Testimony of Ashwini Chhabra, Deputy Commissioner, Policy & Planning

NYC Taxi and Limousine Commission
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Good Morning, Chairman Vacca and Chairman Cabrera, and the members of the City Council Committees on Transportation and Technology. I am Ashwini Chhabra, Deputy Commissioner for Policy and Planning at the New York City Taxi and Limousine Commission.

Thank you for the opportunity to speak to you today regarding Intro 599, which would affect the Taxi Passenger Enhancement Program (TPEP) – this is the bundle of technology in taxis that includes the taxi TV screens, the credit card reader, GPS unit and driver messaging screen.

Increasing accessibility for all passengers is a primary goal of the Taxi and Limousine Commission. We know and understand that people with low or impaired vision often have difficulty using the TPEP systems to pay for their trips without requesting assistance from the driver. It is our goal to ensure that every passenger can pay for their trip confidently and independently, and we support what we understand to be the objectives of this proposed legislation:

1) That any payment technology equipped with a credit card reader installed in a vehicle should also have a payment option for visually impaired passengers to pay for the taxi trip on their own; and

2) That periodic audio announcements should inform the passenger of the current metered fare, accrued tolls and rate code used for the trip.

Earlier this year, at your urging Chairman Vacca, one of our two outside TPEP vendors – Creative Mobile Technology (CMT) – developed software that allows blind or visually impaired passengers to pay, unassisted, on some of their screens through the use of audio commands and screen touches. The TLC permitted and urged CMT to

begin testing this technology, with the goal of bringing this functionality to the entire taxi fleet. They currently have the technology installed in approximately 1,500 taxis. We have also urged Verifone, the other TPEP vendor, to develop the same functionality for their screens and they have indicated that they will. We think this is promising technology, and provided it can be done in a secure and user-friendly way, we agree with you that it should be mandatory in every taxi. As you may also know, the current TPEP contracts run through February 2013. We are in the process of drafting rules to succeed these contracts, and these rules will require this technology in every taxi.

However, the proposed bill, as it is currently written, does not allow for changes to the current TPEP technology, nor does it allow the flexibility to implement new innovations. Again, we agree with the goal of the proposed local law, but it should be revised to allow for technological improvements.

The proposed law also requires assistive features for the hearing impaired. Again, while the objective of this requirement is one the TLC supports, in fact, this is better accomplished not as part of adjustments to the TPEP system, but through the changes to the design of the vehicle itself. In fact, starting in November 2013, hearing loop technology will be standard in the Nissan NV200 – the Taxi of Tomorrow. This will allow hearing-impaired passengers to better hear not only what is broadcast from the taxi TV screens; but, more importantly, this technology, coupled with a passenger-to-driver intercom system, will allow passengers to better communicate with the driver and other passengers. This technology was brought to our attention by the Hearing Access Program at the Bell Association for the Deaf and Hard of Hearing and we worked with Nissan to ensure that it will be installed in each and every NV200 taxi.

In addition to the hearing loop, the NV200 will also include several other features that will greatly improve the passenger experience. The NV200 is equipped with a deployable step and a grab handle to help passengers get in and out of the taxi easily; and easy-to-open sliding doors (which require significantly less force to open than the sliding doors on the cabs today, and which should also reduce incidences of passengers swinging car doors into cyclists or other cars). There is floor lighting, and

high-contrast markings on the entry step and the seats, which will further assist visually-impaired passengers. The vehicle also features a wide entryway, more legroom than any of the taxis available today and a flat floor, which is great news for any passenger who has had trouble fitting into the current models, but especially good news for persons with service animals.

This concludes my testimony on Intro 599. To reiterate, the TLC supports the objectives of this proposed local law, and with the changes I have highlighted in my testimony, we will support the legislation.

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I would now like to speak on the other topic on today's agenda – challenges and opportunities for technology in the taxi and for-hire vehicle industries.

New York City has always been at the forefront of technological innovation, and New York City government is no exception – whether in the form of innovation in government services like 311 and 311 Online, or in the form of support to tech startups to locate in Silicon Alley and elsewhere in the five boroughs.

Likewise, our taxi and for-hire vehicle industries are continually adapting to technological advances to provide better service to the riding public, and the TLC supports that innovation.

In 2004, Mayor Bloomberg advocated for fleetwide in-taxi technology to provide consumers with increased functionality and better service – in particular, the ability to pay for taxi rides with credit cards. These efforts led to the development of the TPEP system. Again, the core elements of the TPEP system are a credit card reader (with the capacity to process credit card transactions in real time) and a GPS tracker that records the pickup and drop-off time and location, distance traveled and fare for each taxi trip. Each of these features has provided significant, measurable benefits. The GPS data

has given the TLC a powerful tool to identify and enforce against rule violations, without requiring expensive field enforcement. GPS tracking has also proved invaluable in helping to locate items left in taxis, and it has brought economic transparency to an industry that was previously opaque to its regulators. In addition, the TPEP system includes a passenger-facing touch screen that provides information and entertainment to passengers and a dashboard text screen that enables the TLC to directly communicate with drivers.

Over the four years that it has been available in taxicabs, the TPEP system has improved industry efficiency, TLC effectiveness, and customer service for the City's iconic yellow taxis, and it has become the standard that other municipalities have sought to emulate in their for-hire vehicle industries.

Looking ahead to 2013, when the current, exclusive TPEP contracts will expire and we will need to provide specs for TPEP 2.0, the Commission recently approved a pilot program to test new TPEP technologies. Through this pilot, a company called Square is testing an "off-the-shelf" system that utilizes iPads in the back seat and iPhones in the front, to provide the same services as the existing TPEP systems. There are currently 13 vehicles that have this technology and it has received positive preliminary feedback. If the final results of this pilot program are similarly positive, we will allow similar solutions as part of the TPEP 2.0 offering.

