Summary of World Urban Transport Leaders Summit 2008

Singapore
4-6 November 2008

Introduction

The inaugural World Urban Transport Leader Summit (WUTLS) 2008 was held in Singapore on 4 – 6 November 2008, organised by LTA Academy, a division of the Land Transport Authority (LTA), Singapore.

The summit focused on urban transport policies, strategies and innovations from a practitioners' perspective under the theme of "Transforming Urban Transport for Liveability and Sustainability". It provides a global platform for thought leaders and distinguished practitioners to share and exchange valuable practical insights, experiences and best practices in key areas of good governance, sustainable transport, transforming public transport, managing congestion and strategies for emerging cities.

The summit was attended by 117 high-level officials and transport professionals and leading academics from 29 countries; and 30 LTA staff and observers. Many interesting and thought-provoking discussions were generated during the summit which attracted a total of 23 positive news articles in the local media pertaining to the three-day summit.

Opening

Mr. Mohinder Singh, Dean, LTA Academy, delivered the welcome remarks. Mr. Singh highlighted that the focus of the summit was on the critical issue of sustainable urban mobility for cities facing the multiple challenges of generating economic growth, protecting the environment and sustaining high quality of life for their people. He also expressed his hope that these challenges would be addressed through the four plenary forums, stimulating discussions and exchange of views.

Mr. Raymond Lim, Minister for Transport and Second Minister for Foreign Affairs, delivered the opening speech. Mr. Lim highlighted that the common challenge for transport policy makers around the world was how to deliver a liveable and sustainable city. He mentioned that our cities would descend into gridlock if we did not succeed. Even though there is no common solution for our diverse situations, we will still be able to benefit by learning from the experiences of others. He also took the opportunity to announce the opening of the new premises of LTA Academy

and the launch of the Academy's flagship journal, "JOURNEYS", written for urban transport practitioners.

LTA Academy signed four Memoranda of Cooperation (MOC) respectively with representatives from Tsinghua University's School of Civil Engineering (China), the Institute of Transportation and Development Policy (USA), Global Transport Knowledge Partnership (UK), and the Institute of Urban Transport and Urban Mass Transit Company (India), to enhance collaborations in research, professional training, knowledge exchange and learning best practices.

Four plenary fora and site visits were held thereafter.

On the first day, site visits to Land Transport Gallery, integrated transport hub at Sengkang and NEL/SKLRT driveless-train systems, ITS Centre, Electronic Road Pricing (ERP) and the KPE underground expressway were conducted. Site visits to the Urban Redevelopment Authority (URA) Gallery, Changi Airport Terminal 3 and Port of Singapore Authority (PSA) Container Port were held on the third day.

Plenary Forum 1 – Good Governance, Sustainable Transport

This session was chaired by Professor Tony M Ridley, Professor Emeritus of Transport Engineering, Imperial College London, United Kingdom. Representatives from the cities of Singapore, Germany and USA presented their initiatives and achievements.

Mr. Yam Ah Mee, Chief Executive, Land Transport Authority (LTA), Singapore, presented LTA's initiatives in developing a sustainable, people-centred land transport system in Singapore. He shared the challenges and constraints faced, the core principles that guide the policy and planning process, and the land transport strategies set out under the Land Transport Master Plan (LTMP) launched in 2008. He also touched on how LTA seeks to realise a people-centred land transport system for all Singaporean through the use of a holistic package of measures to 1) enhance integration of the public transport system, 2) manage road usage, and 3) cater to the diverse needs of the people.

Mr. Gunnar Heipp, Head of Department, Strategy and Planning, Munich Transit Ltd (MVG), Germany, presented some of the best examples of public transport for Liveable Cities and described the necessary crucial points to be successful in developing such environment.

Professor Vukan R. Vuchic, UPS Foundation Professor of Transportation Systems Engineering, City and Regional Planning, University of Pennsylvania, USA, presented some of the transportation problems in cities and their causes, in which, he introduced a systematic review of the major steps that are required to handle the

complex urban transportation problems. He went on to present how governmental setup to solve the problems and provide guidance should be followed by definition of goals for the city. To achieve the goals of a liveable and sustainable city, a balanced intermodal transportation system must be planned.

Seven participants commented on the presentations. One was on whether Singapore's plans for an improved transport system included also pedestrians and cyclists. In response to the question, Mr. Yam Ah Mee explained that in the 3rd strategic thrust to meet the diverse needs of people, it is a requirement to make sure that firstly all access to public transport will be barrier free for the pedestrian to move around and secondly, to have the public transport nodes to be very close together. Cycling will serve as a link for commuters from the housing estates to the nearest public transport nodes. Other comments were on the role of social marketing campaign in using public transport in the future, and whether Government, a major stakeholder, was doing anything to ensure sustainable transport. Many experts voiced their concerns that government in many cases need to take on a greater role in implementing policies for sustainable transport system, and not be a stumbling block.

