

A Report on Trends of Mobility on Demand in the United States

~Part 3~

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1. The Value MOD Provides

As of the end of March 2020, the MOD-related projects that are ongoing with the cooperation of “stakeholders” across the U.S., which I mentioned in my previous report, “A Report on Trends of Mobility on Demand in the United States ~Part 2~,” remain at the verification testing stage.

Notes *1) It seems they are examining what benefits MOD can bring to transit systems and local communities.

On this topic, the Eno Center for Transportation, a prestigious transportation policy think tank in the U.S., mentioned that “We cannot forget the fact that most of the projects for realizing MaaS are still at the stage of starting verification tests. In the U.S., there is no long-term contract, such as 5 years, for a MaaS-related project. To say this another way, we still don’t know whether these projects will be valuable to the entire transit system and public transportation organizations.” Notes *2)

2. The Reasons Why Public Transportation Organizations and TNC Cooperate on MOD

In the report, “Partnerships Between Transit Agencies and Transportation Network Companies (2019)”¹⁾, the National Academy of Science explains the reason why public transportation organizations and TNC cooperate on MOD-related verification tests. From this report, we learn that through working with TNC, public transportation organizations can focus on solving immediate issues rather than having to look for new projects with clear goals. For example, they have provided valuable services that haven’t sufficiently been given, cut costs of services that are not expected to make profits, and tried to maintain and increase the number of users. Furthermore, they have

broadened showing positive innovation positions to stakeholders. On the other hand, TNC joins projects from a business perspective, having analyzed that because many people use rideshares from stations, they will gain greater profits through more riders. In addition, TNC and public transit organizations work together with the viewpoint of benefitting both parties, such as by cutting down the number of private cars and providing alternatives to certain services operated by public transportation that cause financial losses.

2.1 Public Transportation Organizations’ Reasons for Cooperation

○ To provide certain types of services

Public transportation organizations are motivated to cooperate on MOD because they are required to provide certain types of services. The following are services they’ve targeted in the verification projects they’ve partnered with TNC.

- First / last mile service for access to public transportations
- Late night/early morning service options
- On-demand services

○ To respond to specific policy goals and policy agendas

Among the policy goals and agendas behind partnerships with TNC, the following are common to multiple public transportation organizations:

- Reduce costs for public transport services that are provided for specific markets and regions (often introduced as an alternative to new fixed-route bus services and existing non-revenue services)
- Cut costs of alternative services for users of paratransit

and ADA paratransit services

- Acquire new users and maintain existing users of extensive public transport mobility services
- To exhibit their positive attitudes towards innovation and their flexibility to perform verification tests

They think they can show board members and the public the potential for public transportation organizations to develop innovative services by partnering with TNC.

2.2 TNC's Reasons for Cooperation

- To achieve mutual goals with public transportation

The main goals common to both public transportation and TNC include:

- Reduce the number of private cars and expand shared mobility
- Utilize TNC's capabilities for certain market services that public transportation had previously provided for to cut costs while maintaining a high quality of service
- To acquire users

Trip analysis by TNC has discovered advantages in partnering with public transportation, finding that a significant percentage of TNC users set rail stations and bus stops as starting points of their trips.

3. Major Legal Systems that Impact Development of MOD

While efforts are being made to promote the development of MOD, conducting verification tests has made it clear that the current legal system needs adjustment and review, especially in cases when public transportation and shared mobility operators, such as the TNC, collaborate.

As representative of this point, the following examples regarding the endeavor to achieve equability through the

- ① Title VI of the Civil Rights Act and The Americans with Disabilities Act : ADA will be given, along with
- ② Information Disclosure related laws.

3.1 Tackling equitability: ADA/ the Civil Rights Act

The accessibility laws established as a result of Civil Rights Movement in 1960s hugely impact the designs of U.S. public transportation MOD projects.

Title VI of the 1964 Civil Rights Act protects people from

discrimination based on national origin, color, and race for federally funded programs and activities. According to guidance from the FTA, which is under the DOT, public transportation programs that receive federal grants include partnership programs with private companies such as TNC, and are eligible for Title VI of the Civil Rights Act. Thus, for example, when they design programs that TNC participate in, they need to include mobile dispatching services for users who cannot use smart phone applications, and payment options for users who do not own credit or debit cards.²⁾ Through the Office of Civil Rights, the FTA has a responsibility to monitor public transportation programs that they've awarded grants, and confirm that these programs are following the requirements of Title VI to ensure transportation without discrimination.³⁾

Furthermore, the 1973 Federal Rehabilitation Act guarantees access to public transportation and facilities operated by the federal government to all civilians. Modeled after this Act, the Americans with Disabilities Act (ADA)⁴⁾ was legislated in 1990. The FTA issues guidance to follow regulations⁵⁾ related to these Acts.⁶⁾ ADA transportation-related rules prohibit public transportation from discriminating against users with disabilities. It also requires all public organizations operating fixed routes (except commuting buses, commuting trains, and intercity rails) to provide equivalent services, such as paratransit, for free to users who meet certain criteria.^{Notes*3)} Likewise, the DOT has determined that equivalent services should not only be applied to federal agencies operating public transportation, but also to state government agencies who receive grants from the FTA, as well as those private organizations and companies who receive support from these state governments.⁷⁾ In other words, the DOT indirectly uses the FTA's grants and ADA federal regulations to require agencies to offer paratransit services in many places in the U.S. while also supporting these efforts.

