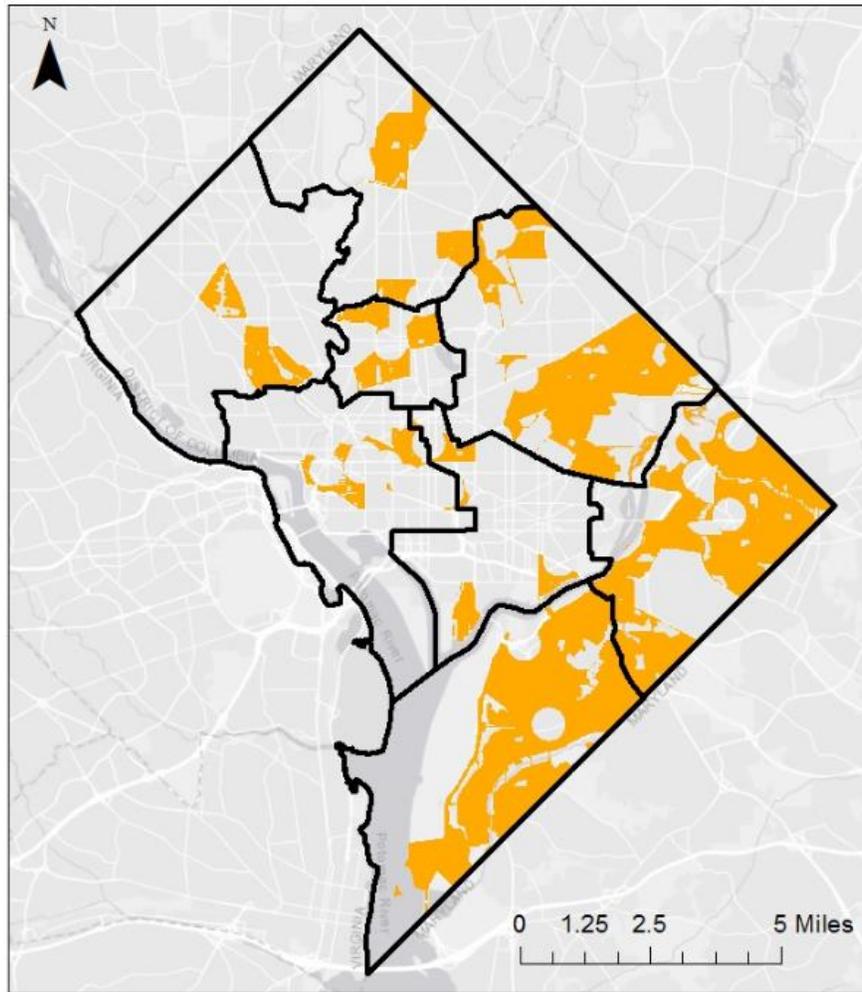


# **Attachment A**

**District of Columbia  
Equity Emphasis Area Map**

**2020 Permit Year**

## Equity Emphasis Areas: Washington, DC



DDOT adapted the COG methodology<sup>1</sup> for use in the District by weighting it to District rather than regional demographics. The index score was re-weighted to account for the new base values. A quarter mile buffer was removed around metro stops given the connection to transit and removed institutional property where DDOT cannot permit vehicles to be staged such as education institutions. The equity emphasis areas cover 17.41sqmi, or 25.48% of the district.

