



Shared Mobility Data Sharing Specifications Policy Effective May 14, 2020

It shall be the policy of the License Administrator that Shared Mobility Operators operating in the public right of way must provide the Department of Business and Neighborhood Services (“DBNS”) with accurate, complete, and timely data about how Shared Mobility services are used and, in an appropriately anonymized fashion, who is utilizing these devices. Specifically, the provider must provide both quarterly and real-time data to the DBNS for three purposes: compliance, long range planning, and real-time device availability.

Real-Time Data Reporting

Vendors shall provide information on the entire fleet through documented application program interfaces (APIs): the Mobility Data Specification (MDS) format and the General Bike Share Feed Specification (GBFS) format.

Companies that offer dockless shared mobility options shall utilize the MDS feed to provide real-time and historical data to the City and contracted city partners through direct API access. Anonymized route data (per trip) must be made available via the most current version of Mobility Data Specification (MDS) format. Companies shall inform DBNS of the location of the MDS feed on the internet. If a token or authentication is required to view that file, the location to apply for the token must also be submitted to DBNS.

All Shared Mobility Operators shall also make available GBSF data to the public for uses including but not limited to creating apps or performing research that are not necessarily affiliated with the companies or city. If a token or authentication is required to view that file, the location to apply for the token must also be submitted to DBNS. Requirements for the real-time data reporting in the GBFS format:

GBFS Fields:

File Name	Defines
gbfs.json	Auto-discovery file that links to all of the other files published by the system. <i>This file is optional in the GBFS, but required by DBNS.</i>
system_information.json	Describes the system including System operator, device type, System location, year implemented, URLs, contact info, time zone.
station_information.json	Mostly static list of all stations, their capacities and locations. <i>(Note: This file may contain no information in a dockless system but is required by DBNS in order to maintain compliance with the GBFS standard.)</i>
free_bike_status.json	Describes bikes, scooters, or other mobility network devices that are available in non station-based systems. <i>This file is optional in the GBFS, but required by DBNS.</i>
geofencing_zone_information.json	Mostly static list of all geofencing zones, their capacities, locations and areas. <i>This file is optional in the GBFS, but required by DBNS.</i>
geofencing_zone_statuses.json	Defines geofencing zones available in the system and their link to physical stations if any. <i>This file is optional in the GBFS, but required by DBNS.</i> Elements within the num_bikes_available_types array are required by DBNS and should be set to 0 if not applicable.
system_regions.json	Describes the regions the system is broken up into. <i>This file is optional in the GBFS, but required by DBNS.</i>
station_status.json	Number of available devices and docks at each station and station availability. Optional as system can be free floating.
system_hours.json	Describes the hours of operation for the system.
system_calendar.json	Describes the days of operation for the system.
system_pricing_plans.json	Describes the system pricing.
system_alerts.json	Describes current system alerts.

Quarterly Reporting

On a quarterly basis, vendors must provide data on ridership for long range planning, compliance, and reporting. Vendors are required to submit the following information:

1. A summary of Shared Mobility device ridership (Summary Report of Data),
2. Anonymized details for individual trips (Trip Report),
3. A list of customer-reported issues (Customer Complaint and Violation Report), and
4. Details on device maintenance (Maintenance Report).

Submission Requirements:

- Quarterly data submissions shall reflect all applicable data from the previous quarter and shall be submitted by the dates provided:
 - April 14
 - July 14
 - October 14
 - January 14
- All four sections can be submitted in one Excel file, with separate sheets for each section.
- Vendors must follow the specified schemas when reporting data. Data can be validated by the DBNS and, if the data is not formatted properly, the vendor will be required to reformat and resubmit the data within 5 business days
- Files must utilize the following naming formats:
 - *For PDFs:* [company name] – [device type] – [Report Topic] – [date of reporting period].pdf
 - *For CSVs:* [company name] – [device type] – [data topic] – [date of reporting period].csv

1. Summary Report of Data:

- Each quarter, vendors shall provide a summary of ridership data. This report should be submitted in a PDF, CSV, or Excel format.
- The report shall include the total number of devices deployed over the reporting period. A deployed device means a device made available. The total number of devices deployed shall be calculated using the maximum number of available devices each day.
- The report shall include an overall snapshot of ridership during the reporting period. The report must at minimum include the number of active riders, total ridership, the number of rides taken, the number of miles traveled, and the mean.
- Vendors shall keep a record of reported collisions and include a summary of the total crashes, locations, and contributing circumstances of the crash.

