

# Taxi meters

The *Passenger Transportation Act* (Act) authorizes the Passenger Transportation Board (Board) to set rules, policies, and licence terms and conditions for taxi meter use and standards. This page provides information about taxi meter types and usage in BC and includes links to other taxi meter resources.

Taxi meters help to ensure transparency regarding rates, especially to passengers, and the Board's taxi meter requirements ensure that drivers and passengers are protected. The Board's [Rates Rule – Taxi Meters Rule](#) details requirements for the use of all taxi meters in BC, including accuracy and testing standards.

Taxi meters are also important to ensure trip-level data is recorded and reported under the Board's [Data Requirements\(495 KB\)](#) to which all taxi licensees must adhere.

## Relevant legislation

- Section 7(1)(g) of the Act provides authority for the Board to make Rates Rules.
- Section 23(2)(a) of the Act says that a person cannot equip their motor vehicle with a meter, unless the Board authorizes it.
- Section 28(3)(a) of the Act says that the Board can establish terms and conditions of licence regarding “equipment or technology that must be installed or carried on or in motor vehicles operated under the authority of any licence issued in response to the application, and the inspection, testing, adjustments, display and use of that equipment or technology”.

## Definitions

- A “taxi meter” calculates taxi fares based on distance rates or time rates, or both.
- A “traditional taxi meter” refers to either an analogue or smart taxi meter, which are hardware-based.
- A taxi “analogue meter” is a mechanical taxi meter that functions independently from a dispatch system and lacks electronic capabilities.
- A taxi “smart meter” is a digital-electronic meter that has many programmable options and can connect with dispatch and other technologies via Bluetooth, USB, etc.
- A taxi “soft meter” is:
  - Any device used as a taxi meter that calculates distance travelled on the basis of Global Positioning System (GPS) technology and/or onboard diagnostics (OBD), or
  - Any smartphone or tablet (or a similar mobile device such as an Android or Apple iOS product) that is loaded with application software to be used as a taxi meter.
- A “fare” means the total transportation charges and taxes for a trip, including variable-pricing adjustment and excluding any gratuities.

## **How does the Board regulate taxi meters in BC?**

In BC, most taxi rates are calculated on a meter that may be calibrated and tested. Non-metered rates are less common and must be approved by the Board.

Taxi meter rates are based on a flag drop rate, a distance rate, and a time rate.

- A flag rate is the rate at the start of the trip – it appears when the taxi meter is turned on.
- A distance rate is a per kilometer rate.
- A time rate is estimated in seconds or minutes. If a taxi speed falls below a “crossover” speed, then the taxi meter applies the time rate rather than the distance rate.

The Board allows taxi licensees to use traditional taxi meters or taxi soft meters to calculate metered rates. Both kinds of taxi meter must meet the requirements set out in the Board’s [Rates Rule – Taxi Meters Rule](#).

The Board’s regulation of taxi meters focuses on establishing requirements and standards related to technology, function, and use by taxi licensees. The Board does not prescribe specific types or models of taxi meters for use in BC, and it does not maintain a list of approved taxi meters. This approach balances flexibility with transparency for passengers. There are many reasons taxi companies may prefer a certain type of meter over another, including geographical factors, data automation, and compatibility with other technologies.

## Weights and measures

In Canada, taxi meters are exempt from approval and testing requirements that are set out in the federal *Weights & Measures Act*. In the United States, several state and federal agencies are involved in the determination and coordination of national standards for taxi meters.

This table provides links to agencies and standards relevant to the Board’s [Rates Rule – Taxi Meters Rule](#):

| Institution                                                                                   | Reference Documents                                                                                  |
|-----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| National Conference on Weights and Measures (NCWM)<br>National Type Evaluation Program (NTEP) | <a href="#">NTEP Home Page</a><br><a href="#">Taximeters with an NTEP Certificate of Conformance</a> |
| National Institute of Standards and Technology (NIST)                                         | <a href="#">NIST Handbook 44</a>                                                                     |

## Taxi meter types

There are three types of taxi meters currently used by taxis in BC:

- Analogue taxi meters
- Smart taxi meters
- Soft taxi meters

Smart and soft taxi meters have steadily become the industry standard in recent years, while analogue meters have grown less common as they lack the flexibility and advanced capabilities of smart and soft meters.

