Surface Light-rail Network for Johannesburg City, South Africa

The movement and transportation of people are facing increasing challenges in the city of Johannesburg, South Africa.

The need for a sustainable, affordable, economically viable and safe system will play a major role in ensuring the successful expansion and growth of this transforming third to first world scenario and into the future. The project explores the key issues surrounding the need for a new mass passenger transport system with the ability to tackle complex social structures, the need to alleviate severe congestion and how a public system will encourage the regeneration and development of the inner and outer city areas. The purpose is to look at the key transit issues currently experienced in Johannesburg and the best ways in which a new system will help to tackle these issues and create opportunities for growth in the city.

In order to explore this opportunity, information is gathered using literature reviews and desk-based research. To understand more closely how the end users of the project would like to see a transit system for the future, research is conducted by telephone, email and with city residents. Cumulative data obtained is analysed to form a valid design specification. The information and research gathered is used for the creation of a design brief and the vehicle and relevant infrastructural requirements.