

Appendix C – Case studies for outdoor elevators/escalators

Case studies for outdoor elevators/escalators

In addition to the linear infrastructure investigations, Roads and Maritime also explored built examples of where an escalator or elevator was used to provide step-free access for cyclist. This desktop investigation was prompted by feedback from some stakeholders who had suggested that these solutions may have a relatively smaller footprint than a cycle ramp and may mitigate impacts to heritage and public open space.

A brief overview of two potential alternative options is provided below.

Nijmegen Cycle Bridge (Cyclist Access Escalators), Netherlands³

Description: Outdoor escalators constructed to provide access to elevated cycleway. Completed in 2004.

Issues cited: Poor durability, high cost of maintenance, vandalism, poor reliability, noise, and wheels slipping during and after periods of rain. In 2009, 11 malfunctions were reported. In 2012, the authority responsible for the facility announced their intention to replace the escalators with stairs suitable to be used by cyclists. In this example, provision of an outdoor escalator for cyclists was not considered to be a cost-effective solution.



Figure 1 (Out of use) escalator and stair access for cyclists to the Nijmegen Bridge, Netherlands

³ Bicycle Dutch (2013) "Nijmegen cycle bridge revisited"
<https://bicycledutch.wordpress.com/2013/05/16/nijmegen-cycle-bridge-revisited/> viewed 03 November 2017.

Paleisbrug (Palace Bridge) Access Lifts, 's-Hertogenbosch, Netherlands⁴

Description: Inclined lift for pedestrian and cyclist access. Adjacent to the lift are stairs with grooves on the edges to allow cyclists to wheel their bicycles up/down.

Potential issues: A lift would not adequately accommodate the high volume of cyclists currently using the Sydney Harbour Bridge Cycleway. As discussed in Section 2.1.2, data collected in 2014 showed peak hourly demand during the AM and PM periods exceeded 550 and 450 cyclist trips, respectively. Queueing on the bridge deck is also a potential issue as cyclists would be waiting to use the lift at the top of the stairs. Reliability of lifts is also a potential issue.



Figure 2 Lift access for cyclists and pedestrians to the Palace Bridge, Netherlands

⁴ Bicycle Dutch (2015) "First garden bridge in the Netherlands opened"
<https://bicycledutch.wordpress.com/2015/06/16/first-garden-bridge-in-the-netherlands-opened/> viewed 03 November 2017.