



# MaaS Ready

## International Study Mission for Mobility-as-a-Service

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*Above:* Study mission participants met with public- and private-sector representatives in three European cities.

**W**hat does it mean to be mobility-as-a-service (MaaS)-ready? In June 2019, an American Public Transportation Association (APTA) study mission set off to Europe to find out. The 29 representatives from public transportation authorities and private organizations visited Vienna, Austria; Hamburg, Germany; and Helsinki, Finland. Each city has taken a different approach to integrating new mobility services, but each is now a global leader in developing the MaaS concept in practice. The cities aim to offer a full range of mobility options in a single digital platform that uses public transportation as the network backbone.

For APTA's purposes, MaaS can be defined as the integration of a full range of mobility options in one single digital mobility platform offering, with public transportation as the backbone. Users may choose the most suitable solution based on their travel needs. MaaS is available anytime and offers integrated planning, booking, and payment, and real-time

travel information to provide easy mobility and alternatives to the single-occupant automobile. It provides comprehensive access to mobility services, including public transportation, ridesharing, carsharing, bikesharing, scooter-sharing, taxi, car rental, and ride-hailing.

### Study Process and Questions

The delegation included senior representatives from public transportation agencies and from large and small businesses from across the United States. Throughout the week, study mission members participated in presentations, panel discussions, and site visits with the three cities' public transportation authorities, as well as local and national MaaS stakeholders from the public and private sector.

The study participants began the mission in Vienna, meeting with the public transportation operator Wiener Linien. Participants also met with representatives from Upstream, the public startup



Map of places visited.

MaaS platform that facilitates planning, payment, and access to mobility services throughout the Vienna region.

Study participants then continued on to Hamburg, hosted by bus and heavy rail operator Hamburger Hochbahn. Participants also heard from ÜSTRA, a Hannover agency that successfully transformed itself from a public transportation operator to a mobility management company.

The study mission ended in Helsinki where, in October 2016, MaaS Global had been the first private company to develop a MaaS subscription service through its Whim app. In the app, customers can arrange for all of their travel needs, either by buying individual tickets as needed or by purchasing a monthly subscription that provides access to transit, taxis, bikesharing, and carsharing services. Study participants met with MaaS Global and Demos Helsinki, a Nordic think tank, as well as with a variety of national and regional public actors. These included the Finnish Association of Public Transportation; the Helsinki Public Transportation Authority, which plans and organizes public transportation in the region; and the Finnish Ministry of Transportation, to learn about the legislative approaches that have made Finland a global MaaS leader.

The study mission addressed a number of critical questions, including the following:

- What customer-facing strategies do these public transportation agencies use to build a MaaS platform that includes trip planning and ticketing for all mobility options?
- Who is—and should be—taking the lead?
- What partnerships are required?
- What are the most viable business models?
- How can the physical mobility system be integrated more effectively, allowing for seamless transfers between modes?

The study mission underscored the importance of positioning transit as the foundation of the MaaS concept. A clear vision of sustainable mobility, an excellent and well-integrated public transportation system, and mobility partners willing to coordinate on a level playing field all are necessary ingredients of a successful MaaS system.

Participants noted that each of the cities they visited already has a very well-developed transit system with a high modal share of local and regional trips. Yet these cities continue to invest in organizational and system innovations to provide the best possible customer experience and to remain a relevant mobility player in the future.

## Key Findings

### WORKING TOWARD GOALS

**Transportation agencies of all modes must connect MaaS to a broader set of regional goals.** These European systems see MaaS as a strategy for addressing issues such as healthy cities, strong regional economies, improved air quality and environment, reduced carbon emissions, and equity and access for all. MaaS is a way to capitalize on the full array of mobility options to reduce reliance on single-occupancy vehicles and private car ownership. That is the end game—not MaaS itself.

In Vienna, the official city strategy is to lower the mode share of private cars

to just 20% by 2025. Hamburg has an equally ambitious goal of reducing single-occupancy vehicle trips, and Finland's nationwide goal is to halve emissions by 2030, which will require a decrease in individual car trips. In all three countries, climate change concerns are the consistent driver behind the implementation of MaaS initiatives.

### STRONG FOUNDATIONS

It was clear from all cities visited that a **digital multimodal mobility platform must be built on a robust and well-integrated transportation system.** Many of the systems are developing the concept of “mobility hubs” as an important element of their MaaS strategy. These cities have also focused on a structured entry of transportation network companies (e.g., Uber, Lyft, and others) and micromobility options (e.g., bikeshare, e-scooters, and the like) to afford time to think through their place in the mobility system.

### TRANSIT AS THE BACKBONE

European transit agencies are of the collective mindset that **public transportation must be the backbone of integrated mobility services** in an era driven by new customer expectations, new technologies, and new mobility options. Both private- and public-sector entities look to MaaS to position themselves as the platform and integrator of mobility; however, the public sector—including transportation agencies—is in the best position to look out for the public good, offer a complete mobility solution, and reduce the hassle for customers of finding the most suitable travel option for each trip.

Transit agencies should be actively involved in MaaS development, implementation, and management, whether as a collaborator, enabler, or manager. As Martin Röhrleef of ÜSTRA noted, “Uber yourself before you get Kodaked.”

### CHALLENGE OF GOVERNANCE

**Governance, not technology, is the key challenge for MaaS.** Although every region takes a unique approach, each of the three cities studied have faced and addressed questions of how to organize to



Photo: moovit

Hamburger Hochbahn bus route 39 in Hamburg, Germany. The city has a goal of reducing single-occupancy vehicle trips.

implement MaaS, as well as questions of what institutional and regulatory frameworks are required. MaaS looks different in each city, but all transit agencies have taken a central role and worked closely with local governments to ensure overall policy alignment. In North America, it is vital to do the same.

**LEVERAGING ASSETS**

To take a central role in mobility service integration and in a MaaS platform, **transit agencies must leverage their own unique infrastructure, assets, and data** and must understand technology to make appropriate decisions that drive innovation. This means expanding the skill sets available in the transit workforce, including hiring more software developers and data scientists.

MaaS is a new business approach requiring a transformation of organizational cultures to allow agencies and their employees to innovate and experiment.

Several of the established European transportation agencies defined risk as “what happens if we do nothing.” They cultivate and reward risk-taking internally and give riders credit for trying and liking something.

**GOAL OF EQUITY**

MaaS can revolutionize the customer experience and can individualize the mass transportation and shared mobility experience. It can expand mobility service coverage and reach, increasing access to the mobility system. But equitable access to a sustainable mobility system must be the ultimate goal—not MaaS itself.

**Conclusion**

These findings are consistent with the study mission delegation’s collective experience in the United States and Canada. The fundamental difference with Europe, however, is the greater role that public transportation plays in serving the public.

It generally is widely acknowledged in Europe that transit agencies should lead the integration of urban and regional transportation options.

In North America, there is more work to be done in convincing local decision makers that the transit agency should be at the center of a MaaS-oriented system and in ensuring that agencies are prepared to do so.

*This article is a brief summary of the APTA report “Being Mobility-as-a-Service (MaaS) Ready,” released at the APTA TRANSFORM conference in New York in October 2019. The full report is available at [www.apta.com/wp-content/uploads/MaaS\\_European\\_Study\\_Mission-Final-Report\\_10-2019.pdf](http://www.apta.com/wp-content/uploads/MaaS_European_Study_Mission-Final-Report_10-2019.pdf).*