and have

conveniently enabled our customers to pay their parking tickets at any CVS or 7-Eleven store around the country.

Put simply, just as private sector firms use big data and technology to provide excellent services, we must do the same.

At the Department of Finance, we are on the cutting edge. The examples of our data-driven and customer-centric approach are numerous. I'd like to share just a few with you in the time that we have today.

First, the process by which the Department of Finance values properties has become heavily driven by technology and big data. While we continue to inspect properties in person every three years as required by law, we are increasingly relying on technology to do the majority of inspections.

In the last two years, we have increased the number of properties that we have checked for anomalies, and have increased assessments by adding missed construction and fixing incorrect square footage data and incorrect building classifications.

More importantly, our assessors are now trained in applications where GIS and imagery are the underlying technologies. They appreciate the power of these new capabilities and how they have made their data-collection task more efficient. For example, our assessors were able to visit approximately 27,000 parcels in one five-month period in 2016, before the adoption of streetscape technology. For the same period in 2018, they reviewed about 80,000 parcels: about 67,000 via desktop review, and the rest through field visits.

The assessment process has also benefitted significantly from a Department of Finance initiative that we refer to as cross-agency data sharing. The purpose of this initiative is to create a collaborative culture among more than twenty participating city agencies.

The property valuations team is sharing data with nine other city agencies, including the Department of Buildings and the Department of City Planning. As a result, we can now obtain more timely Department of Buildings certificate of occupancy data to identify parcels with recently completed construction, resulting in an increase of more than $40 million in the city's total assessed values and generating $5 million in additional property taxes in FY20.

We are now moving into mass data collection of building characteristics using machine learning algorithms on Lidar (light detection and ranging) and imagery data, with the goal of capturing data on exterior building characteristics. Thus, assessors can focus on interior inspections of buildings (i.e. number of units, condition, alterations, etc.) and on the valuation of properties, particularly in growth areas.

Mass-data collection using Lidar and imagery will give New York City a database that all agencies can share, since many agencies use building characteristics such as footprint, square footage, number of stories and façade type. This wealth of data that is shared, accurate, and

updated on a regular basis, paired with data analytics, is the basis for building the smart cities of the future.

Clearly, good things happen when government agencies use and share data to make informed decisions. That is true not only in the area of property taxation, but also in law enforcement.

The New York City Sheriff's Office is very active in the areas of data sharing and technology. We are one of the few sheriff operations in the United States that integrates data from the courts and the police department to our service of court orders. For example, if we serve an order of protection and we know that the offender has an outstanding warrant with the court or is wanted by the NYPD, we will make the arrest on the spot. This is not a universal practice among law enforcement agencies nationwide—many will simply serve the orders and walk away.

You may also have heard about the recent tobacco bust performed by our Sheriff's Office. In January, the sheriff executed six arrest warrants and seven search warrants that resulted in the seizure of over 26,000 cartons of cigarettes in a single operation. The defendants were charged with conspiracy and the trafficking of over 400,000 cartons of untaxed cigarettes.

That operation was made possible by joint investigative work with the United States Postal Service and by the multiple data sources acquired by the Sheriff's Office concerning illegal tobacco trafficking.

In fact, we are investing in information technology to improve our law enforcement efforts across the board. The Sheriff's Office is preparing to deploy a new computer-aided dispatching system to provide deputies with more information in the field. And we are also using technology to protect New Yorkers who are vulnerable to deed fraud, a crime that has been described as an epidemic in the city.

The Department of Finance has already implemented a system to inform homeowners whenever a document is recorded against their property, so that they can report any suspicious activity. Now, we are turning our focus to prevention by acquiring optical character recognition and artificial intelligence capabilities that will make property-related records more accurate and more easily searchable.

This, in turn, will make it easier for the city register's office and the sheriff to spot suspicious activity and track the connections between perpetrators of fraud and their accomplices. Our objective is to use machine learning to detect patterns of illegal activity and stop deed fraud before it starts.

