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Social Construction of Sustainability and Quality of Life Indicators for Urban Passenger Transportation

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Abstract: This study developed sustainability and quality of life indicators for urban passenger transportation by using Social Construction of Technology (SCOT). The initial indicators were proposed by referring to literatures and were summarized by using impact-based framework. Subsequently, the stakeholders were defined according to their interest, power and then classified into scientific, operational, policy making, policy monitoring and nonprofessional frames. The scientific frame consisted of nine scholars in transportation field. Ten representatives from Taipei Rapid Transit Corporation (TRTC), Taiwan Railways Administration (TRA) and bus operators were grouped into the operational frame. The policy making frame comprised of ten representatives from Department of Transportation, Taipei City Government (DOT, TCG), Department of Railways and Highways, Ministry of Transportation and Communication (DORH, MOTC), Directorate General of Highways, Ministry of Transportation and Communication (DGOH, MOTC) and Institute of Transportation, Ministry of Transportation and Communication (IOT, MOTC). The policy monitoring frame consisted of 15 representatives from Taipei City Councilor, legislator and reporter. The nonprofessional frame comprised of 72 Taipei citizens. The stakeholders were asked to evaluate the relative importance of indicators using Delphi survey method. Social construction of 14 transport sustainability indicators and 12 transport quality of life indicators were obtained.

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