By replacing analogue taxi meters with smart or soft taxi meters, taxi companies are able to take advantage of technological advances in meter programming, cloud-based dispatch systems, data collection and reporting software, and compatibility with other technologies. Such advances can improve business efficiency, customer service, and transparency for passengers. Modern meters can

also help businesses reduce administrative, maintenance, and information technology costs over time.

The following table highlights some of the features, benefits, and limitations of analogue, smart, and soft taxi meters.

| Meter Type | Features | Benefits | Limitations |
|------------|----------|----------|-------------|
|------------|----------|----------|-------------|

## Analogue

- |                                                                                                                                                                                                                                                      |                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"><li>• Mechanical</li><li>• Simple to set rates and calibrate</li><li>• Limited multi-rate programming (requires manual selection)</li><li>• Physical security seal</li><li>• Uses OBD to calculate fares</li></ul> | <ul style="list-style-type: none"><li>• Reliable in all geography/conditions if well-maintained (does not rely on GPS or any network)</li></ul> | <ul style="list-style-type: none"><li>• Cannot connect with dispatch or other technology</li><li>• Driver must manually select the rate and record trip information</li><li>• Cannot automatically record and transmit data</li><li>• Static rates (must unseal, reprogram, calibrate, and reseal each meter for every rate change)</li><li>• Less transparent to passengers</li></ul> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Smart

- |                                                                                                                       |                                                                                                                |                                                                                                                                                      |
|-----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"><li>• Digital electronic</li></ul>                                                  | <ul style="list-style-type: none"><li>• Reliable in all geography/conditions</li></ul>                         | <ul style="list-style-type: none"><li>• Static rates for most (must unseal, reprogram, calibrate, reseal each meter for every rate change)</li></ul> |
| <ul style="list-style-type: none"><li>• Simple to program and calibrate</li></ul>                                     | <ul style="list-style-type: none"><li>• Connects with dispatch and other technology</li></ul>                  |                                                                                                                                                      |
| <ul style="list-style-type: none"><li>• Multi-rate programming and fees options (manual selection)</li></ul>          | <ul style="list-style-type: none"><li>• Connects to cameras, roof lights, and payment systems easily</li></ul> | <ul style="list-style-type: none"><li>• Driver must manually select the rate and fees (where multiple rates are permitted)</li></ul>                 |
| <ul style="list-style-type: none"><li>• Physical security seal</li></ul>                                              | <ul style="list-style-type: none"><li>• Records and transmits data automatically</li></ul>                     |                                                                                                                                                      |
| <ul style="list-style-type: none"><li>• Uses OBD to calculate fares</li></ul>                                         |                                                                                                                |                                                                                                                                                      |
| <ul style="list-style-type: none"><li>• Technology is evolving to include more wireless programming options</li></ul> |                                                                                                                |                                                                                                                                                      |

## Soft

- Software for smartphone or tablet
  - Simple to program and update rates, fees, geofencing, etc. (manual and/or automatic selection)
  - Passenger interface to track trips, receive receipts, etc.
  - Electronically sealed with limited access and mandatory records of changes
  - Uses OBD,
- Connects with dispatch and other technology
  - Flexibility and adaptability are built-in to meet various regulations
  - Fast, remote programming that can save time and resources
  - Potential to program rates by calendar dates, times, etc.
  - Records and transmits data automatically
  - Drivers can transport their phones/tablets easily between vehicles
- GPS is not reliable (on its own) in all environments
  - May require additional costs to connect to cameras and roof lights

# Rates rule - Taxi meters rule

## Disclaimer (PDF copy)

The HTML version of the document displayed below for your convenience may contain typographical and formatting errors. The [PDF version\(62 KB\)](#) is considered the true copy.

## Purpose

To establish regulatory requirements for taxi meter usage in BC.

## Legislation

Section 7(1) of the Passenger Transportation Act (Act) states the Passenger Transportation Board (Board) has authority to:

- (g) make rules respecting
- (i) rates that are or may be charged by a licensee,
- (ii) any rules or practices of a licensee relating to those rates, and
- (iii) any tariff of those rates.

Section 23(2)(a) of the Act states that a person must not operate a motor vehicle equipped with a meter unless the Board expressly authorizes it.

## Definitions

A “taxi meter” is any device that calculates taxi fares based on distance rates or time rates, or both.

A “traditional taxi meter” refers to either an analogue or smart taxi meter, which are hardware-based.

A taxi “analogue meter” is a mechanical taxi meter that functions independently from a dispatch system and lacks electronic capabilities.

A taxi “smart meter” is a digital-electronic meter that has many programmable options and can connect with dispatch and other technologies via Bluetooth, USB, etc.

