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Understanding Urban Mobility in China: Challenges and Innovation

Special Session organized in partnership with the Institut pour la ville en mouvement/PSA Peugeot-Citroën [City on the Move]

The objective of this session is to highlight recent trends in urban mobility in China using new data (travel surveys or transportation policies), looking at new phenomena (mobility services) and questioning automobile use.

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Urban Sustainable Transport in China: Challenges and Approaches

China's sustainable urban transport development is facing unprecedented challenges as well as opportunities under the new context. Changes caused by unprecedented migrations from rural to urban areas, continuous improvement in urban systems, and the rise of regional urban clusters will have a tremendous impact on urban transport development. In this situation, resources and environmental shortages closely related to urban transport development and traffic demand are the key factors to be considered in the process of implementing transport development strategies. China's unique traditional culture, based for instance on the concept of harmony between man and nature, is incorporated into urban planning and construction process, becoming a new social norm. In the new development era, progress made in technology, energy security, environmental protection, traffic and lifestyle changes have brought new opportunities to the development of China's urban transport. Whether we can take these opportunities is closely related to the successful implementation of a sustainable urban transport system. In this paper, the current situation and challenges of urban sustainable transport in China is first discussed, then, an approach towards urban sustainable transport in Chinese cities is proposed.

XIAN Kai, Research Fellow, Beijing Transportation Research Center

An Analysis of Travel Patterns in Beijing Based on a Comprehensive Transport /Traffic Survey

Dramatic changes occurred during recent years in Beijing. Population growth was quite strong, adding 2 million individuals to the city from 2000 to 2005. Private car ownership has been increasing rapidly, adding 2 million vehicles on Beijing's streets during the same period. In the meantime, public transportation benefited from a large governmental support, resulting for instance in the extension of the subway system by about 100 kilometers. A comprehensive transport and traffic survey was conducted in the year of 2005. This survey consisted of twelve sub-surveys, including a households survey on personal daily travel, a visitors survey of daily travel, a vehicle usage survey, a public transport passenger survey, a taxi passenger survey, an on-site traffic count, etc. Based on the results of this survey, this paper proposes to analyze individual travel patterns in a context of drastic change caused by rapid motorization and modernization. Some recommendations for future urban and transport development are presented. The experience of Beijing may be a very useful reference for other developing countries.

PAN Haixiao, Professor, Tongji University

Using knowledge on Urban Mobility to Improve Transportation and Urban Plans

The fast development in urban construction and transport systems in China has greatly changed the urban spatial structure. It is a very unique experience in the world. Many cities in China have ambitious plans both for urban expansion or transport infrastructure construction. To realize the objectives of those plans, we must understand the response of the city, people as well as land use. In this paper, several cases will be analyzed about the subway's impact on land use, house location as well as the effectiveness of land use mix in reducing long distance travel or car travel. Using knowledge from empirical studies greatly helps urban planners and transport engineers get inspired and promote more innovative solutions.

Jean-François DOULET, Associate Professor, Paris Institute of Urban Planning
The Emergence of Carpooling in China

Started later than elsewhere, motorization in China is taking off with quick access to the car by the rising middle class. Recent figures showing a 40% increase in annual sales in 2009 make China the first automobile market in the World and the automobile country of tomorrow. The car market is now booming with over 80% of first-time buyers. Rising incomes and growing needs of daily mobility are factors that support today's automotive access to cars. In this context, carpooling is emerging in main Chinese urban centres as an organized mobility solution. How is carpooling impacting urban mobility? What are its specificities in the Chinese context?