Through the two-way interactions during the Questions and Answers session, the issue of the role of government, transport experts and community support surfaced. There was consensus among the speakers and participants that in order to push for sustainable transport policy, it is crucial to set the right mind frame of the politicians on sustainable transportation through constant inculcation of the right concepts of sustainable transport and through sharing of good practices among transport experts. Transport experts play an important role to help mould public opinion to create the right attitudes towards transportation such that the politicians will have the legitimacy to take the risk to implement policies for a sustainable transport system.

Plenary Forum 2 – Transforming Public Transport

The session was chaired by Professor David Hensher, Professor of Management, and Founding Director of the Institute of Transport and Logistics Studies at the University of Sydney, Australia.

Professor Shigeru Morichi, President of the Institute for Transport Policy Studies and Professor of Graduate Institute for Policy Studies, Japan, presented "Urban Railway Network and Terminal Renovation". His presentation focused on the importance of a hierarchical structure of urban railway and bus network. In his presentation, Professor Morichi introduced the hierarchical railway network and terminals in Tokyo, presented the examples of urban railway network improvement and terminal renovation works currently taken, and discussed the importance of such projects in expanding the network, increasing the capacity and maintaining the aged infrastructures.

Professor Phang Sock Yong, Professor of Economics at the Singapore Management University, Singapore, discussed the strategies and pitfalls of rail transit Public - Private Partnerships (PPP). She compared the public procurement and PPP decisions in the context of rail transit first. She then described the four main strategies adopted in urban rail system. Examples of the urban rail systems which adopted different strategies to finance the projects were given during the presentation.

Professor Kim Kwang Sik, Professor of the Department of Public Administration and Graduate School of Governance, and Director of the Sustainable Urban Development Institute, Sungkyunkwan University, Korea, discussed the lessons learned from the Seoul's bus reforms. The Seoul Metropolitan Government implemented an innovative bus transport reform in July 2004. Professor Kim explained the fields of bus reform, which include bus routes, bus fares, semi-public operation, bus management system, the new smart card, the median bus lane system and vehicles and transfer terminals. He gave an assessment of the reform by comparing pertinent circumstances in place before and after the reform and discussed the promotion of the bus reform based on urban governance as well.

During the panel discussion, six questions and comments were raised from audiences on: 1) concerns of the issue of land development and private sector participation; 2) the number of initiatives that were carried out in the bus reform, how the government handled the resistance from the public, and the current usage of the Bus Rapid Transit (BRT); 3) the role of public sector in contracting PPP; and 4) the applicability of the PPP in BRT projects and whether the problems of PPP were related to the stock market and private sector initiatives

From this discussion, it was learnt that competitive tendering has been quite successful in the bus sector and road tolls. It is in the rail sector that the PPP strategy has encountered problems. A portion of the benefit of rail development actually comes in the form of the land value enhancement, but competitive tendering has so far failed to recognize this long term benefit. The exceptions are Tokyo and Hong Kong where land development option has been successfully integrated with the rail system development to finance the projects, but competitive tendering is sacrificed.

Plenary Forum 3 – Managing Congestion

This session was chaired by Professor Kim Kwang Sik, Professor of the Department of Public Administration and Graduate School of Governance, and Director of the Sustainable Urban Development Institute, Sungkyunkwan University, Korea. There were two speakers in this session.

Professor David Hensher, Professor of Management, and Founding Director of the Institute of Transport and Logistics Studies at the University of Sydney, Australia, gave a presentation on "Road Pricing and Road Funding". His presentation looked at various examples of cities to illustrate the migration of road financing practice from a myopic perspective to a sustainable approach under the Variable User Charging (VUC) methodology. The proposed implementation of VUC road pricing models has met resistance in some instances. However, positive receptions from Oregon, USA, and the Netherlands have been encouraging in acknowledging the feasibility of VUC models and highlighting the potential of environmental and economic sustainability for the travelers and city transport planners.

Dr. Chin Kian Keong, Group Director, Road Operation and Community Partnership and Chief Engineer, Transportation, LTA, Singapore, presented Singapore's experiences in keeping traffic flowing on Singapore roads. Traffic congestion is synonymous with urban development, given the intense need for road transport in any developed city. Dr. Chin pointed out that traffic on Singapore roads has been kept flowing by the recognition that congestion would be inevitable if it is left to natural progression and by the early adoption of various transport strategies. These strategies include the development of a long-term transport plan that took into account land-use in Singapore, the use of technology to optimize transport capacity, the need to manage both vehicle ownership and usage, and the importance given to public transport. Over the years, these strategies have proved to be invaluable in keeping traffic flowing. His presentation focused on both the policies and the technology behind them.

Six questions were raised during the panel discussion covering a wide range, from the technical details to the general policies: 1) On road pricing, whether it is good to apply the fixed charge first, e.g. registration tax and the fuel tax later if a city has decided to go for road pricing; 2) Whether taxi is a part of public transport and if trucks should be regulated in terms of time of travel as they also contribute to congestion; 3) The criteria to determine a bus priority scheme on a stretch of road in Singapore; 4) Comments were sought on London's congestion charge and low emission zone; 5) Whether road pricing should be levied on transit buses; and 6) On the comparison of Singapore's ERP system with other similar systems in the world and the technology Singapore used in the ERP system.

