

## **The Feasibility of a Protected Launch Site near Melkbosstrand for a Public Transport Ferry across Table Bay, Cape Town**

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**Abstract :** Traffic congestion on the Northern side of Table Bay is a major problem. In Gauteng, the implementation of the Gautrain between Pretoria and Johannesburg, solved their traffic congestion. In 2002 two entrepreneurs endeavoured to implement a hovercraft ferry service across the bay from Table View to the Port of Cape Town. However, the EIA process proved that disgruntled residents from the area did not agree with their location for a launch site. 17 years later the traffic problem has not gone away, but instead the congestion has increased. While property prices in the City Bowl of Cape Town are ever increasing, people tend to live more on the outskirts of the CBD and commute to work. This means more vehicles on the road every day and the public transport services cannot keep up with the demand. For this reason, the study area of the previous hovercraft plans is being extended further North. The study's aim is thus to determine the feasibility of a launch site North of Bloubergstrand to launch and receive a public transport ferry across Table Bay. The feasibility is being established by researching ferry services across the world and on what makes them successful. Different types of ferries and their operational capacities in terms of weather and waves are researched and by establishing the offshore and nearshore wind and wave climate for the area, an appropriate protected launch site is determined. It was concluded that travel time could potentially be halved. A hovercraft proved to be the most feasible ferry type, because it does not require a conventional harbour. Other types of vessels require a protected launch site because of the wave climate. This means large breakwaters that influence the cost substantially. The Melkbos Cultural Centre proved to be the most viable option for the location of the launch site, because it already has buildings and infrastructure. It is recommended that, if a harbour is chosen for the proposed ferry service, it could be used for more services like fishing, eco-tourism and leisure. Further studies are recommended to optimise the feasibility of such a harbour.

**Keywords :** Cape Town, ferry, public, Table Bay

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