A taxi “soft meter” is:

- (a) Any device used as a taxi meter that calculates distance travelled based on Global Positioning System (GPS) technology and/or onboard diagnostics (OBD), or
- (b) Any smartphone or tablet (or a similar mobile device such as an Android or Apple iOS product) that is loaded with application software to be used as a taxi meter.

A “fare” means the total transportation charges and taxes for a trip, including variable-pricing adjustment and excluding any gratuities.

## Applicability

This Rule applies to licensed taxi operators in British Columbia that have:

- (a) Express authorization stating that vehicles may or must “be equipped with a meter that calculates fares on a time and distance basis,”; and,
- (b) Board-approved meter rates.

## Rule

## Use of Taxi meters

1. A taxi meter in a taxi must:
  - (a) Be capable of calculating and displaying a fare based on time and distance; and,
  - (b) Have a fare display that a passenger with normal eyesight seated in the rear of the taxi is able to read at all times.
  
2. A taxi meter must be produced by a qualified taxi meter company.
  
3. A licensee may only use a taxi soft meter if the licensee:
  - (a) Only uses taxi soft meter models (including any software updates or hardware modifications) that meet the performance requirements set out in this Rule.
  - (b) Only installs and operates taxi soft meters that:
    - (i) are programmed with current Board-approved rates;
    - (ii) have hardware and software provisions that protect the rates from unauthorized changes as required in sections 13-14, below;
    - (iii) are affixed to the vehicle to the right of the driver and physically secured in the vehicle by hardware;
    - (iv) provide passengers with a printed or electronic receipt at the end of every trip which contains information as required in section 21.
  
4. The licensee may only use taxi soft meter models that:
  - (a) Calculate flag rates, distance rates, and time rates at distinct periods of time without overlap;
  - (b) Have been evaluated and shown to meet the standards and perform within tolerances set out in section 5.54 of the NIST Handbook 44, including the following:
    - (i) section 5.54 (S.1.3) "Visibility of Indications"
    - (ii) section 5.54 (N.1) "Distance Tests"
    - (iii) section 5.54 (N.2) "Time Test"

- (iv) section 5.54 (N.3) “Interference Test”; and,
- (v) section 5.54 (T) “Tolerances”
- (c) Are installed with a functioning fare announcer that:
  - (i) a driver can easily activate and silence at the request of a passenger,
  - (ii) announces the following in English:
    - Upon meter activation: The taxi company name, the unique taxi ID number for the vehicle, and the flag rate;
    - During a trip: The trip fare at regular intervals (e.g., every \$1 or \$2);
    - When a trip concludes: The total fare, the company name, and unique taxi ID for the vehicle; and,
    - If turned off while a trip is in progress: A verbal acknowledgement that the fare announcer has been turned off and that the meter is still running.

5. The taxi licensee using a soft meter with a fare announcer must provide training to all drivers on when and how to use the fare announcer.

6. The taxi licensee using a soft meter with a fare announcer must comply with fare announcer requirements unless otherwise exempted, in writing, by the Board.

7. If a taxi soft meter uses GPS technology to calculate distances and distance rates, the road tests and routes used to evaluate the meter’s performance must show that it can operate within NIST Handbook section 44 tolerances despite the following technical challenges:

- (a) Canyon effect (e.g., by routes on urban streets with tall buildings 20 stories high on both sides for 3 or more blocks);
- (b) GPS signal loss (e.g., by routes with a tunnel at least 500 metres in length); and,
- (c) Variable driving conditions (e.g., by routes that include 90° turns, gradual curves, and changes in elevation of 100 metres or more).

8. Upon request, the licensee must provide documentation of the evaluation it undertook to ensure that the taxi soft meter model it selects meets the standards and performance requirements in this Rule.
9. Documentation to meet the requirement in section 8 may include one or more of the following:
- (a) Product specifications and performance test documentation that has been provided by the maker of the taxi soft meter;
  - (b) A report by an independent engineer who reviewed the product, conducted road tests, and evaluated its level of conformance with requirements in this Rule; or,
  - (c) A Certificate of Conformance issued by a laboratory that is authorized to conduct NTEP evaluations of taxi meters.

