

Mobility on Demand Trends in the United States

~A Case Study of Washington D.C., Part 3~

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1. Advancement of Data Coordination and Open Access

The DDOT strives for local governments and stakeholders to exchange information and cooperate in developing data standards important to system coordination of MOD/MaaS projects. Currently, the DDOT is encouraging local governments, as well as operators in the greater Washington, D.C. area ^{Note 4)}, to implement data standards including the General Transit Feed Specification ^{Note 1)}, the General Bikeshare Feed Specification ^{Note 2)}, the Mobility Data Specification, ^{Note 3)} and so forth. However, there isn't particularly any support to introduce these public transport data standards, and even WMATA, which leads regionally in technological implementation for public transportation, only just launched GTFS Real Time in January 2020. ^{Note 5)} Thus, it can be inferred that data standards are ununified across the D.C. metropolitan region.

Additionally, the DDOT is in collaboration with cities around the world. Shared Streets ^{Note 6)} is a joint project under the Open Transport Partnership, ^{Note 7)} a nonprofit organization established through the collaboration of the National Association of City Transport Officials ^{Note 8)} (NACTO, headquartered in New York) and the World Bank (headquartered in Washington, D.C.). The Open Transport Partnership (OTP), after concealing user information and ensuring that privacy is protected, shares vehicle GPS data collected from vehicle dispatch services in the Philippines, including taxis, to local governments to allow for greater traffic congestion management and to prevent traffic accidents. Based on this pilot program, OTP is working to develop data standards for this process with the aim to provide this service globally. The DDOT conducted the pilot program "Taxi and TNC

Activity" via the collaboration of Shared Streets and local governments. Specifically within a section of Washington D.C. crowded with TNCs and taxis after midnight when bars and clubs were closed, and known for being a dangerous place for accidents between pedestrians (many who had been drinking) and vehicles, the DDOT was able to implement measures after receiving vehicle location information (travel routes, passenger boarding/departure locations, and times) from TNCs (Uber and Lyft) who had shared them with local governments (government agencies in the District of Columbia, including the DDOT).^{1) 2)} At this location, where parking at night was free, limiting on-street parking to only TNC for a certain period of time allowed for shoulder spaces to open for passenger pickup and secured road space for vehicles to drive.

Furthermore, one of the four recommendations from the BTP mentioned above includes that the Washington metropolitan area's nine bus operators should "equalize the frequency of rides across all regions to ensure access to convenient services," and as part of this, to standardize bus service data (bus locations, arrival times, etc.) and performance data (ridership status, delays, etc.) so that it can be shared among operators and third parties. The action plan^{Note 3)} announced by the project in December 2019 gives further detail, including establishing working groups for bus operators participate in, identifying data storage agencies, and describing steps for establishing the rules of data sharing (between operators, third parties, and the public). According to the action plan, the goal is for agreement and implementation of data sharing regulations among participating organizations to be set by 2021, and for data to be collected by 2023. In addition, the collected data will eventually be reflected in other action items within the project, such as rebuilding the bus industry based on understanding of bus

service availability throughout the region.

2. Cooperation Between Urban Transport and City Planning

There was no clear reference to MOD / MaaS in recent transportation plans for the greater Washington, DC area. TPB, an MPO in this region, is under the umbrella of COG.⁴⁾⁵⁾ COG, a nonprofit organization made up of participating local and federal government agencies in the greater Washington region, as well as voluntary members from federal, state, and local governing councils, is a venue for not only information exchange between its participants, but also a place to propose various policy changes aimed at improving the living conditions of the D.C. metropolitan area and revitalizing economic activities.⁶⁾ Beneath COG, the TPB mainly engages in formulating long-term plans necessary to utilize federal funds, standardizes policies among participating local governments,^{Note 9)} and provides technical support for said municipalities. Within "long-term plans," they've created a wide range of transportation strategies, including the "Financially Constrained Long-Range Plan (CLRP)" for public transportation and the latest versions of "Horizon 2045,"^{7) 8) 9) 10)} which were designed in 2018 and then revised in 2020.¹¹⁾ The plans do not incorporate any MOD/ MaaS-specific content, but cover several relevant initiatives.