Accessibility laws, which guarantee equitability, have been reflected in budgets on related transit infrastructure. The 1964 Urban Mass Transportation ACT (UMTA) originated big investments on transit infrastructure^{Notes*4)}, and since then it has been reauthorized and amended to expand the

application range and budget scale. Gradually, requirements to provide accessibility to residents in underpopulated areas, people with disabilities, and the elderly have also been included. The first of these was the 1970 Urban Mass Transportation Act⁸⁾, which clearly stipulates that federally funded transportation facilities and services should be accessible to the elderly and people with disabilities, and new grants were established for state governments, local governments, and other organizations to support plans, designs, and operations corresponding to ensuring accessibility in light of the special needs of these populations. Then, the 1978 Surface Transportation Assistance Act⁹⁾ created additional new grants to improve public transportation in underpopulated areas.

These grants' budgets are ensured until September 30th, 2020 by the Fixing America's Surface Transportation Act (FAST)¹⁰⁾, which was reauthorized in 2015. As an example, the budget for grants to maintain and improve public transportation, especially for an underpopulated area with 50,000 people or less, is based on United States Code, Title 49, Section 5311, and is scheduled to contribute an annual average of \$646 million from 2016 to 2020.¹¹⁾ Grants to support the purchase of technology and services aimed at providing transportation to the elderly and people with disabilities, whether in large or small populations, are also defined by United States Code, Title 49, Section 5310. They are expected to contribute an annual average of \$274 million from 2016 to 2020.¹²⁾

3.2 Sharing Data and Information-Disclosure Law

There are various verification tests for attaining MOD in the U.S., and for many public transportation projects, working with TNC and private mobility agencies, such as Uber and Lyft, is an essential component. However, because public transportation and private TNC have different positions in terms of sharing data, and regulations for data sharing are complicated, finding a solution is difficult. The National Academy of Science's report "Partnerships Between Transit Agencies and Transportation Network Companies,"¹⁾ mentioned above, explains the different positions taken between TNC and public transportation on data sharing.

○ Public transportation

With the following objectives, public transportation would like to obtain crude data prior to processing:

- Evaluate the achievement status of the goals for verification projects
- Understand who is using verification projects and for what purpose
- Obligate TNC to report ride data from federally-funded verification projects to the National Transit Database

Notes *5

○ TNC

There is a risk to users of privacy invasion by sharing ride data before processing (especially departure · destination information). There is also a risk that competitors and third persons can access ride data for various purposes.

The cause for the difference in transparency for TNC is due to information-disclosure laws, which require government organizations to publicize information. Similar information-disclosure laws exist at federal, state, and local levels, and are often called "sunshine laws" or the "Freedom of Information Act (FOIA)."^{Notes *6} The general public can request specific government information based on these information-disclosure laws.

On the other hand, TNC insist that if public transportation organizations collect their data, there is a risk in disclosing their information to the public under these laws, and that there may be danger of invading user privacy, even if that information was collected anonymously. Furthermore, TNC is also concerned that their competitors and third parties could access their ride data for their own diverse purposes. For example, Uber considers their data as a business secret that requires extremely careful handling.

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Notes * 1) For example, in the MOD-related program, "MOD Sandbox Program," launched by the FTA under the DOT in October 2016, public transportation has been taking the lead in various places. In addition to transportation service providers, such as TNC, research institutes and universities participate, and eleven verification projects have been carried out. Currently, evaluations are being conducted on the status, results, and issues of these projects. As of the end of March 2020, only

the project implemented by BART, a public transportation in San Francisco, California, was evaluated by this method, and the result has been published.

(<https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/147901/ftareportno0155.pdf> ; <https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/147911/revise-fta-report-no-0156.pdf>

[Accessed : 2020/3/20]).

Notes * 2) Comments heard by the author from the Eno Center for Transportation (Washington, DC, February 12th, 2020)

Notes * 3) Code of Federal Regulations, Title 49, Part 37, Subpart F (Sec. 121 – 159);

For example, bus operators are required to provide these special services from both sides and the end of the line, while railway operators are required to provide them within a radius of 0.75 miles from each station (about 1.2 km, and in a wider range in remote areas). Paratransit services are also stipulated in detail in the relevant rules. (Code of Federal Regulations, Title 49, Part 37, Sec. 123-133) For example, based on a reservation made up to the previous day, transportation operators are required to provide paratransit services to people with disabilities from their departure stations to their destinations at any time on the next day. (If the operators have taken measures (such as installation of facilities / vehicles that can be used by wheelchair users, and support for getting on and off) for people with disabilities to use their existing lines, all that operators have to do is to provide transit services to departure stations/destinations.).

