



**Toronto Parking
Authority**

**Office des parcs de
stationnement de
Toronto**

FILE: 2195-00, 4055-00

January 28, 2020

DELIVERED VIA EMAIL

Ulli S. Watkiss, City Clerk
City Clerk's Office
City of Toronto
12th Floor, West Tower, City Hall
100 Queen Street West
Toronto, Ontario M5H 2N2

Attention: Marilyn Toft, Manager, Secretariat

Dear Ms. Toft:

**RE: Response to Administrative Inquiry:
Open Data – Cycling and Infrastructure Programs – Bike Share Ridership**

Councillor Paul Ainslie submitted an Administrative Inquiry under Municipal Code S27-61 to seek information regarding the release of timely and current bike share datasets.

1. Toronto Parking Authority to report on their work with the City of Toronto Open Data Team including meeting dates, project status and implementation plan.

Toronto Parking Authority (TPA) is in communication with the City of Toronto Open Data Team on a weekly basis responding to public or internal inquiries concerning live feed data and historical Bike Share Toronto datasets. TPA staff have attended open data workshops and have contributed in consultation sessions that were held prior to release of the new open data platform. In addition, TPA has a phone call with the City of Toronto Open Data Team in Q4 of every year to discuss the upcoming release of historical ridership data.

Toronto Parking Authority has been working with the City of Toronto Open Data Team to publish Bike Share Toronto data since 2011. Bike Share data is currently available in two formats: a live JSON file and a historical ridership dataset (CSV).

Bike Share Toronto publishes a JSON (JavaScript Object Notation) file which updates in real-time by connecting to the Bike Share backend software; the open API transmits live data under the General Bikeshare Feed Specification (GBFS). This live data reporting system is used by over 230 bike share systems worldwide. The JSON file includes information on all operational Bike Share Toronto terminal locations, including station occupancy data. This means that in real time it relays how many bicycle and docking points are available at each individual station, and it tracks the release and docking of bikes in stations.

Historical ridership is posted on an annual basis. The latest posting was on January 7, 2020 after the 2018 data was audited, cleaned and reviewed as the raw data contains personal information which cannot be shared (Protection of Privacy Act). We work with the open data team to ensure that the data is anonymized and in line with policy and privacy requirements.

33 Queen Street East
Toronto, Ontario
M5C 1R5

Tel: (416) 393-7275

Fax: (416) 393-7352

www.greenp.com

The published historical bike share ridership dataset contains the following attributes:

- Trip identification number
- Trip duration
- The start/end date and time of each trip
- The start/end station of each trip
- Whether or not the user was an annual or casual member

TPA has also worked with the Open Data Team to publish a “Data Story” on the Open Data Knowledge Centre on March 16, 2019. The article, “Exploring Bike Share Ridership”, looked at Bike Share Toronto’s historical ridership data and analyzed it for its various uses. TPA provided the public with guidance and information on how the data could be viewed and used. The article can be found at the following link:

<https://open.toronto.ca/exploring-bike-share-ridership/>.

TPA’s Board of Directors has approved the implementation of SAP which is expected to go live within the next 6 to 9 months. This will replace TPA’s current financial system and fully support the Open Data requirements going forward.

TPA is working with the Open Data Team to determine if there is a way to package the live feed for an improved visualization and deliver a more consumable format in order to enhance the user experience of all knowledge levels. TPA and the Open Data Team do not have a set timeline for this work, as the Open Data team needs to review the capability of its internal API extraction tool and determine how the data would be displayed.

2. Toronto Parking Authority to provide a detailed plan to commence releasing current bike share datasets to the City of Toronto’s open data team daily or monthly to be available on the City of Toronto’s Open Data Web Portal by March 1, 2020.

As noted in response 1, Bike Share Toronto has been publishing the JSON (JavaScript Object Notation) file on the City of Toronto’s Open Data Web Portal since 2011. This file updates in real-time by connecting to the Bike Share backend software; the open API transmits live data under the General Bikeshare Feed Specification (GBFS). This live data reporting system is used by over 230 bike share systems worldwide. The JSON file includes information on all operational Bike Share terminal locations, including station occupancy data. This means that in real time it relays how many bicycle and docking points are available at each individual station, and it tracks the release and docking of bikes in stations.

3. Toronto Parking Authority together with the City of Toronto's Open Data Team to provide a bike share data release schedule.

Table 1: *Current TPA Bike Share Toronto Data and Update Frequency*

Bike Share Data	Update Frequency
Station ID	Live
Station Name	Live
Last Communication with Server	Live
Latitude/Longitude of Station	Live
Station Occupancy Data (number of bikes and docks available)	Live
Bike Type	Live
Rental Method	Live
Trip Identification Number	Annual
Trip Duration	Annual
Start/End Date and Time of Each Trip	Annual
Start/End Station of Each Trip	Annual
User Type for each trip	Annual

TPA has posted reports annual reports from 2014 to 2018 and will continue to post reports annually going forward. The live feed will continue to run 24/7. These datasets are available on the following links:

<https://open.toronto.ca/dataset/bike-share-toronto/>
<https://open.toronto.ca/dataset/bike-share-toronto-ridership-data/>

The next annual report will be posted in January, 2021.

Both Transportation Services and TPA are committed to providing Open Data to the public. As such, staff from both organizations continue to evaluate posted datasets for potential updates and expanded fields to provide the most useful data to the public as possible.

Sincerely,

TORONTO PARKING AUTHORITY

Robin Oliphant
Acting President
Toronto Parking Authority

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File: RE\BST\Bike Share Open Data\City Clerks Response to Admin Enquiry (Open Data) Jan 2020

cc: City Manager