2. Trip Report

- Each quarter, vendors shall provide information for all trips completed during the reporting period.

- Trip data should be submitted in a CSV format, with a row that includes the required fields for each individual trip. For this file, a trip is a transaction with a single rider. Trip data should utilize the following format:

Field	Element	Data Type	Required	Description
T1	Trip ID	String	Yes	A unique identifier that identifies the trip. The identifier should be permanently unique, not just within the reporting period.
T2	Device ID	String	Yes	A unique identifier for the device.
T3	Start Time	ISO 8601 (YYYY-MM-DDTHH:MM:SS+00:00)	Yes	The date and time that the trip began (e.g., 2018-06-30T20:06:06-05:00). Time shall be reported in Coordinated Universal Time (UTC).
T4	End Time	ISO 8601 (YYYY-MM-DDTHH:MM:SS+00:00)	Yes	The date and time that the trip concluded (e.g., 2018-06-30T20:06:06-05:00). Time shall be reported in Coordinated Universal Time (UTC).
T5	From Latitude	Latitude (WGS84)	Yes	Latitude of where the trip began. Point shall be rounded to three decimal places.
T6	From Longitude	Longitude (WGS84)	Yes	Longitude of where the trip began. Point shall be rounded to three decimal places.
T7	To Latitude	Latitude (WGS84)	Yes	Latitude of where the trip ended. Point shall be rounded to three decimal places.
T8	To Longitude	Longitude (WGS84)	Yes	Longitude of where the trip ended. Point shall be rounded to three decimal places.
T9	Trip Distance	Numeric (feet)	Yes	The amount of distance the bicycle traveled during the course of the trip. Point shall be rounded to three decimal places.

3. Customer Complaint and Violation Reports

- Each quarter, vendors shall provide information on all reports, violations, and complaints related to their devices submitted to the company during the reporting period.
- Please note in addition to monthly reports, Vendors shall make Customer Complaint and Violation Report data available upon request by BNS for the purposes of investigating a specific citizen complaint or company violation.
- Complaint and Violation data should be submitted in a CSV format, with a row for each individual report. Trip data should utilize the following format:

Field	Element	Data Type	Required	Description
R1	Report ID	String	Yes	A unique ID for the report.
R2	Date and time reported	ISO 8601 (YYYY-MM-DDTHH:MM:SS+00:00)	Yes	The date and time of when the report was reported to the company (e.g., 2018-06-30T20:06:06-05:00). Time shall be reported in Coordinated Universal Time (UTC).
R3	Description	String	Yes	The customer service category the alleged violation, complaint, comment, or other report falls into. (Personal identifying information (PII) will be redacted by the vendor)

R4	Resolution	String	Yes	A text description of the action taken or other resolution by the company. To the extent possible, distinguish between reports determined to be unfounded and reports whose validity could not be determined (e.g., report of inappropriate device return for a device rented again before the company could investigate). (Personal identifying information (PII) will be redacted by the vendor)
R5	Latitude	Latitude (WGS84)	Yes	Latitude of the location of the alleged violation or other subject of the report. Point shall be rounded to three decimal places.
R6	Longitude	Longitude (WGS84)	Yes	Longitude of the location of the alleged violation or other subject of the report. Point shall be rounded to three decimal places.
R7	Date and time resolved	ISO 8601 (YYYY-MM-DDTHH:MM:SS+00:00)	Yes	The date and time of when the issue was resolved (e.g., 2018-06-30T20:06:06-05:00). Time shall be reported in Coordinated Universal Time (UTC).

Data Privacy

Vendors will comply with best practice on data privacy as outlined by the North American City Transportation Officials, [NACTO Policy 2018: Guidelines for the Regulation and Management of Shared Active Transportation V1](#).

Policy Subject to Change

This policy is subject to change upon written notice from the License Administrator.