#### Adjustment of Taxi Meters

10. Taxi meters must be adjusted to calculate the current, Board-approved metered rate accurately.
11. Hardware changes or software upgrades must not affect the way rates are calculated. If the calculation of rates is affected, the licensee must evaluate the taxi meter in accordance with this Rule.
12. When flag, distance, and waiting time rates are adjusted on a taxi meter, only the change in flag rate is immediately apparent to passengers; therefore, any change to metered taxi rates must include a change to the flag rate.
13. Hardware and software provisions must be in place that prevent a vehicle operator from changing the rates or modifying how the taxi meter works in a taxi, except in circumstances described in section 14.

14. Rates programmed into a taxi meter may only be changed by an authorized representative of the licensee:

- (a) Who has permission to remove and replace physical taxi meter seals to adjust traditional taxi meters or central, password-protected access to program rates for all taxi soft meters in the fleet; and,
- (b) After the Board has approved a rate change or the Registrar has ordered changes to meet compliance requirements.

15. The licensee must have access to, and provide to the Board or Registrar upon request, a change log that provides a persistent audit trail of rates that are charged, historical rate changes that have been made, and the person(s) who made such changes.

#### Testing the Accuracy of Taxi Meters

16. Licensees must ensure that taxi meters in their vehicles are accurate at all times.

17. A taxi meter in a vehicle is considered accurate if,

- (a) On a road test, the distance computed by the taxi meter is within 2% of the actual distance travelled; and,
- (b) On a time test, the time computed by the taxi meter is within 2% of the actual time.

#### Trip Start

18. Subject to section 20, the taxi meter may only be turned on after the vehicle starts moving.

19. A taxi meter may be turned on before the vehicle starts moving if the vehicle has arrived at the pick-up location and one of the following occurs:

- (a) A passenger instructs the driver to start the taximeter;
- (b) A passenger enters the taxi and instructs the driver to wait for one or more passengers; or,
- (c) A driver informs a passenger of their arrival, and after waiting at least 4 minutes, the driver does

not see the passenger on the way to getting in the taxi. Note: Drivers of wheelchair accessible vehicles cannot charge for waiting time during loading or unloading of passengers.

#### Trip End

20. The meter must be turned off when the taxi arrives and stops at the passengers' destination.
21. A taxi soft meter must generate a receipt in print or electronic form at the end of every trip that must be offered to the payer and that includes the following details:
  - (a) Each charge or fee for the trip (including flag rate, total distance charges, total waiting time charges and other rates);
  - (b) The total amount paid;
  - (c) The date, start time, and end time of the trip;
  - (d) The total time for which "time rates" were charged and total distance travelled for which "distance rates" were charged;
  - (e) The initial pickup and final drop off locations;
  - (f) The company name and taxi number; and,
  - (g) The taxi company contact information (phone, URL, or email).

#### Responsibility for Costs

22. Licensees are responsible for all costs associated with taxi meters including their evaluation, inspection, installation, use, maintenance, and removal.

#### Compliance

23. Failure to comply with this Rule may result in compliance or enforcement actions by the Registrar of Passenger Transportation, or fitness reviews by the Board.

### Additional resources

[Rates Rule - Standard Rule for Taxi Rates](#)

[National Institute of Standards and Technology \(NIST\) Handbook 44, Section 5.54 "Taximeters"](#)

[National Council on Weights and Measures \(NCWM\)- Certificate of Conformance search](#)

[PT Board Form 10 \(Metered Rates\) \(475 KB\)](#)

## Rates rule - Standard rule for taxi rates

### Disclaimer (PDF copy)

The HTML version of the document displayed below for your convenience may contain typographical and formatting errors. The [PDF version\(65 KB\)](#) is considered the true copy.

### Purpose

To establish a core set of rules governing taxi rates.

### Legislation

Section 7(1) of the *Passenger Transportation Act* (Act) states the Passenger Transportation Board (Board) has authority to:

- (g) make rules respecting
- (i) rates that are or may be charged by a licensee,
- (ii) any rules or practices of a licensee relating to those rates, and
- (iii) any tariff of those rates.

Section 1 of the Act includes the following relevant definitions:

“passenger directed vehicle authorization” means an authorization that, if included in a licence, authorizes one or more motor vehicles to be operated as passenger directed vehicles, but only if those motor vehicles are hailed other than through the use of transportation network services.

“rates”, in relation to compensation that may be charged or collected for the transportation of passengers in commercial passenger vehicles, includes the following:

- (a) discount fares;
- (b) round-trip fares;
- (c) point-to-point fares;
- (d) deadhead charges;
- (e) minimum and maximum charges;
- (f) any other fares, fees or charges.

