



# **Questionnaire for Smart Taximeter Review and Approval**

#### Introduction

This questionnaire, in accordance with Seattle Municipal Code 6.311.340.A.8, King County Code 6.65.340.A.8, and the City of Seattle (City) and King County (County) rule on taximeters and smart taximeters, is the first step to reviewing and approving a smart taximeter system and must be completed prior to any fleet implementation. The questionnaire applies whether the system is brand new to a dispatch agency or replaces an existing system.

Both the dispatch agency seeking review and approval of the smart taximeter system and the system's vendor should complete the questionnaire. Please submit the completed questionnaire to the City's Consumer Protection Division at consumerprotection@seattle.gov.

Given the capabilities of smart taximeters, the review and approval process is more extensive than what the City and County use to assess application dispatch systems or what inspectors use to test and seal traditional, hard-wired taximeters.

Please provide a written response to each question asked in this document.

## **Technical**

1. Explain the functionality and connectivity of the smart taximeter, including the digital meter, on board diagnostics-II (OBD-II) connector (if used), driver console, passenger console (if used), printer device, and credit card processing device; how the digital meter interacts with the legacy dome light or cruising light; and how the unit interacts with the back-end management system.

Please attach detailed specifications and photographs of all components including auditable data privacy standards and security and breach notifications to the City and County.

A mandatory drive test will be conducted using all published City and County rates for accurate fare calculation (including no-GPS or GPS-degraded environments). The system should have no legacy meter connections and must be backward compatible with the previous two iOS or Android versions as of the date of the City and County's review.

- 2. Describe the technical or systems security, physical security and process security measures that protect the software and hardware that comprise the metering system, anti-fraud provisions to detect and eliminate unauthorized electronic interference, and other security measures that ensure the integrity of the metering system.
- 3. Does the smart dispatching system include publicly available, customer facing Application Programming Interface (APIs) for purposes of connecting to, and integrating with, route planning systems to facilitate discovery of available vehicles for-hire?

- 4. Provide documentation showing the smart taximeter will have an uptime of 99.99% including measures to ensure high availability, low fault tolerance, and redundancy. Include examples such as no or limited wireless connectivity (e.g., canyon effect, GPS signal loss, and variable driving conditions).
- 5. Is the system capable of accepting deep linking and/or promotional codes (e.g., fare discounts) issued by private or public entities to incentivize or reward the use of ride services?
- 6. Explain how trip and session data, for at least the past 48 hours, will appear on the driver console and be made available to City and County inspectors.<sup>1</sup>
- 7. Explain the functionality of the driver and passenger safety features, and photographs showing their locations on the driver and passenger consoles. The visibility of the information presented on the driver and passenger consoles must comply with section 5.54.S.1.3 of Handbook 44.<sup>2</sup>
- 8. Describe all approved (DDS) digital dispatch services or Application Dispatch Systems (ADS) (apps) with which the smart taximeter will be integrated, including how booking requests will be accepted and how payments will be processed for e-hail trips.
- 9. The City and County currently prohibit discounting of fares. Explain how the smart taximeter will prevent a driver from discounting a fare. If discounting is authorized by the City and County in the future, describe how the discounting function, including rate calculation, training for drivers, and passenger receipt compliance would work.
- 10. Describe the smart taximeter's ability to incorporate GPS data to meet regulatory reporting requirements, including municipal and county boundaries, zip code boundaries, Port of Seattle, ad hoc or temporary boundaries, and other potential data points related to trips provided and/or service availability.

### **Fare Transparency and Receipting**

- 11. Does the smart taximeter (both driver and customer console) clearly display the total trip cost, including extras and any additional charges, during the trip and at trip completion?
- 12. Can the smart taximeter calculate or be programmed to offer flat rates, contract rates, upfront fares, dynamic rates or fares, split rates or fares, trip rates or fares that have been bid, minimum rates, vehicle size rates or fares as outlined by <a href="City of Seattle Director's Rule FOR-HIRE">City of Seattle Director's Rule FOR-HIRE</a>
  TRANSPORTATION-11-2024 and King County Public Rule FHT-10-2024-PR?
- 13. Can the smart taximeter present the taxicab trip's rate, fare, or price to a passenger so that the passenger can consider before deciding whether to confirm the trip (i.e., upfront presentation)?
- 14. Does the smart taximeter notify a passenger if a convenience fee for electronic payment, or other known fees, will be added to the fare?

https://www.nist.gov/system/files/documents/2024/04/09/NIST%20HB44%202024%20Section%205-54%20Taximeters.pdf.

<sup>&</sup>lt;sup>1</sup> SMC 6.311.360.E and KCC 6.65.360.E require dispatch agencies to store certain records, including dispatch records, for affiliated drivers and vehicles for the current year and at least the prior two calendar years.

<sup>&</sup>lt;sup>2</sup> Section 5.54.S.1.3 of Handbook 44 is available at

- 15. What information is displayed to the customer in the vehicle before the trip begins? For example, can the smart taximeter present a fare upfront?
- 16. How will the smart taximeter rates be configured? Will the meter be configured to:
  - a. Incorporate the City and County standard taximeter rates as required by City and County codes?
  - b. Able to run the meter in the background while an alternative fare is used to price the trip?
  - c. Incorporate the airport (SEA) minimum fare as required by County code?
  - d. Use the City and County standard taximeter rates to generate an upfront rate?
  - e. Enable upfront presentation of alternate rates and fares to the customer?
  - f. Incorporate any flat rates?
    - i. If so, will the flat rates be used as the dispatch agency's primary pricing model?
    - ii. If not used as a primary pricing model, how will the flat rates be available to the customer (e.g., ADS/apps, promotional events, etc.)?
  - g. Vary fares based on a static schedule (time of day, day of the week, etc.)?
  - h. Vary fares based on dynamic conditions (traffic, weather, demand)?
- 17. Is the integrated electronic payment system Payment Card Industry (PCI) compliant?