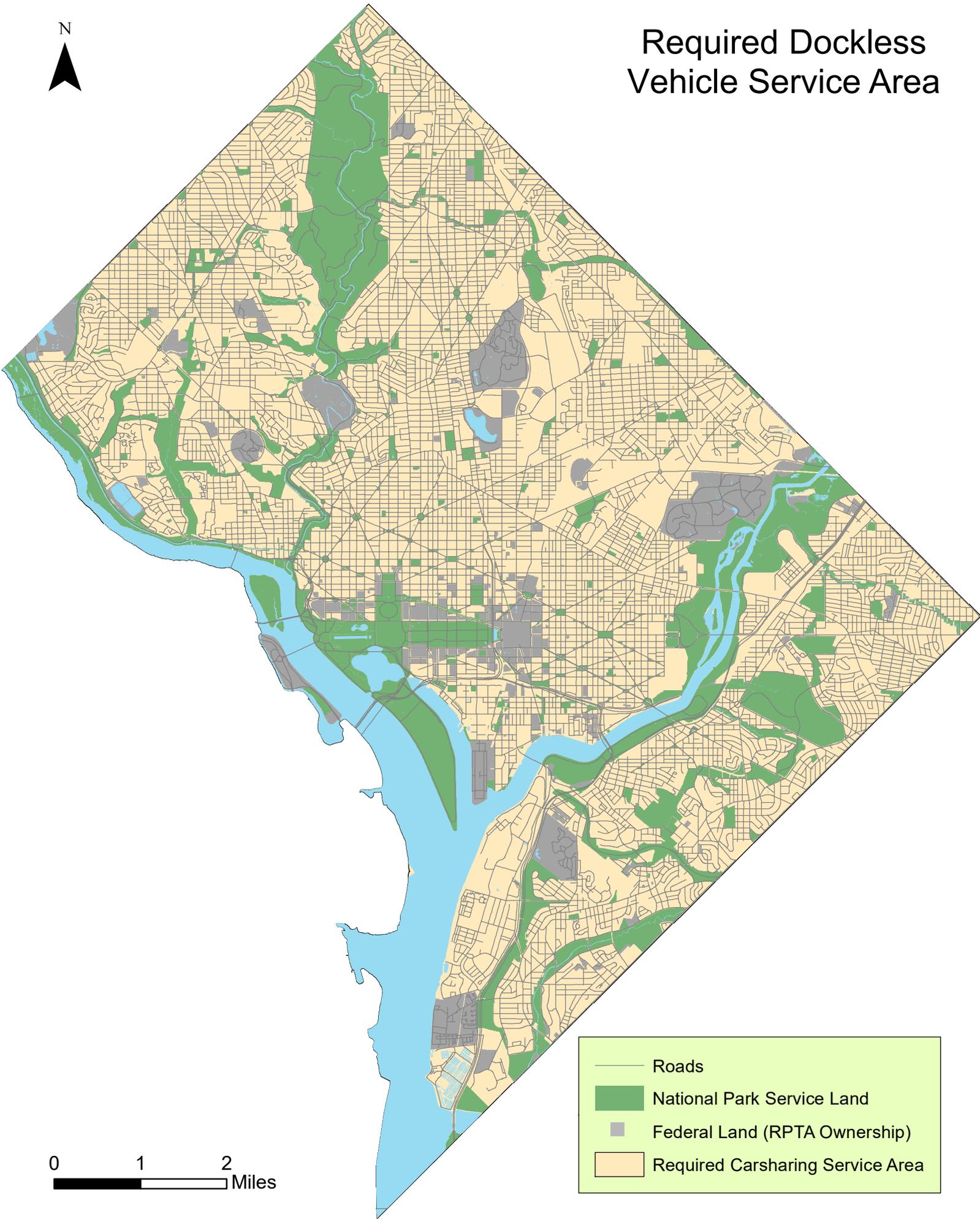
<sup>1</sup> <https://www.mwcog.org/assets/1/6/methodology.pdf>

# **Attachment B**

## **District of Columbia Required Dockless Vehicle Service Area Map**

**2020 Permit Year**

# Required Dockless Vehicle Service Area



0 1 2 Miles

- Roads
- National Park Service Land
- Federal Land (RPTA Ownership)
- Required Carsharing Service Area

## DATA AND REPORTING STANDARDS

### 2020 Dockless Permit

This is a list of the data and reporting standards for dockless vehicles for the 2020 permit year. DDOT will provide 30 days notice for any updates to this document. DDOT understands that GBFS will be updated in the next year and will update Permit Holders when we expect feeds to be updated.

