Study on Cost of Contact-wire-less LRV to be Introduced

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Recently LRT project is discussed for activation of urban function in several cities. Especially, contact-wireless type LRV is expected for energy saving and clear cityscape. However the cost is an important factor for railway operator to adopt this system. This paper described the comparison of the economies for the case of a conventional tram system based on catenary type and those for the three cases of a contact-wire-less LRV powered by batteries. We calculated the initial cost and running cost including costs for battery, substation, charging station and cost reduction of electricity energy saving and so on. Based on this calculates, we carried out a simulation to evaluate the economy. Finally, this paper reports results of the simulation using the parameters of length of railway line, battery unit price, headway and so on.