Notes * 4) This law also established the Urban Mass Transportation Administration (UMTA), a former organization of the Federal Transit Administration (FTA).

<https://www.transit.dot.gov/about/brief-history-mass-transit>;

<https://crsreports.congress.gov/product/pdf/R/R42706>

(Original) Pub. L. 88-365, 78 Stat. 302 <https://uscode.house.gov/statviewer.htm?volume=78&page=302#> (Accessed : 2019/10/22) ; The law was initially enacted with a three-year time-limited budget.

Notes * 5) Public transportation that is a recipient of either the Urbanized Area Formula Funding program under the

5307 Urban Formula or the 5311 Rural Formula, is required to report all transport activities / services to the National Transit Database (NTD).

Notes * 6) FOIA has traditionally been a federal law that applies to federal agencies, giving the public the right to request access to certain information held by the federal government.

References

- 1) National Academy of Science HP, “Partnerships Between Transit Agencies and Transportation Network Companies (2019) ”, <https://www.nap.edu/catalog/25425/partnerships-between-transit-agencies-and-transportation-network-companies> (Accessed : 2019/11/28)
- 2) National Academy of Science HP, “Partnerships Between Transit Agencies and Transportation Network Companies (2019) ,Findings” <https://www.nap.edu/read/25425/chapter/7> (Accessed : 2019/10/16)
- 3) FTA HP, “Title VI of the Civil Rights Act of 1964” <https://www.transit.dot.gov/title6> (Accessed : 2019/10/16)
- 4) United States Department of Justice Civil Rights Division HP, “The Americans with Disabilities Act of 1990 and Revised ADA Regulations Implementing Title II and Title III”, https://www.ada.gov/2010_regs.htm (Accessed : 2019/10/16)
- 5) The transport-related federal regulations based on ADA are mainly listed below.
Code of Federal Regulations Title 49, Part 37.
Original : https://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&SID=d315855e2f2c9f940970f4c191349c12&rgn=div5&view=text&node=49:1.0.1.1.27&idno=49#_top (Accessed : 2019/10/16)
- 6) FTA HP, “ADA Guidance”, <https://www.transit.dot.gov/regulations-and-guidance/civil-rights-ada/ada-guidance> (Accessed : 2019/10/16)
- 7) FTA HP, “Paratransit Requirements for §5311-Funded Fixed-Route Service Operated by Private Entities”, <https://www.transit.dot.gov/regulations-and-guidance/civil-rights-ada/paratransit-requirements-§5311-funded-fixed->

[route-service](#) (Accessed : 2019/10/16)

8) 「Urban Mass Transportation Act」 Pub. L. 91-453, §8,
84 Stat. 967

<https://uscode.house.gov/statviewer.htm?volume=84&page=967#> (Accessed : 2019/10/22)

9) 「Surface Transportation Assistance Act」 Pub. L. 95-
599, §313, 92 Stat. 2749, 2750.

<https://uscode.house.gov/statviewer.htm?volume=92&page=2749#> (Accessed : 2019/10/22)

10) 「Fixing America's Surface Transportation Act :
FAST」 Pub. L. 114-94

<https://www.congress.gov/bill/114th-congress/house-bill/22/text?q=%7B%22search%22%3A%5B%22P.L.+114-94%22%5D%7D&r=1&s=2> (Accessed : 2019/10/22) :

The subject section is the United States Code Title 49,
Chapter 53, "Public Transportation", Section 5310.

(Formula grants for the enhanced mobility of seniors and
individuals with disabilities :

[https://uscode.house.gov/view.xhtml?req=granuleid:USC-
prelim-title49-section5311&num=0&edition=prelim](https://uscode.house.gov/view.xhtml?req=granuleid:USC-prelim-title49-section5311&num=0&edition=prelim)

(Accessed : 2019/10/22))

11) FTA HP, "Formula Grants for Rural Areas - 5311",

<https://www.transit.dot.gov/rural-formula-grants-5311>

(Accessed : 2019/10/16)

12) FTA HP, "Enhanced Mobility of Seniors & People with
Disabilities Fact Sheet (Section 5310)",

[https://www.transit.dot.gov/funding/grants/enhanced-
mobility-seniors-people-disabilities-fact-sheet-section-](https://www.transit.dot.gov/funding/grants/enhanced-mobility-seniors-people-disabilities-fact-sheet-section-5310)

[5310](https://www.transit.dot.gov/funding/grants/enhanced-mobility-seniors-people-disabilities-fact-sheet-section-5310); (Accessed : 2019/10/16)