#### A. Data

1. Data must be provided in compliance with the Mobility Data Specification (MDS) provider through a City-accessible Application Programming Interface (API) that provides the data outlined within, and meets the Specification of, the City of Los Angeles Mobility Data Specification (MDS) as published online at <http://github.com/CityOfLosAngeles/mobility-data-specification>.
2. Permit holder must provide 30 days notice before changing the address of any API used for reporting whether MDS, public, or private API.
3. Permit Holder shall provide a publicly accessible application program interface, clearly posted on the company's website that shows, at minimum, the current location of any dockless vehicles available for rental at all times. Data must be provided in compliance with the Generalized Bikeshare Feed Specification (GBFS) v1.0. To account for the dockless nature of the vehicles covered by this permit, the following clarifications and modifications are accepted to the GBFS:
  - a. There are no "stations" in the parlance of GBFS. As such, `station_status.json` should return an empty list (`[]`) and `station_information.json` should return an empty list (`[]`).
  - b. `free_bike_status.json` is required.
  - c. The field "vehicle\_type" shall be added to the public API to describe the vehicle type. This may be either "bicycle," "e-bike," "scooter," or another type of permitted vehicle that must be specified.
4. The public API need not be available without authentication; however, any member of the public, including commercial entities, must be able to gain access to the data provided by the API by requesting access through a web interface. Moreover, the provider should provide access on average of at least 50 requests an hour.
5. A private API with appropriate authentication for DDOT shall be made available that follows the same format of GBFS version 1.0 and produces the extra endpoint called ``all_bike_status.json``. This describes both vehicles that are stationary and those that are in use or on an active ride. This file is identical to ``free_bike_status.json`` but includes the additional fields:

- a. `in_use` (boolean): Whether the vehicle is currently in use or not;
  - b. `is_unavailable` (boolean): Whether the vehicle is no longer available due to maintenance or equipment issues;
  - c. `idle_time` (float): The time in seconds since the vehicle was last in use;
  - d. `battery_pct` (float): The percent of battery charge for the vehicle, expressed between 0 and 1.
6. If the operator operates more than one type of vehicle, they must provide a separate GBFS version 1.0 API as well as the private API per vehicle type. Providers must inform DDOT to which vehicle type each API corresponds.

#### A. Reporting

1. Permit holder shall provide a monthly report within 10 days of the end of the month. The report shall be composed of five (5) RFC 4810- compliant, UTF-8 encoded CSVs. All datetimes should be UTC ISO 8601- compliant datetimes, i.e., formatted as YYYY-MM-DDTHH:MM:SSZ, and should be accurate to at least the minute. All latitudes and longitudes must be provided to five decimal points and distances to at least two decimal points. The CSV databases shall provide:

a. Aggregated user data in “[YYYY-MM]\_[operator]\_users.csv.”

“Users.csv” shall consist of one line per active user with the following headers (a user is “active” if they make at least one trip in the month in question):

- i. `user_id` (string): A unique identifier for the user. This shall not be directly linked or traceable to PII captured by the company.
- ii. `vehicle_type` (string): Description of the vehicle type user rented. This may be either “bicycle,” “e-bike,” “scooter,” or another type of permitted vehicle that must be specified.
- iii. `num_trips` (integer): The number of trips the user took in the month.
- iv. `mean_trip_length` (float): The mean length of trips taken by the user in the month in miles.
- v. `median_trip_length` (float): The median length of trips taken by the user in the month in miles.
- vi. `std_trip_length` (float): The standard deviation of the length of trips taken by the user in the month in miles.

- b. Aggregated vehicle data in “[YYYY-MM]\_[operator]\_vehicles.csv.” “Vehicles.csv” shall consist of one line per active vehicle with the following headers (a vehicle is “active” if it was in service for at least six hours during the month in question):
  - i. vehicle\_id (string): A unique identifier for the vehicle.
  - ii. vehicle\_type (string): Description of vehicle type. This may be either “bicycle,” “e-bike,” “scooter,” or another type of permitted vehicle that must be specified.
  - iii. entered\_service (datetime): The date and time that the vehicle first entered service.
  - iv. num\_days\_in\_service (float): The number of days the vehicle was in service during the month in question.
  - v. mean\_trip\_length (float): The mean length of trips taken on the vehicle in the month in miles.
  - vi. median\_trip\_length (float): The median length of trips taken on the vehicle in the month in miles.
  - vii. std\_trip\_length (float): The standard deviation of the length of trips taken on the vehicle in the month.
  - viii. maintenance (integer): The number of instances when the vehicle was removed from service for maintenance.
  - ix. exit\_service (datetime): The date and time that the vehicle exited service and was decommissioned. If the vehicle has not been decommissioned, this field is “null.”
  
