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**Future of Privacy Forum Comments on Privacy Implications of Collecting FHV Drop-off
Location Data**
[Reference Number 2016 RG 097](#)

Thank you to the Taxi and Limousine Commission for the opportunity to speak today. My name is Lauren Smith, and I am Policy Counsel at the Future of Privacy Forum. FPF is a non-profit in Washington, DC that serves as a catalyst for privacy leadership and scholarship, and advances principled data practices in support of emerging technologies. We believe that the power of data for good is a net benefit to society, and that it must be well-managed to control risks and offer the best protections and empowerment to consumers and individuals.

Last week, FPF submitted comments to the TLC in partnership with four other leading groups: the Center for Democracy and Technology, the Electronic Frontier Foundation, the Constitution Project, and Tech Freedom. We made three recommendations that we think are crucial to mitigate the privacy risks posed by the proposed rule; the TLC should:

- 1) tailor the data collection more narrowly to the stated purpose by focusing on trip duration rather than the location of passengers' trips;
- 2) collect less precise, more general geographic information; and
- 3) enact policies and procedures that detail the privacy and security protections for such sensitive data.

These organizations all wrote to highlight the privacy risks posed by the addition of more data reporting requirements to for-hire vehicle (FHV) bases. We believe that these new trip reporting requirements create significant privacy risks. We urge the Commission not to adopt the new data requirements in this rule unless the scope of these requirements are more narrowly tailored to focus on trip duration, and the serious privacy risks created by the proposal are mitigated.

The proposed rule would create significant privacy risks by mandating that FHV bases transmit passenger drop-off time and location data. This can be highly sensitive information. These additional data points pose particular risks in light of the TLC's existing data collection, given that FHV bases must already report the date, time, and location of passenger pick-ups. With the addition of drop-off data as proposed by the rule, the TLC's data set would provide

the TLC and the public with a comprehensive view of the movements of individual New Yorkers.

We understand that the Commission has proposed this rule change in order to reduce the risks associated with fatigued driving, but it is unclear how the collection of precise location information will achieve this end. Driver fatigue results from long periods of time on the road, which is information the TLC could ascertain from collecting trip duration rather than pick-up and drop-off location information of individual passengers.

Though the TLC recognizes that it must protect the privacy and confidentiality of any data it collects, it does not acknowledge the heightened privacy and security concerns that accompany the collection of vast quantities of sensitive location information.

For example, the proposed rules are unclear on how this new information about passenger drop-offs would or could be shared among city departments. Clear rules must be established to address potential access to the data by other agencies and law enforcement. Law enforcement access to such data about citizens, in particular, raises serious Fourth Amendment concerns.

Data collected by the TLC can also be subject to New York's Freedom of Information Law, creating a high risk that private information will be made public and widely available. The TLC has previously released similar data in response to Freedom of Information requesters, and requesters have made that data easily accessible to anyone with an internet connection.¹

Studies have demonstrated that even de-identified data can be "reverse engineered" to reveal passenger names and trip pick-up and drop-off location information.² By adding drop-off time and location to the collected data as proposed by the rule, the privacy risk posed by this dataset grows substantially, offering the TLC and anyone else who accesses it a comprehensive, 360-degree view into the movements and habits of individual New Yorkers. Evidence shows that even with robust de-identification, the more data points that are added to a data set, the easier it is to re-identify individuals.³

In conclusion, we believe that at minimum, the TLC should explore ways to: 1) tailor the data collection more narrowly to the stated purpose by focusing on trip duration rather than the location of passengers' trips; 2) collect less precise, more general geographic information; and 3) enact policies and procedures that detail the privacy and security protections for such sensitive data.

Thank you again for the opportunity to speak with you this morning.

Lauren Smith, Policy Counsel

¹ Chris Whong, *FOILING NYC's Taxi Trip Data* (Mar. 18, 2014), http://chriswhong.com/open-data/foil_nyc_taxi/.

² E.g., Neustar Research, *Riding with the Stars: Passenger Privacy in the NYC Taxicab Dataset* (Sept. 15, 2014), Dataset <https://research.neustar.biz/2014/09/15/riding-with-the-stars-passenger-privacy-in-the-nyc-taxicab-dataset/>.

³ See, e.g., Montjoye, Yves-Alexandre de, César A. Hidalgo, Michel Verleysen, and Vincent D. Blondel, *Unique in the Crowd: The Privacy Bounds of Human Mobility*, SCIENTIFIC REPORTS 3 (March 25, 2013): 1376. doi:10.1038/srep01376.