



safer roads for everyone

Pedestrian Guardrail - Taking it Away

Background

First it was the Royal Borough of Kensington and Chelsea; then Transport for London; other Highway Authorities have also decided that they should take action, or at least investigate the situation; and now the Department for Transport (DfT) has issued Local Transport Note 2/09 – Pedestrian Guardrailing. The potential to take out pedestrian guardrailing has now come into focus in the UK.

With attention in recent years being drawn to improving the urban environment and a need to de-clutter some of our historic centres, whilst promoting more inclusive usage of other community areas, the need for guardrail has now come under review. However, there will always need to be locations where installing or maintaining pedestrian guardrail is essential to achieve basic public safety and this is clearly recognised in the DfT's recently published guidance.

The purpose of pedestrian guardrail

Pedestrian guardrail has been used extensively since the 1940s as part of the ongoing attempt to reduce the potential for conflicts between pedestrians and vehicles as our society sets out to address the social and economic impact of road collisions and casualties. Guardrail has been used in town centres, on the approaches to pedestrian crossings, outside schools and on signal-controlled junctions where the pedestrian desire line was different to the safe controlled route. When used in appropriate locations guardrail can successfully result in a reduction in risk for vulnerable road users and most studies have recognised this.

The over use of guardrail

Unfortunately, for many years there has been a tendency to over use guardrail and provide it at locations where other solutions were possible and more appropriate. Excessive segregation of pedestrians and vehicles may have resulted in higher vehicle speeds in some locations, as drivers may perceive a reduced risk of conflict with pedestrians. This has not always improved people's feeling of safety.

Excessive guardrail is unsightly and clutters the streetscape. Poorly located guardrail can result in pedestrians being trapped on the carriageway or divert them significantly from their desire line. This has resulted in some pedestrians choosing to walk around it or climb over it to avoid this. The provision of guardrail has also led to cyclists being squashed against it by turning vehicles at some junctions.

Illustrative examples



The intended purpose of some guardrail is unclear



Perhaps sometimes it is meant to be decorative?



An example of unsightly and excessive guardrail



Attempts to make guardrail less unsightly have led to a different potential safety problem

Over use of guardrail has come about for a variety of reasons including:

- An over eagerness to eliminate perceived pedestrian risk rather than actual pedestrian risk
- A cheap form of enforcement of waiting and loading restrictions
- Organisations' fear of liability if guardrail was not present

Despite this, however, guardrail does have a significant role to play in road safety at locations where without it there would be an unnecessarily high level of risk for pedestrians, particularly the most vulnerable ones such as children, the elderly and those with sight impairment.



Sometimes an alternative use can be found locally



Whether this protected a pedestrian is uncertain

Our main concern as a profession with safety in mind should be that with the rush to clear the clutter may result in removing too much and creating new problems. LTN 2/09 does include an assessment process, but it is quite complex, and few authorities may have the staff or financial resources to be able to use it correctly across their whole network. Transport for London (TfL) has also introduced a similar, but less complex, process. Both of these methods may be too resource hungry for smaller authorities.

A London Example

Concerned about improving the appearance of their area, members of a London borough council recently decided to make a conscious decision to instruct their officers to instigate a de-cluttering programme that would set out to rationalise, and if necessary remove, some of the street furniture that had accumulated in certain important locations. Taking out unnecessary pedestrian guardrail was high on their agenda and they designated three trial sites where such action could be considered. Rather than simply promote a blanket removal of all guardrailling in these areas, as could have been suggested by some, the borough chose to use engineering experience to assess the areas and produce comprehensive reports on individual situations.

The borough chose TMS to carry out the work because of their extensive experience in road safety engineering. Following in-depth site investigations a series of proposals were developed that sought to rationalise the removal of unnecessary guardrail set against the need to retain a safe environment for all road users. Guardrail was recommended for retention at a variety of locations including:

- School entrances and school crossing patrol sites
- Pedestrian crossings particularly in areas of high pedestrian flow where without it there is a risk of pedestrians spilling out into the carriageway
- Where pedestrian routes / cycle tracks meet roads and a collision is more likely through poor visibility (such as from alleyways) or speed of travel
- To reduce speeds at key points on cycle routes where they may need to give way
- On Triaiff kerbing, and on other high kerbing, but which could become trip hazards for the visually impaired if not protected.



A different Borough, but a typical example of cycles and bins being locked to guardrails



Another Borough, where a signal junction has been re-modelled with no guardrail

A study of collision and casualty data in three areas highlighted other issues that additional pedestrian guardrail may be needed to solve.

At all sites where guard rail is removed it is recommended that the casualty data is monitored to check that pedestrian injuries do not rise as a result of the removal of the guard rail.

The complete removal of guardrail at the type of site illustrated above should only take place following a more comprehensive assessment using the DfT/TfL guidance methodology.

Following a report that recommended a decision to move forward to the next stage of the process, the implementation of the recommendations in one area of the borough, the borough's Deputy Mayor commented:

"This has been a really worthwhile exercise. We are conscious that local residents and traders wish to see their local environment improved but we are also aware that we have a duty of care to all other groups of road users. Using professional expertise to identify sections of railings that could safely be removed was the only real way forward and we will also be carefully monitoring the outcome of our trial sites."

The work undertaken in this part of London has shown that by using the professional expertise contained within the borough's staffing structure assisted by independent outside safety engineers (TMS), a comprehensive assessment of guardrailing removal can be produced. Although for both practical and financial reasons the process adopted did not use the systems developed by the DfT and TfL, it has followed a set procedure and, as recommended by the DfT, an Audit Trail is in place.

The borough is to be commended on setting out to improve their environment in a professional manner rather than simply responding to pressures to remove guardrailing, a potentially useful adjunct to improving road safety.

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