- c. Permit holders shall provide a summary report titled “[YYYY-MM]\_[operator]\_summary.csv.” “Summary.csv” shall consist of one row of data for the relevant month with the following headers:
  - i. total\_trips (integer): The total number of trips
  - ii. total\_vehicles (integer): The total number of vehicles in fleet
  - iii. nonoperational\_LS (integer): The total number of vehicles removed from service because of theft or property loss
  - iv. nonoperational\_M (integer): The total number of vehicles removed from service because of maintenance
  - v. M\_lights (integer): The total of instances that lights or the lighting system were repaired on vehicles
  - vi. M\_wheeltire (integer): The total of instances that wheels or tires were repaired on vehicles
  - vii. M\_seat (integer): The total of instances that seats were repaired on vehicles

- viii. M\_brakes (integer): The total of instances that brakes or the braking system were repaired on vehicles
  - ix. M\_frame (integer): The total of instances that frames (including handle bars and pedals) were repaired on vehicles
  - x. M\_gearsystem (integer): The total of instances that gears and the gear system were repaired on vehicles
  - xi. M\_lock (integer): The total of instances that locks and the locking system were repaired on vehicles
  - xii. M\_otherrepair (integer): The total of instances that other repairs not specified were completed on vehicles
- d. Permit holders shall provide a Customer Service report titled “[YYYY- MM]\_[operator]\_Customer.csv.” “Customer.csv” shall consist of one line per interaction with the public or customers and be gathered through all communication channels with the following headers row of data for the relevant month with the following headers:
- i. interaction\_type (string): Description of the reason for interaction. This must be “safety”, “parking”, “maintenance”, or “other”.
  - ii. incident\_time (datetime): the date and time the reported issue occurred. This is the time of the interaction or, if referring to an earlier incident, the time the issue was reported to have occurred.
  - iii. vehicle\_id (string): A unique identifier for the vehicle, if vehicle is known.
  - iv. vehicle\_type (string): Description of vehicle type. This may be either “bicycle,” “e-bike,” “scooter,” or another type of permitted vehicle that must be specified
  - v. incident\_lat (float): The latitude of the incident
  - vi. incident\_lon (float): The longitude of the incident
  - vii. Travel\_path (string): The location of the vehicle when the incident occurred sidewalk, bike lane, travel lane
  - viii. Incident\_severity (string): fatality, injury, or property damage, if the incident is a crash
  - ix. MPD\_report (float): number of MPD crash report, if applicable
  - x. Vehicle\_speed (float): speed of the vehicle if the vehicle was electric-powered, if known
  - xi. Narrative (string): The text of the description of the safety incident or customer complaint

- xii. `remedy_time` (datetime): Time to remedy the complaint, if relevant

e. Permit holders shall provide a Customer summary report titled “[YYYY- MM]\_[operator]\_customersummary.csv.”

“customersummary.csv” shall consist of one row of data for the relevant month with the following headers:

- i. `Active_customer` (integer): Number of customers who have taken a ride in the last month
  - ii. `LICP_sign-ups` (integer): Total number of low income customer plan sign-ups
  - iii. `LICP_active` (integer): Number of low income customers that have taken a ride in the last month
  - iv. `Active_time` (float): Total time in minutes that active customers were on a trip in the last month
  - v. `LICP_time` (float): Total time in minutes that low income customers were on a trip in the last month
  - vi. `Active_miles` (float): Total miles traveled by all active customers in the last month
  - vii. `LICP_miles` (float): Total miles traveled by all low income customers in the last month
  - viii. `Active_trip_count` (float): Total number of trips taken by active customers in the last month
  - ix. `LICP_trip_count` (float): Total number of trips taken by low income customers in the last month
2. Permit holder must provide staging report titled “[YYYY- MM]\_[operator]\_staging.geojson.” identifying its staging areas for dockless sharing vehicles from the prior month of operations.
  3. Permit holder must provide an unmet need report titled “[YYYY- MM]\_[operator]\_unmet\_needs.geojson.” identifying the first location that a user opened the application when searching for a vehicle and did not unlock a vehicle aggregated by block face.