3. For Reference: Industry Recommended Washington, D.C. Transportation Plans

The Washington metropolitan area understands the close relationship between urban transportation planning and urban planning. For example, in 2016 a group of business owners and entrepreneurs based in Baltimore and Richmond established the Greater Washington Partnership^{Note 10)} in order to promote the economy of the greater D.C. area, and summarized its recommendations,^{13) 14)} including four initiatives,¹²⁾ one of which was to improve the region's mobility. According to the Partnership, in order to continue to attract talented people, it is essential for urban areas to establish transportation that allow for convenient commutes between home, work, and other destinations. Moreover, among the seven divisions of solutions¹⁵⁾ proposed by the Partnership, in addition to strengthening existing transportation

infrastructure, including concentrating on land development and creating transportation jobs, innovating local employer provided commuting allowances and supports for employees and improving technologically advanced mobility were mentioned. The opinion of the Partnership, representing the business community, is influential in the Washington metropolitan area, as it seems that WMATA and DDOT officials are also paying close attention to their activities.^{Note 11)}

Notes

Note 1) This is the World standard public transport data format. It is divided into static data which describes public transportation timetables, fares, and transfer information, and real-time data that describes predicted arrival times, vehicle position information, delay information, and so on. Originating from informal cooperation between Google and Portland's TriMet staff, many public transportation organizations now publish data in the same format, and these are used by various route search apps, including Google. (<https://gtfs.org/>; <https://gtfs.org/gtfs-background/> [Accessed : 2020/2/25]).

Note 2) GBFS (General Bikeshare Feed Specification) is an open data format for bike sharing. Findability is the focus of real-time data feeds that are published online in a unified format. (<https://nabsa.net/opendata/> [Accessed : 2020/2/25]).

Note 3) The Mobility Data Specification is an API that aims to share data mainly related to dock-less mobility services (bike share, scooter share, etc.) between local governments and private mobility operators. Development started mainly by the Los Angeles Transport Bureau (LADOT)

(<https://github.com/openmobilityfoundation/mobility-data-specification>;
<https://www.arcgis.com/apps/Cascade/index.html?appid=9b39f195da0e457c944ae4fc7333f32f>; <https://ladot.io/wp-content/uploads/2018/12/What-is-MDS-Cities.pdf> [Accessed : 2020/2/25]).

Note 4) Information from a DDOT hearing

Note 5) Information from a WMATA hearing

Note 6) Established in 1996. Headquartered in New York. A nonprofit organization whose purpose is to exchange opinions and cooperate on transportation-related topics among members, consisting of local governments and public transportation organizations from various parts of North America. The core

members are 25 municipalities in the United States and 10 public transportation organizations, including 83 cities and organizations, as well as associate members and international members (Canadian cities) (as of February 2020).

(<https://nacto.org/about/> [Accessed : 2020/3/2]).

Note 7) In 2016, the World Bank collected and analyzed information from TNCs (Easy Taxi, Grab, and Le. Taxi), traffic maps and data (Mapzen, Miovision, NDrive), and think tanks (World Resources Institute) from around the world, and established a non-profit organization in collaboration with the National Association of City Transportation Officials.

(<https://www.worldbank.org/en/news/press-release/2016/12/19/the-world-bank-launches-new-open-transport-partnership-to-improve-transportation-through-open-data>; <https://www.worldbank.org/en/news/feature/2016/12/19/open-traffic-data-to-revolutionize-transport> [Accessed : 2020/3/2]).

Note 8) Their aim is to create data standards and platforms for data sharing between private mobility operators and local governments. It is currently funded by Bloomberg Philanthropies, a charity built by former New York City Mayor Bloomberg.

(<https://sharedstreets.io/>; <https://nacto.org/2018/02/22/nacto-and-otp-launch-sharedstreets/> [Accessed : 2020/2/25]).

Note 9) Consists of 23 counties and municipalities that span the District of Columbia, Maryland, and Virginia. In addition, representatives from the Department of Transport of the three governments and wards, as well as WMATA, also on the TPB board of directors.

(<https://www.mwcog.org/transportation/about-tpb/jurisdictions/> [Accessed : 2020/3/12])

Note 10) Established to promote the economy of the metropolitan area by assembling business owners, entrepreneurs, university officials, etc. based in Washington DC, Baltimore, and Richmond.

(<http://www.greaterwashingtonpartnership.com/> [Accessed : 2020/2/24]).

Note 11) Information from a DDOT and WMATA hearing.

Citations / References / Sources

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- 5) <https://www.mwcog.org/transportation/about-tpb/roles-and-responsibilities/> (Accessed : 2021/1/27)
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