

Public-private partnerships in urban mobility

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CITIES like Singapore need efficient transportation systems to physically connect people, goods and places. The development of transport systems is ever dynamic, influenced by evolving demand, new technologies and upcoming trends. Key trends include a heightened focus on sustainability and greater use of digital technologies. In recent years, more public-private partnerships (PPPs) have begun to shape the development and provision of smart urban mobility solutions in our cities. These are collaborations between the government and industry players that enhance the provision of transport services, offering greater convenience and comfort for everyone, and enabling new service models to achieve commercial viability.

Given rapid developments in the transport sector, there is a need for nimbleness, and for all stakeholders to work together. Let us explore PPPs with a few examples.

The rise of shared mobility

The private sector has led the development of shared mobility services including point-to-point mobility, such as ride-hailing, vehicle sharing and bicycle sharing. These are supported by the government to help create an increasingly diverse urban transport landscape. Besides providing more options for consumers, the rise in shared mobility options also helps to re-

duce private car ownership, and consequently, discourage private car use. In this way, supporting the growth of shared mobility helps to reduce the environmental impact of road transport. In Singapore, BlueSG, an electric car-sharing service, has worked with government agencies in securing suitable parking lots for their fleet, such as in HDB car parks, which helps to increase convenience and accessibility to service users.

In the case of bicycle sharing in Singapore, the Land Transport Authority (LTA) has set up parking infrastructure and regulations, while shaping business conditions to allow both old and new players (such as HelloRide), to co-exist. The safety of road users is also of topmost concern, as seen in the introduction of the Active Mobility Act and various educational campaigns by the government to promote road safety among cyclists and pedestrians. Whether bicycle sharing continues to flourish as a viable transport option will remain to be seen, given the rise and fall in the shared-bicycle fleet size over the past few years.

Mobility data as the new currency

Another area where we see PPPs create greater value is in the use of mobility data. Industry players are using data to respond more quickly to dynamic demand, and to increase service performance and efficiency. Mobility service platforms allow the

collection of data such as real-time usage and travel time. However, as such data reside with individual operators, governments could take on the role to facilitate data sharing within the ecosystem. From a transport system perspective, such data is valuable for managing operations and infrastructure planning.

In Singapore, LTA's DataMall facilitates the sharing of some transport-related data sets. These data sets encourage collaboration and co-creation of mobility solutions. Some data, such as real-time geospatial and traffic data, are openly available, while others are available upon request. Open data sets from DataMall have been used to develop mobile apps on bus and train schedules, and road traffic conditions, helping commuters to better plan their journeys.

Rolling out autonomous vehicles

PPPs can also shape the future of our transport landscape, as in the case of rolling out autonomous vehicles (AV). Self-driving vehicles have the potential to address challenges in manpower constraints. The use of AVs in public transport, such as dynamically-routed shuttle buses, can be used to enhance first-and-last-mile connectivity for commuters.

In early 2021, the first commercial autonomous bus trials in Singapore were conducted by an industry consortium comprising transport operators and tech-

nology providers. The rollout of AVs requires strong government support in terms of regulatory facilitation, while the industry develops the technology and identifies viable business models for deployment. The government's role also includes promoting awareness and understanding of the technology, so that the public will be more accepting of AVs when they finally appear on the roads.

In the ever-changing urban mobility landscape, user centricity should be integrated into PPPs. Community needs and public acceptance should always be taken into account when new transportation technologies and services are introduced. For instance, as part of a study on autonomous mobility services, researchers from the Singapore University of Technology and Design (SUTD) conducted community design workshops in Punggol to better understand residents' needs and preferences. They found out that residents were more enthusiastic about autonomous shuttles in their neighbourhood rather than other vehicle types, and were able to identify where the AVs were needed most. By adopting participatory planning approaches and engaging communities in the rollout of new mobility services, the likelihood of success can only grow.

Partnerships described in the above cases are still evolving, and the interplay between stakeholders will continue. By promoting platforms to bring public agen-

cies, industry players and the community together, there will be more opportunities to work and learn in tandem. Active citizenry should be encouraged, allowing people a chance to shape mobility developments in their neighbourhoods. Through such partnerships, the demand for, and feasibility of, new mobility services can also be discovered more quickly. Increasingly, inviting people to play a role in transport development will be a key part of the planning process. By joining hands with public and private interests, we can accelerate the growth of new urban mobility services.

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