

SmartMetro : Smart Metro Operations Enhancement through Data Analysis

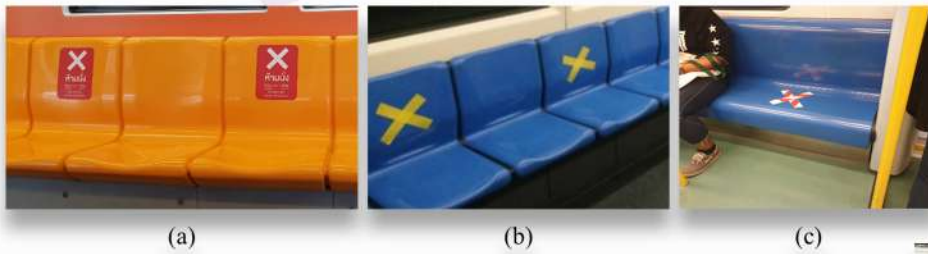
Newsletter No. 5 Quarterly SMARTMETRO Newsletter May-July 2020



Activities under SmartMetro Project

Publication on COVID-19 and Metro practices

Dr. Somsiri Siewwuttanagul, the Smartmetro researcher and his colleagues have published a paper entitled "Investigation on Physical Distancing Measures for COVID-19 Mitigation of Rail Operation in Bangkok, Thailand" in the International Journal of Building, Urban, Interior and Landscape Technology (Built) in July, 2020. The paper had investigated the physical distancing practice during COVID-19 pandemic at the selected metro stations in Thailand. The surveyed location includes the concourse level, the platform level, and the passenger cars. The results showed the level of virus infection risk at the metro stations for passengers using the Bangkok Mass Transit System (BTS), Metropolitan Rapid Transit (MRT), and Airport Rail Link (ARL) systems.



Student research with industry

Two Master's students of Mahidol University are doing research under the SmartMetro project.

Ms. Vasita Suriyamart is doing her research on the "Evaluating the Efficiency of Mass Rapid Transit System in Thailand" under Dr. Jirapan's supervision. Ms. Lalitphan Samitiwantikul is doing her research on "Metro Performance Management and Data Analytics" under Dr. Waessara's supervision. The students have got some data and advice from the experts in metro operations. However, they do not get a real practical experience as interns at the metro operators due to the new normal practice which requires people to work from home. It is hoped that the situation would be under controlled and we would be able to do the internships either with the industries in the UK or Thailand.

For the UK side, Ms. Natchaya Lailomthong and Mr. Nattanon Luangboriboon are Ph.D. students supervised by Dr. Taku Fujiyama. Ms. Natchaya is working closely with the Transport for London (TFL) to investigate "Metro Dwell Time and Passenger Flow Management on the Northbound of Victoria line" while Mr. Nattanon is working on "Passenger Flow Management on the Network Rail Station." Their research have got good support from TFL Palestra and Network Rail.



Public transport practice during COVID-19

The SmartMetro researchers have been active and exchange their practices between Thai and UK metro systems during COVID-19 era via online communications. Examples of the TFL staff shared their practices are shown in the picture.



Future Activities: SmartMetro Project

The COVID-19 pandemic has affected a lot of project activities, especially for the ones require physical participants and practical experiences. The more discussion would be made to deal with the problems and some activities might be arranged using the online facilities.