## Abstract

The goal of this research is to study the regeneration of railway space in the eastern railway network. The study uses ecotourism as basic concept and seeks ways to integrate various forms of tourism, tour experiences, the regeneration of railway space, and the interconnection between the existing railway network and other modes of transportation.

The Taiwan railway network used to play an important role in the economic development in Taiwan. It was a key transportation system for people to travel around freely. However, its importance has been gradually reduced after the completion of highway systems and high speed rail system. It lost its competition to highway and high speed rail systems due to lower speed and less flexibility. In response to these challenges, the Taiwan railway has transformed its regional railway network into electrical trains for daily commuters and long distance railway network into unique theme trains. In the past, the organization of Taiwan railway network has been criticized to be unable to operate efficiently. Therefore, it should apply new thoughts and ways to improve its operation efficiency.

Currently, the Taiwan railway space is preserved and maintained mainly on a point to point basis. The Taiwan railway network should be systematically planned to integrate with the environment around these spaces. Although Taiwan Council for Cultural Affairs has planned to preserve the historical railway stations and to implement the Taiwan railway arts network policies, the results have been limited. In recent years, people have better perceptions towards leisure activities in daily life. This could provide an opportunity for Taiwan railway authorities to better manage existing railway networks with consideration of the development of ecotourism. The railway authorities can use educational tours to promote local cultures, environmental protection, and regeneration of railway space. These eco-tours may help Taiwan railway remain competitive in the long run.

In fact, the preservation of the railway culture assets at the end of the 20<sup>th</sup> century and environmental protection of the ecosystem at the beginning of the 21<sup>st</sup> century are becoming vitally important in the modern world. The railway tourism in Japan and Europe is gradually becoming a principal way of traveling for groups of all age. This research investigated railway related documents, ecotourism, and travel experiences. By referring to various examples of reused railway around the world, this research uses case studies and field researches to provide evidences for examples of

reused multifunctional railway stations. These stations combine various scenic spots and use alternative strategies to construct a multipurpose experience that includes leisure, education, history, fine arts and local folk tales. These stations also increase social awareness and local emotions. This research also states that the key to success in ecotourism still remains in the hands of Taiwan Railway Administration and their way of managing ecotourism in Taiwan. The Taiwan Railway must seek new thoughts and actively involve in transforming existing railway transportation system into railway tourism in order to develop high quality travel experience for people.