“transportation network services” means either of the following:

- (a) services, other than services excluded by regulation, respecting the connection of drivers of passenger directed vehicles with passengers who hail and pay for the services through the use of an online platform;
- (b) prescribed services.

## Rule

### Board Approved Rates

1. Companies may only charge rates that are approved in writing by the Board.

## Metered Taxi Rates

2. Board requirements regarding the use, adjustment, and testing of taxi meters are prescribed in the Board's Rates Rule – Taxi Meters Rule.

## Taxi Fare Estimates

3. If a dispatcher or driver estimates a trip fare in advance, passengers pay the actual fare that is posted on the meter.

## Trip Changes by Passengers

4. If a passenger changes a trip that increases the distance or time, the meter calculates the charges for the extra distance or time, and the passenger must pay the metered fare at the end of the trip.

## Trip Delays or Detours

5. When road construction, detours, heavy traffic, ferry waits, or other delays outside of the control of the driver happen, the meter calculates the charges for the extra distance or time, and the passenger must pay the metered fare at the end of the trip.

## Non-metered Taxi Rates

6. Non-metered rates may only be charged when they have been approved by the Board.

## Deadhead Rates

7. Deadhead rates must not be charged unless approved by the Board.

## GST

8. Goods and Services Tax (GST) is included in the fares displayed on all taxi meters.
9. Unless otherwise approved by the Board, GST is included in all other taxi rate calculations.

## Gratuities and Tips

10. Payment of gratuities and tips is at the discretion of a customer.

## Extra Charges

### Tolls and other Public Fees

11. In addition to approved metered or non-metered rates, passengers pay for:
  - (a) All ferry, bridge, tunnel tolls, and other fees (such as park entrance fees) that apply to the taxi or its occupants (including the driver), and tolls for return trips even if the passenger is not returning with the taxi; and,
  - (b) A driver's overnight lodging and breakfast, if the passenger extends a charter trip overnight and it is not feasible for the driver to return to their originating area.

## Transaction Fees

12. Licensees may not charge or collect compensation from passengers, in addition to their advertised rates, in order to recover/offset transaction fees or any other fees or charges:

- (a) Imposed on licensees by credit or financial companies (i.e., credit card surcharges); or,
- (b) For booking a fare through a mobile app.

### Soiling a Vehicle

13. Passengers who soil or damage the interior of a vehicle with bodily fluids or solids may be required by a driver or taxi company to pay a clean-up fee of \$75 in addition to the meter rate or any other rate.

### Personal Baggage and Freight

14. No extra fees may be charged for the transportation of personal baggage, mobility aids, or assistance dogs.

- (a) Personal baggage items include items such as luggage, parcels, and equipment that would fit in the trunk of a mid-sized, sedan-style taxi.
- (b) In circumstances where it is difficult to determine whether an item is personal baggage or freight, the item is presumed to be personal baggage. Charges for freight do not require Board approval.
- (c) Domestic pets are considered personal baggage and are not subject to extra fees.

Transportation of domestic pets, however, is at the discretion of taxi drivers or companies.

### Taxi Dismissal Charges

15. If a person orders a taxi and changes their mind when the driver appears at the given address, a dismissal fee may be charged as follows:

- (a) The minimum dismissal fee is an amount equal to the approved flag rate on the meter.
- (b) The maximum dismissal fee is the distance rate for driving from the taxi's base or point of dispatch to the point of dismissal.

## Company-Specific Rules

16. The Board may approve a company-specific rule for an individual licensee.

## Fares Related to Apps

17. For the purposes of this rule, apps are software applications that are used by passengers to book or hail a trip.

18. If the app estimates the fare, the app:

- (a) Must only calculate Board-approved rates in accordance with Board rules respecting rates and rules governing rates.
- (b) Must not add a mandatory tip to the fare estimate.
- (c) Must not accept payment of fares.

## Taxi Service Discounts Rules

19. For trips booked through an app at off-peak times, when the Board-authorized off-peak discount is applicable, the discounted rate information may be communicated to the passenger through the app or by any other means if, by the end of the trip:

- (a) The receipt that is transmitted or printed by the app or dispatch system includes the discount amount or percentage as a line item on the receipt.
- (b) The passenger is given or offered a hand-written receipt with the discount percentage or amount noted on the receipt.

## Additional resources

- (1) [Rates Rule - Taxi Meters Rule](#)
- (2) [Taxi Meters Information](#)
- (3) [Rates Webpage](#)

## **Related topics:**

[Passenger Transportation Board rates rules manual](#)