You are receiving this newsletter following your recent indication of support or interest in an Inter-Modal Transport Data-Sharing Programme. This proposed research programme is a collaboration between Associate Professor Zhou Jiangping of the Faculty of Architecture and Dr John Ure, Director of the Technology Research Project (TRP), based at the Social Sciences Research Centre (SSRC) of the University of Hong Kong, and in collaboration with other industry specialists. This newsletter sets out our progress to date. Further information about the programme and associated partners can be found below.

PROGRAMME UPDATE

Good News about the Innovation and Technology Fund (ITF) Application

The News: Although it is not yet official, (we await a letter of confirmation) we understand that the ITF has agreed to support our application for funding a 7-month Inter-Modal Transport Data-Sharing Programme. This is very good news and we are grateful for this opportunity to do public policy research and to improve mobility across Hong Kong that can beneficially reduce congestion and the emission of Green House Gases (GHGs). We would like to express our gratitude to those stakeholders who made this possible through cash-sponsorship of up to 10% of the required funds (an ITF requirement), and to those who have offered sponsor-in-kind in terms of the use of venues.

When to Start? We hope to start the ITF-funded programme shortly after Chinese New Year 2020.

Who is Involved? First, the research team consists of Project Co-Ordinator - Associate Prof. Dr ZHOU Jiang-Ping, and research collaboration on data-sharing innovation with Associate Prof. LI Weifeng, and Associate Prof. LIU Xingjian; Project Manager - Dr John Ure and the research team of Ir. Andrew Pickford, Waltraut Ritter, Terry Graham and Dr Jenny Wan. Second, all interested stakeholders: transport operators, policy-makers and regulators, vendors, independent researchers, civil society such as NGOs and concerned citizens. Since commencing this initiative in 2018, the principles underlying this research have always been

About The Inter-Modal Transport Data-Sharing Programme

The Inter-Modal Transport Data-Sharing Programme is a proposed research programme that will commence with a conference and convene a Working Group to explore alternative data sharing models and framework conditions in unlocking and supporting intermodal transport in Hong Kong. Doing so will drive the local development of smart city applications such as traffic management, electric and autonomous vehicles. It will put long-term urban planning and sustainability policies on a more evidence-based and data-driven footing.
underpinned by inclusive, bottom-up evidence-based analytics and top-down academic rigour. The ITF-funded programme will be no different.

**How to Be Involved?** The programme will focus on use case studies (see below) with the active participation of interested stakeholders, on demonstration projects provided by stakeholders to showcase what can be done and achieved, and a monthly discussion Working Group of stakeholders.

**Preparation for the Programme:** Research Phases 1 (Dec 2018 - Mar 2019), 2 (May-Jul 2019) and 3 (Sep 2019 - early 2020) have laid the groundwork, including a focus on use cases that describe typical challenges of mobility in Hong Kong, including multi-modal trips. The related participants and findings of each research phase will be carried through into the ITF-funded programme as appropriate.

**The 1st Use Case Workshop, 28th October – achievements and next steps**

**The Workshop:** A highly productive workshop, sponsored by Daimler Mobility, on use cases for inter-modal transport data-sharing was held at HKU SPACE (Admiralty Centre) on 28th Oct. Registrations had to close at 70 attendees - such was the interest shown across all categories of stakeholders, and we achieved 100% attendance from over 30 organisations - a remarkable endorsement of the importance of this subject to everyone. Participants sat around 5 tables of which 3 were focused on use cases (on-demand mobility services; inter-modal data sharing and integrating active transportation data into mobility data platforms), one was limited to a specific application example (new services development at HKIA through data sharing), and one on regulatory innovation for inter-modal data-sharing. Issues identified ranged from the lack of flexibility of the transport licencing regime to the ways in which mobility-on-demand would be possible; the technical and commercial dynamics of data-sharing; the use of ticketing and payment systems to enable integrated journey planning for passengers and finally, the contribution of data sharing to addressing road congestion and high levels of pollution emissions. Most encouraging were the confirmations by stakeholders of the desire to be involved in the next steps.

**Next Steps:** The next steps are three-fold. First is to identify the most promising use cases from all those raised and discussed during the workshop, to scope a plan of action for each, and engaging the key stakeholders. Second, where the feedback is positive, to approach all other stakeholders with an interest in the selected use cases and convene a focused working group to take the use case forward and to consider additional use cases raised by participants for relevance. Third, an actual sharing of anonymised data with the research team and a Data Trust to be established at the HKU that would ensure data confidentiality, and sandboxed development through to pilot projects. The research team will reach out to the major stakeholders for funding of this process. Smaller stakeholders can contribute through participation in data sharing and their active involvement in the process.

Immediately following the workshop, we were fortunate enough that some of the participants from the group that was focused on enhancing mobility provisions at Exchange Square, wished to proceed immediately to define the process towards a Proof of Concept (POC), detailed below. In the next couple of weeks, we will be contacting other attendees at the workshop to test the level of support and available resources to pursue this emerging programme of work.

**Exchange Square Application Challenge**

**Problem Statement** - this application challenge is now under planning as follows:

(a) The potential for data sharing

How can inter-modal data-sharing transform the Exchange Square Public Transport Interchange (PTI) into a Smart PTI? The Exchange Square PTI has all the public transport operators (PTOs) – buses, minibuses, taxis tram, ferries and MTR accessible within a small area. Each party has data relating to usage and we wish to research how data sharing can result in better connectivity, improved balance of demand across modes and an immediate improvement to the Exchange Square PTI operations benefitting the PTOs, the public and the tenants of the nearby office buildings.
(b) Improving the catchment area

How should we define the 'catchment area' of Exchange Square PTI (the area that it serves) and develop an improved understanding of who uses the PTI, where they come from and are going to, and how the PTI could be better used as a mobility hub? In order to plot potential walking paths and walking distances to and from the Star Ferry, outlying island ferries, Macao ferry and to and from the HK Tram. Can the catchment area be extended through the availability of data sharing, providing real-time information to commuters of all modes, informing commuters of available options and (through simulation) the use of PMDs (Personal Mobility Devices)?

(c) Understanding and shaping user preferences

How can 'stated preferences' and 'revealed preferences' help understand the potential to improve PTI utilisation, and what indicators would reveal the potential demand for the users of this space? Could HKU student researchers survey tenants on what transport service preferences would they consider if available such as improved facilities for e-hailing taxis, taxi pooling and on-demand bus services?

We intend to host a meeting relating only to the Exchange Square Application Challenge on the afternoon of 16th December 2019, focusing on (a) above. Stakeholders at this meeting will decide upon the scope of work, costs, the timetable, objectives, framework and rules of engagement leading up to one or more POCs, potentially relating to demand profiling, expansion of the walkable catchment area to/from Exchange Square and opportunities for improved service integration at the PTI.

The 2nd Use Case Workshop, January 2020 – initial plans

Pending the outcome of the Exchange Square meeting, we will plan the second Use Case Workshop in January 2020 to which we will open up the invitation list to everyone. Plans will be defined soon, including opportunities for sponsorship of the volunteer team, and everyone that was invited to the first workshop will be contacted again. Offers to sponsor and co-moderate sessions will be gratefully received.

Those interested in contributing and participating in these workshops please email Dr Jenny Wan at jenny@trpc.biz.

COMMUNICATIONS PREFERENCES

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JENNY WAN
Research Officer, Hong Kong, TRPC Limited