Also this year, the TLC released a Request for Proposals for a fare payment smartphone application. The goal of the RFP is to contract with a technology company to create and release a smartphone application that allows consumers to use a smartphone to pay a fare in any yellow taxi, much as they currently do with credit cards. The goal of this RFP is not to replace current fare payment options but to expand them. I'm told nineteen companies submitted proposals – indicating a very healthy level of interest in this initiative – and we are reviewing these proposals.

In the same way that TPEP has changed the yellow taxi industry, technological improvements have also changed other for-hire vehicle services – namely, the black car

and livery segments. For years now, black cars and livery cars have used electronic dispatching technology, most recently in the form of smartphones, as a means of scheduling trips and allowing consumers to make credit card payments. Smartphone applications offer businesses opportunities to grow; and, in particular, they provide smaller bases, who may not have the resources to develop their own bespoke technology, an off-the-shelf solution that allows them to manage their affiliated vehicles and to offer passengers in-vehicle credit card payment options. Last year, in response to a proliferation of FHV-focused smartphone apps, the Commission provided industry guidance to FHV bases and drivers to help them adopt this new technology, while still ensuring that they comply with TLC rules and local law.

Now, we face a similar proliferation of apps that seek to facilitate "e-hailing" of yellow taxis, and payment of taxi fares by smartphone. There are various business models, but the basic premise is that a user requests a yellow taxi via smartphone app; a driver of a vacant, on-duty taxi accepts that e-hail fairly quickly (also by smartphone or other electronic communication device) and picks up the passenger; and the passenger is able to pay for the ride through the app.

This is a model that has had some traction in other markets, and app developers who have had success elsewhere are now seeking to bring their products to the New York yellow taxi market. New York, of course, is unique. Unlike Chicago or San Francisco, you don't generally need a smartphone to hail a taxi here; at least not in the Manhattan Central Business District, which is where yellow taxis operate for the most part. All you need is to put your hand in the air and, as if out of nowhere, a taxi appears to take you where you want to go; that's one of the beautiful things about living here. And outside the CBD, there are numerous black car and livery bases that provide a similar service, and there are already smartphone apps to help passengers request one of those cars.

That said, these apps can provide some benefit to passengers in some instances. They may assist passengers late at night when there are fewer taxis cruising, or may help passengers who are a few blocks away from a main thoroughfare

to extend the reach of their hail. They may also serve to reduce driver reluctance to take trips out of Manhattan, if drivers think these apps can provide them with a greater prospect of finding a passenger for the return trip. In fact, a recent survey conducted by the TLC on the backseat taxi TV screens indicated that almost 70% of taxi passengers own a smartphone, and 50-60% of passengers want the ability to use their smartphones to find available taxis and to pay for their taxi rides.

At the same time, data suggest that taxi drivers spend a significant portion of their shifts cruising for fares, which is an inefficient use of both time and fuel. Even if these apps result in only 1 or 2 more trips per shift for a driver, this could have a material positive impact on driver earnings and could increase the efficiency of the taxi fleet.

As such, the Commission is of the view that these services – if provided in a manner that does not result in distracted driving, if they do not adversely impact the street hail service which is the core function of the yellow taxi system, and if they provide the Commission with the same transparency into trip data as is currently available – should be permitted and we will pursue rulemaking to permit them. They have the potential to provide a benefit to passengers and drivers and are in keeping with this City's and this industry's striving for innovation.

At the same time, the new technology also raises some thorny issues. One question that has been raised is what impact the ability to e-hail will have on the supply of taxis for passengers who continue to use the traditional hand-in-the-air method. If these apps make it easier for smartphone users to get a taxi at the expense of those who don't have smartphones, then something valuable will have been lost. Again, given the nature of taxi service in New York, we don't think this is a present concern, but it is something we will need to remain vigilant against. (Though, where this might be particularly disruptive – for example, at taxi stands at transit hubs and at the airports – we will seek to prohibit the use of these apps.)

Another concern with this new technology is the possible increase in distracted driving. Any service that requires instant driver trip acceptance increases the likelihood of driver distraction. We believe this is amenable to a technological fix, however, and this is one of the key issues we will explore during the rulemaking process.

There has also been some concern voiced by our licensees in the black car and livery segments, that the availability of these apps will impact their businesses. Currently, passengers who cannot otherwise hail a taxi in Manhattan, can call a base to request a black car or livery car. Arguably, some of that business may be affected if we make it easier for these passengers to hail taxis. That is a consideration, but it cannot be our overriding consideration. (No doubt this was also a concern when the idea of requiring credit card readers in taxis was first considered. That passengers should be able to pay with credit cards no doubt has reduced some of the business that would otherwise have gone to black cars or liveries, but no one would suggest that credit card readers in taxis was a bad idea. Not least of all the 100 million plus passengers who pay for taxi trips with credit cards each year.) It is not the rightful function of government to protect one segment of an industry from competition from another segment. So long as passengers win and the industry overall wins, our goal should be to encourage innovation and forward movement.

Other issues – including passenger perception of refusal by drivers *en route* to pick up an e-hail passenger – are real concerns, but they are not insurmountable. We will seek to mitigate these concerns in the course of rulemaking which we will pursue, on an expedited basis, over the next few months. We will solicit the input of each of our regulated industries, passengers, technology providers and the Council in that process. And in the course of those conversations, no doubt, other concerns will come to the surface and we will address them together and in a constructive way. I welcome the continued dialogue with each of you on this topic.

This concludes my testimony regarding taxis and technology. I would like to thank you for the opportunity to testify on this topic, and on the subject of the proposed legislation. I'm now happy to answer any questions you may have on either topic.