

# Abstract

Our CBDs are developing continuously and urban sprawl is growing at a rapid rate. Without sufficient upgrades to infrastructure and public transport networks, how long will it take before the struggle of everyday commuting becomes near impossible and transport costs become too high for most South Africans? Simply moving back to the Cities and CBDs is not an option for the majority of our population because as these areas become denser, the price of property and rentals increase. We need a solution for our current situation, to regain the control of the road networks in and around these areas. The aim of this thesis is to propose an alternative, hybridised transport system. To reduce the reliance on privately owned, single passenger motor vehicles by encouraging the use of public, semi-private and non-motorised forms of transport in order to alleviate traffic congestion from major CBDs, aid in social cohesion and promote a healthier lifestyle by making use of bicycles.

The Sandton CBD will be the area of focus affected by the study with the site located on the fringe, at the intersection of William Nicol Drive and Republic Road. The proposal introduces a system which would couple onto existing urban design framework proposals as well as transport networks such as, the Rea Vaya (BRT), Gautrain (Train and Bus networks) and the privately owned mini-bus taxi and bus industry. Adjacent to the site is the Braamfontein Spruit cycle path which will aid in the process of gathering and promoting an interest in cycling as a means of everyday transport. The building put forward in this thesis will act as a knuckle and point of convergence where people will be able to utilise different means of transport. It will also serve as a new social and active lifestyle hub comprising of a gym (connected to a research centre), social and recreational spaces, retail facilities, transport information offices, mass parking and accommodation.