
The Importance of Data Standards in a Multi-Modal World

Mindy Montgomery
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Our World is Built on Standards

Imagine if the Internet had not come to be

Our modern world would be a collection of:

- Separate, private networks for each and every business, industry, university with little to no interoperability
- Data kept in walled gardens, mostly inaccessible and unusable
- Bespoke and expensive solutions would be the only option

Most of how we work, shop, and are entertained would not exist today.

A Sampling of Types of Standards used in an Multi-Modal World

- Transport Standards
 - Leverage existing TCP/IP and other Internet transport protocols - no need to reinvent the wheel
- Data Standards
 - GTFS, GTFS-Ride, GTFS Plus, GTFS-to-HTML, GTFS-Fare, GTFS-Mobile, others
- API Standards
 - Follow industry best practices like <https://github.com/WhiteHouse/api-standards>
- Documentation Standards
 - Use industry accepted tools such as Swagger, UML

Our goal should be to strive for standardized and interoperable data to understand how people move

GTFS-Ride in the Multi-Modal World

The GTFS-Ride specification is a great start to form the basis of transit rider behavior

But there are a few gaps when considering a GTFS-Ride in a multi-modal world

- Service Mode - add to be a required field inclusive of all modes
 - Agencies would be required to supply the mode (bus, light/heavy rail, ferry, etc.)
 - MSPs required to supply the mode (bike share, scooter, vanpool, free route ride-hailing)
 - Optionality to include implementer-defined modes
 - Service Provider - extend agency_id to account for non-transit providers
 - Trip Start/End Location - allow GPS coordinates, necessary for dockless and non-fixed route options
 - Source - extend data model to accept implementer/MSP-defined collection options
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What is moovel doing WRT to adoption of Open Data and Standards in its platform?

Nothing...yet

Why do we need to adopt and evangelize Open Data and Standards?

Agencies need to understand ridership and people movement in order to fulfill their obligations

Vendors need to compete on offerings, price, and quality, not lock-in and holding data hostage

Consumers need to make informed transportation choices

Discussion/Q&A