We have already seen the benefit of machine learning in other areas of the agency. As we speak, a very sharp team of highly trained economists and statisticians is working to make sure that the city's businesses pay what they owe—not one penny more, and not one penny less.

The Data Intelligence Group has developed more than 200 models to identify potential business tax audit candidates. These models include predictive econometric algorithms which identify

common characteristics of past audit subjects in order to find other candidates with similar characteristics.

The learning comes in when the results of the audits are then fed back into the models to make them smarter. Put simply, our models use auditors' insights as well as statistical algorithms across multiple sources of data to select better audit cases, which results in a significant increase in revenue for the city. Since 2014, our annual audit revenues have increased to more than $1.3 billion.

Our collections effort has also benefited from new technology and process re-engineering. As a result of the new business tax system, business tax judgments increased to $225 million in FY17 and close to $200 million last year after averaging about $70 million dollars each year from FY09 to FY15.

On the other side of the coin, we are also making sure that business owners receive the refunds that they deserve. The new system has made it easier for taxpayers to request, and DOF to process, business tax refunds. We issued $600 million in refunds to businesses in 2018, compared to $465 million in 2014.

So you see, we don't just come looking for customers when they owe us money; we also make sure they receive the refunds to which they are entitled.

Another example of our commitment to use technology to improve tax administration and become more customer-centric is the launch, earlier this month, of a new online property tax system which makes it much easier for customers to transact with DOF.

Property owners are now able to view important information such as their property tax bills and notice of property value and to pay their property taxes from the palm of their hand, on their mobile device.

With the new system, homeowners are now able to file online for money-saving property tax benefits such as the senior citizen and disabled homeowners' exemptions, and to view the status of their submitted applications. The streamlined electronic workflow of the new system allows us to process applications more efficiently and grant these benefits more quickly.

Our priority at the Department of Finance is to leverage technology and big data to provide a better experience for the customer and to provide more accurate tax assessments.

Before we close, there are a few other initiatives and developments of which I would like to make you aware, all of them geared toward better serving our customers.

First, working with the Council, we have just introduced a very important new program to help low-income property owners who are experiencing difficulties to pay their property tax. The Property Tax and Interest Deferral program, also known as PT AID, allows homeowners to defer a portion or, in some cases, all of their property tax payments to help them remain in their homes.

There are three payment plan options for owners with low or moderate incomes: one for seniors, one for homeowners facing extenuating circumstances such as death or loss of income due to unemployment, and one for homeowners who simply need to stretch out one year's worth of taxes over multiple years.

PT AID program participants will have their properties removed from the tax lien sale as long as they provide all required information within 45 days of the date of application.

We are excited about PT AID and expect that it will be an incredibly helpful program for the homeowners most in need of our assistance. We will work with Council members and other elected officials to get the word out in their districts.

Second, the Office of the Parking Summons Advocate was officially launched on December 21, 2018. The parking advocate's office is tasked with helping members of the public who are unable to resolve their parking and camera-violation tickets through normal DOF channels. The office also evaluates the parking system to identify and offer solutions to systemic issues.

The parking advocate and his team have been conducting a robust educational outreach effort, providing in-person assistance at our business centers and assisting customers over the phone and via email. To date, the Office of the Parking Summons Advocate has opened close to 600 cases and assisted with about 1,900 summonses. But the advocate's most important work is in educating people before they go to the judge, to help them understand their violations and prepare effective defenses.

We can be proud that New York is now one of only a few cities in the country where people who receive parking tickets have an advocate in city government.

And finally, this summer we will launch a new Department of Finance contact center which will provide customers with easy access to experts on business taxation and personal exemptions and benefits. With the contact center in place, we will be able to provide faster service for customers with sophisticated or highly specific tax questions.

This is critically important, as our system of taxation involves complicated issues that cannot be answered by 311 operators and comprises many different deadlines and documentation requirements.

Our customers require timely answers—and with the contact center, they will receive the information they need as quickly as possible.

In closing, the Department of Finance is hard at work on behalf of the city and our customers.

We are very grateful for your support, and as always, we welcome your input.

Thank you for your time. I am happy to take any questions.