# Certification

18. Is the smart taximeter certified under the National Conference of Weights and Measures' National Type Evaluation Program (NTEP)? If yes, please provide a copy of the NTEP certificate. If not, please describe your plan to gain certification before the City and County deadline of March 31, 2026.

#### **Reporting and Data Standards**

- 19. Is the system configured to connect using the Mobility Data Specification (MDS)? The City and County anticipate configuration to be a requirement beginning April 1, 2026.<sup>3</sup>
- 20. Does the system include an open public application programming interface (API) based on the General On-demand Feed Specification (GOFS) standard? The City and County anticipate having an open public API to be a requirement beginning April 1, 2026.<sup>4</sup>

### **Demonstration**

- 21. In addition to answering questions 1-20, physically demonstrate the specific hardware and device intended for use and how the smart taximeter performs the following:
  - a. The integration of payment and receipting systems and the absence of any side systems to meet this requirement as set by City and County codes.
  - b. The functionality for visually-impaired, blind, and physically-disabled passengers including a choice of spoken per mile, per dollar, and per minute announcements for the front console.
    - If a backseat console is used, it must include block display formatting standards, text-to-speech, rate of speech control, volume, audible information regarding vehicle and driver identification, and location.

<sup>&</sup>lt;sup>3</sup> The MDS is available at https://www.openmobilityfoundation.org/about-mds/mds-version-guidance/.

<sup>&</sup>lt;sup>4</sup> The GOFS is available at <a href="https://mobilitydata.org/mobilitydata-is-accelerating-the-standardization-of-on-demand-transportation-with-the-gofs-project/">https://mobilitydata.org/mobilitydata.org/mobilitydata-is-accelerating-the-standardization-of-on-demand-transportation-with-the-gofs-project/</a>.

- c. The forms of credit and debit card and cashless payment available to passengers and whether the system requires a single payment processor solution or allows dispatch agencies to choose their electronic payment processor.
- d. The processing of each type of payment, including digital wallet channels, peer-to-peer payment systems, and chip-enabled credit/debit cards.
- e. The manner in which passenger driver tip presentation not to exceed 30%, unless manually entered by passenger, is configured.
- f. The availability of receipts by hard copy printing, text, and email or on the web. Receipts are required to follow all City and County codes and <u>rules</u> and include the following elements:
  - i. The date and time the trip began and ended,
  - ii. Distance traveled,
  - iii. The medallion number for the vehicle providing the trip,
  - iv. The driver's regional for-hire driver's license number or unique driver identification number,
  - v. Fare charged and any tip paid,
  - vi. Any additional charges paid (e.g., additional passenger charge, tolls, temporary fuel surcharge, technology fee, convenience fee, etc.),
  - vii. Total amount paid,
  - viii. The TRDA or RDA with which the vehicle is affiliated, and
  - ix. A phone number, email address, or website to submit passenger feedback and inquires to the TRDA or RDA.

## **Approval Process**

- After submitting the completed questionnaire, City and County staff will review it and may follow up
  with additional questions. Staff will ask representatives from both the dispatch agency proposing to
  use the smart taximeter and the system's vendor to meet and discuss the questionnaire and any
  other questions related to the review.
- 2. Following the questionnaire review and meeting, please contact the City's Consumer Protection Division at consumerprotection@seattle.gov to arrange for the mandatory drive test. Using an affiliated vehicle with the smart taximeter installed, the drive test will begin at the City's inspection facility (Dearborn) and will involve travelling through areas where a GPS signal may be degraded (e.g., the parking garage at SeaTac Airport, the state route 99 tunnel, a downtown Seattle street with tall buildings on either side, etc.).
  - As part of the approval process, neither the City nor County will test a dispatch agency's entire fleet of vehicles with installed smart taximeters. However, testing of smart taximeters in more than one vehicle and during either an annual inspection or field enforcement could occur in the future as the City and County move towards mandating smart taximeters.
- 3. City and County staff will confirm in writing final approval (or rejection) of the smart taximeter system. A rejection means a dispatch agency will receive a written notice that cites the specific deficiency or deficiencies and/or the basis for rejection. Subsequent submissions of the questionnaire for a previous reject shall include clear evidence of remediation prior to staff review.
  - In some cases, staff may issue a provisional approval, meaning the system does not meet at least one requirement (e.g., the system does not have NTEP certification). With all other requirements

- being met, however, staff will continue working with the dispatch agency and system vendor to ensure compliance and full approval.
- 4. The review and approval process should take approximately 4-6 weeks to complete, though incomplete applications or delays in responding to request for missing or unclear information may lengthen the timeline. City and County staff reserve the right to request additional information or hold additional meetings should needs dictate.
- 5. After approval, the City and/or County will periodically inspect and test smart taximeters in dispatch company vehicles to ensure continued compliance.