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Rental Bike Design for the New Zealand National Cycleway

Alistair Patterson© 2010

A thesis presented in partial fulfilment of the requirements for  
the degree of Masters of Design in Product Design at Massey  
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## ABSTRACT

This project seeks to find a product solution to increase user access to the proposed national cycleway throughout New Zealand. This is achieved through the design of a self-service bike rental system to be placed at points along the proposed cycleway track.

Various possible bike rental systems precedents were analysed for the national cycleway. Included in this were three short films that documented cycling conditions on New Zealand roads and the current bike rental systems that operate in New Zealand.

A practical approach was taken wherein a significant amount of testing in full scale via 3D model making techniques. To complete the process, a full-scaled ergonomic/usability test rig was built. Following this, a full-scale design model could be developed. The resultant proposed solution features an innovative bicycle and locking system with distinct and unique styling. The bikes are styled to convey a fun and user friendly aesthetic. The risks of vandalism or theft of the bikes has been mitigated by a unique parts system whereby nothing on the bikes would be usable on any other frame if stolen.

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## WRITTEN ASSIGNMENT ORIGINALITY DECLARATION

Student ID: 05017955

Surname: Patterson

First Name: Alistair

Paper Number: 197.800

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