From this panel discussion, it was learnt that there had to be a balance between road efficiency and the community need when a bus priority scheme is to be implemented and the key point is to move passengers rather than vehicles. It is good to start with a transitional strategy to demonstrate to the community the benefits of road pricing. A lot of learning had to be done to determine the pros and cons of various strategies.

Plenary Forum 4 – Strategies for Emerging Cities

This session was chaired by Professor Shigeru Morichi, President of Institute for Transport Policy Studies & Professor of Graduate Institute for Policy Studies, Japan. Experts from UK, India and USA presented their initiatives and achievements.

Professor Tony Ridley, Professor Emeritus of Transport Engineering, Imperial College London, UK, introduced current transport challenges, particularly those in urban areas. He referred to the special problems of developing countries and described the role of the newly established Global Transport Knowledge Partnership (gTKP).

Mr. O P Agarwal, Managing Director of Urban Mass Transit Limited and Vice President of Institute of Urban Transport, India, presented the current Indian urban transport scenario, the initiatives taken towards improving public transport and the lessons they have learnt with the ongoing metro rail and Bus Rapid Transit (BRT) projects in Indian cities.

Mr. Michael Replogle, Transportation Director of Environmental Defense Fund and President and Founder of Institute for Transportation and Development Policy (ITDP), USA, shared the transportation strategies for sustainable development. The growing burden of traffic congestion, energy costs, and problems related to traffic safety, air pollution, climate change, and transportation financing pose a challenge to governments, business, and citizens across much of the world. There are no simple solutions, but a toolbox of strategies is available to address these issues. Sustainable transportation and development strategies focus on managing travel demand, aligning transportation revenue systems with broader system objectives, and expanding travel choices and mobility while minimizing transportation's environmental footprint. He highlighted some key best practices and discussed how emerging technologies may transform broke and broken transportation systems into sustainable high performance networks.

The audience made comments on the above presentations. Discussion in the session addressed the following points. 1) The decision on the type of the transport system depends on many factors, including construction cost, operational flexibility, spacing, efficiency, etc. The comparison between BRT and rail transit system was discussed. 2) The key strategy to reduce greenhouse gas emission in the land transportation includes using fuel efficient vehicles, using lower carbon fuel, reducing travel through demand management, and increasing the greenhouse efficiency of the existing public transport network. Higher density developed areas have lower greenhouse gas emission per person because the trip length tends to be shorter and the people tend to use more public transport in these areas. 3) Many developing countries have 10-20% trips from different forms of paratransits, like three-wheelers, taxis, school buses, office vans. The role of paratransit was discussed. In India, paratransit is considered as a substitute for the public transport, and its use is preferred to personal vehicles.

This forum highlighted that there is no one solution which works for all cities, and it is important to make decisions and adapt strategies and solutions based on the city's particular situation.

Policy Dialogue – The Way Forward to Transforming Urban Transport

Policy Dialogue was chaired by Professor Vukan Vuchic, UPS Foundation Professor of Transportation Engineering in City and Regional Planning, University of Pennsylvania, USA. The members of the panel were:

- Professor David Hensher, Professor of Management and Founding Director of the Institute of Transport and Logistics Studies, University of Sydney, Australia,
- Professor Kim Kwang Sik, Professor of the Department of Public Administration and Graduate School of Governance & Director of the Sustainable Urban Development Institute, Sungkyunkwan University, Korea,
- Professor Shigeru Morichi, President of Institute for Transport Policy Studies & Professor of Graduate Institute for Policy Studies, Japan,
- Professor Tony Ridley, Professor Emeritus of Transport Engineering, Imperial College London, UK,
- Mr. Yam Ah Mee, Chief Executive, Land Transport Authority (LTA), Singapore,
- Mr. Gunnar Heipp, Chief of Strategic Planning, Munich Transit Ltd, Germany,
- Mr. O P Agarwal, Managing Director of Urban Mass Transit Limited and Vice President of Institute of Urban Transport, India.

Main discussion points in the dialogue session were as follows.

1) The deciding issue is the goal of the city, i.e. what kind of city we want. This is the strategic level decision. The detailed projects may focus on specific objectives.

2) It is difficult to manage the relationship among bureaucracies, operators, agencies and politicians. Mr. Yam Ah Mee shared Singapore's successful experience. The agencies in Singapore work as one since they all take the responsibility for the national economy performance.

3) Economic analysis is important. However, benefit-cost analysis in many ways is strongly project centric and does not add much on the strategic vision. We should help the politicians to have a broader awareness of the issues and educate more on the vision, not on details.

4) Although higher density development tends to have lower greenhouse gas emission, it may not be the only way that all cities will move forward. Decentralized structure may have higher accessibility.

5) The impact of the financial crisis includes reduction in tourism and more people moving to public transport.

From the dialogue session, it was evident that the sharing of experiences is very important in urban transport planning. Although there is no one recipe that can be applied everywhere, some innovative solutions which are successful in one city can be translated in other cities. It is helpful to have global platforms, like the WUTLS, to share and exchange these new ideas.