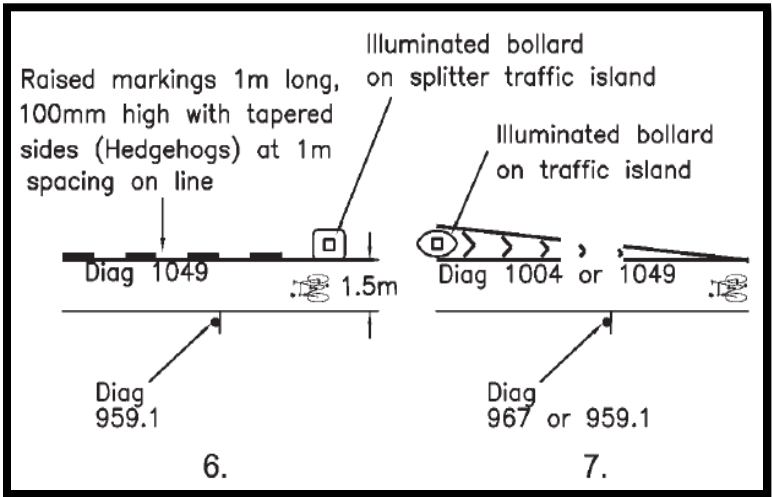




Cycle Lane Protection: A state of the art review

Brian Deegan

History of Cycle Lane Protection



Home / News

Segregated cycle lanes using planters and armadillos could spread across Britain

Laura Laker
September 6, 2013 11:25 am

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1 / 4 Camden cycle path, planters and armadillos
Credits: Cycling Weekly

What is light segregation?



“the use of physical objects intermittently placed alongside a cycle lane marking to give additional protection from motorised traffic”

What are its benefits?



Level of Service



Value for Money



Adaptability



Legality



Research



INTERNATIONAL CYCLING INFRASTRUCTURE BEST PRACTICE STUDY

Key Findings:

- Low level separators considered more successful
- Vertical separators have higher degree of subjective safety
- Seville installed 80km of segregated network in 4 years



Camden Council
ROYAL COLLEGE STREET, PHASE 1
Post-Implementation Review



Key Findings:

- 15 months after delivery cycling numbers rose 70%. Despite full segregation being removed.
- 18 collisions in 15month period before implementation down the 3 in 15months after



PUBLISHED PROJECT REPORT PPR704

TfL Cycle Facility Trials: Alternative Separation Methods for Cycle Lanes

G Beard

Prepared for: Transport for London
Project Ref: M12 Alternative Separations

Quality approved:
S Greenshields
(Project Manager)

M Jones
(Technical Referee)



Key Findings:

- Cyclists rated kerb segregation the safest but pedestrians and motorcyclists rated it the least desirable
- Flexible posts preferred choice by all users
- Little objective safety difference between light and full segregation but light segregation more adaptable

ASSESSMENT OF THE EFFECTIVENESS OF NARROW SEPARATORS ON CYCLE LANES

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Keywords: Cycle lanes, Separated Bike Facilities, Safety

ABSTRACT

Roading authorities desire to better provide for existing people cycling, and to encourage more people who wish to cycle but are discouraged due to safety concerns. There is widespread acknowledgement (supported by a substantial body of research) that providing increased physical separation between motor vehicle and bicycle space will help address these concerns and lead to an increase in cycling.

A wide variety of physical devices and delineators are available to provide separation. This research covers on-road trials of a 100 mm wide raised bicycle lane separator in Christchurch. ViaStrada was commissioned by VicRoads to design the empirical study, and evaluate and report on the findings. Christchurch City Council provided site support and Canterbury University helped to analyse the results.

Separators were placed in two locations where motorists were commonly encroaching into exclusive bicycle lanes. Road user behaviour was observed before and after installation, and qualitative feedback was also sought from site users.

The results show a significant effect on motor vehicle encroachments following installation, particularly when separators were supplemented by vertical posts. Very positive feedback was also received from existing cyclists. Some recommendations for best practice guidance on the most appropriate treatment locations and layouts are also suggested.

Key Findings:

- Incursion by motor traffic into cycle lane at one site went from 65% to 19% with low level separators
- 19% to 0.1% when posts added



FINAL REPORT

Lessons from the Green Lanes: Evaluating Protected Bike Lanes in the U.S.

NITC-RR-583

June 2014

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NATIONAL
INSTITUTE FOR
TRANSPORTATION AND
COMMUNITIES



Key Findings:

- Up to 171% increase in cycling in first year on measured sites
- 85% of residents said they were more likely to cycle as a result

STUDY OF THE USE OF LIGHT SEGREGATION FOR CYCLING



Key Findings:

- Cost effective protection improving subjective safety
- No one size fits all solution. Context and users need to be considered.
- Light segregation is generally successful at stopping motor traffic from entering cycle lanes

Issues



Design considerations



Products

Product	Protection	Cost	Durability	Aesthetics
Flexible post	Green	Green	Green	Yellow
Lacasitos	Green	Yellow	Green	Yellow
Armadillos	Yellow	Green	Yellow	Yellow
Orcas	Yellow	Green	Yellow	Yellow
Planters	Green	Yellow	Red	Green
Defenders	Green	Green	Green	Yellow
Wandorca	Green	Green	Green	Yellow
Zipper	Yellow	Green	Green	Yellow
Riley	Red	Green	Green	Green
Fixed post	Green	Yellow	Yellow	Yellow
Solid planter	Green	Yellow	Green	Green
Barrier	Green	Green	Green	Red

Case Study: Combinations



Case Study: Bus Stop Treatment



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