Mobility Data Specification

Information Briefing

Introduction

Similar to a common language, the Mobility Data Specification (MDS) gives cities an elegant and cost effective tool to actively manage private mobility providers and the public right-of-way. MDS allows cities to collect valuable insights through a shared data vocabulary and to communicate directly with product companies in real time using code. Today, it enables cities to manage dockless scooters, bikes, taxis, and buses. Tomorrow, that could be autonomous cars, drones, and whatever else the future may hold.

Standard Data Sharing

In Los Angeles, permitted shared use mobility providers (like scooters and bikes) must provide real-time information about how many of their vehicles are in use at any given time, where vehicles are at all times, and the physical condition that vehicles are in. Additional information includes:

- Parking Verification
- Operating Cost
- Customer Cost
- Vehicle Utilization
- Percent Battery Charge
- Start Trip Data
- End Trip Data

Applications

The MDS is based on a set of Application Programming Interfaces (API). APIs are the underpinning of the modern mobile internet. APIs help get data to and from your mobile device to the backend system of a mobile service you might be using.

In Los Angeles, mobility providers are required to share data with LADOT. The MDS defines the API that LADOT will use in order to pull this data from mobility service companies.

The MDS also defines a number of other APIs that mobility service companies will support so that, in the very near future, LADOT can actively manage

mobility services that are in the public right-of-way. For instance, if a vehicle is parked outside of a proper parking area, LADOT's Agency APIs will be able to communicate in real-time with the mobility service provider and their customer about the proper parking area and may prevent a user from ending their trip until the vehicle is parked in an appropriate designated area. This active management of shared vehicles, for instance, helps ensure safe passage for all who are using the public right-of-way.

First Principles

Open-Source: allows any city or company to run MDS and related products as a service within their city free from any royalties or license fees.

Competition: fosters a competitive market for companies to develop products as a service in cities by creating a single platform where everyone is invited to participate and build.

Data and Privacy: adheres to best practices for privacy standards, commits to data collection transparency, and--above all else--protects citizen privacy.

Harmony: encourages consistent regulation so that providers can offer low cost, homogeneous services across municipal borders.

Sustainability: prepares cities for regulating transportation services that are low-emission, resilient, and ultimately better for the environment

Contributors

MDS is an open source project that involves contributions from cities, agencies, and mobility service providers. Contributors include:

- *The City of Los Angeles*
- *The City of Santa Monica*
- *The City of Austin*
- *San Francisco Metropolitan Transit Authority (SFMTA)*
- *Seattle Department of Transportation*
- *Harvard Kennedy School*
- *Bird*
- *Spin*
- *Lime*

For more info:
github.com/CityOfLosAngeles/ /mobility-da-ta-specification
urbanmobilityla.com
ladot.io