

## **Pedestrian Guardrail Assessment**

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### **Transport, Infrastructure and Environment Committee**

**18 June 2012**

#### **1 Purpose of report**

- 1.1 To seek approval for the draft Pedestrian Guardrail (PGR) Assessment procedures.

#### **2 Summary**

- 2.1 The Active Travel Action Plan (ATAP) includes a commitment to review the need for existing pedestrian guardrail (PGR) and minimise its use. Scottish Government guidance (“Designing Streets”), the Council’s own guidance, set out in the Edinburgh Standards for Streets and the Local Transport Strategy recommend minimal use of guardrail.
- 2.2 One action of the ATAP is the development of an assessment process for the review and removal of PGR. This process will apply to existing sections of PGR and also any proposals for new sections of PGR, as part of improvement schemes.
- 2.3 Building on experience from elsewhere the Council has developed a procedure to review existing and proposed PGR.
- 2.4 This report seeks approval for the new procedure.

#### **3 Main Report**

##### **Introduction**

- 3.1 PGR has been used since the 1930s, with a significant increase in its use since the 1960s, when it was developed for traffic management purposes, as an inexpensive tool to separate pedestrians from motorised vehicles.

- 3.2 Historically guardrailing has been introduced for two main reasons:
- a) To discourage parking and loading from particular sections of road; and
  - b) to discourage pedestrians from crossing away from controlled crossing points.
- 3.3 However, the use of guardrail can degrade the street scene. It can create an unpleasant, constrained environment for pedestrians, taking them away from their 'desire-lines'. The use of guardrail may encourage higher vehicle speeds because drivers have a lower perceived risk of encountering pedestrians. It may also take valuable footway space away from pedestrians because of the need to set guardrail back from the kerb. Guardrail can create safety problems, for example by reducing the visibility of children through the railing from approaching vehicles, or by pedestrians 'vaulting' and trying to follow their natural desire line. It is also a maintenance liability. For these reasons, there is a concern about the extensive use of pedestrian guardrail.
- 3.4 These concerns reflect two current strands of thought on transport and road safety. The first is the increasing importance of urban design and pedestrian convenience in the streetscape, especially in city and district centres. The second is an alternative approach to road safety which, rather than preventing pedestrians being exposed to traffic danger, seeks instead to address the danger at source by reducing the speed and/or volume of traffic.

#### **Legal Position on PGR**

- 3.5 PGR has mainly been used as a tool to reduce collisions between pedestrians and vehicles. However, there is no legal requirement for a Roads Authority to provide PGR. Whilst a Roads Authority has a general duty to carry out collision studies and take such measures as deemed appropriate to minimise those collisions, the burden of responsibility rests with the individual road user to travel in a manner appropriate to the conditions they encounter.
- 3.6 In this respect, the removal of PGR or not providing it should not, in the vast majority of situations, expose an individual officer or a Roads Authority to liability. However, an assessment process which demonstrates a clear audit trail of the decisions taken and their justification will clearly be of benefit.

#### **Development of the PGR Assessment Procedure**

- 3.7 An Officer Working Group has been developing a PGR Assessment Procedure and Programme that aims to remove PGR and replace it with pedestrian and cycle friendly ways to reduce the potential dangers from traffic.
- 3.8 This draft PGR assessment process seeks to establish a methodology that sets out a logical, staged approach to considering the need for PGR, with the objectives of ensuring consistency in the analysis, robust justifications and a clear audit trail.

- 3.9 Existing national PGR guidance was reviewed including that from the Department for Transport (DfT) and the Scottish Government.
- 3.10 DfT Local Transport Note 2/09 recommends that “the installation of guardrailing should not be considered if alternative safety measures could be used” such as speed reduction measures or traffic calming.
- 3.11 The Scottish Government’s policy Designing Streets states that “PGR should not be provided unless a clear need for it has been identified”.
- 3.12 The following specific PGR assessment methodologies were reviewed by the Working Group:
- a) DfT Local Transport Note 2/09, this methodology is very complex and has never been used in practice.
  - b) Transport for London (TfL) Guardrail Risk Assessment Form (GRAF), this methodology was used extensively by TfL resulting in 60km of PGR being removed, however they are now moving to use a simpler assessment methodology similar to that of the London Borough of Hackney.
  - c) The London Borough of Hackney, developed by Urban Initiatives, this methodology has been used to review PGR since 2007. During this time 5km of the original 9km of PGR in Hackney has been removed.
  - d) Kent County Council, while relatively simple this methodology requires more superfluous data than the Hackney methodology and does not have as clear a focus on pedestrian “desire lines”.
- 3.13 From the reviews and contacts with the officers who undertook such PGR assessments, the Working Group recommends that the methodology used by the London Borough of Hackney is both efficient for the purpose and the financial resources available to the Council.
- 3.14 The London Borough of Hackney reviewed pedestrian casualties at four sites where PGR has been removed and there is three years before and after pedestrian casualty data. In the three years before PGR removal there were a total of 41 pedestrian casualties at the four sites, compared with a 19 casualties in the three years following PGR removal. This strongly suggests that removing pedestrian guardrail at these sites has not increased the risk to pedestrians in terms of road safety.

#### **Key Stages of the PGR Assessment Procedure**

- 3.15 This procedure will be used to assess both proposed and existing PGR.
- 3.16 The initial presumption is that no PGR will be provided. A specific safety case must be made in order to retain or install every PGR panel.

- 3.17 PGR is assessed on site using a clear form that considers road safety issues as well as the visual impact and appropriateness of the PGR in the street. It provides an audit trail for the decisions taken.
- 3.18 An assessment is made of the level of danger in PGR locations where vehicle paths coincide with where pedestrians would like to walk. If measures are deemed necessary it is considered if PGR is the most appropriate solution.
- 3.19 Possible recommendations of the assessment procedure are:
- a) No PGR or other measures are needed;
  - b) Safety measures are required but PGR is not the appropriate solution;
  - c) PGR should be retained or installed for a clearly defined safety reason(s).
- 3.20 At sites at which PGR removal is recommended, where necessary this will be subject to local consultation, eg through notices affixed to the PGR and letter drops to immediate frontages.

#### **PGR Assessment Procedure Pilot**

- 3.21 A pilot has been performed in which Council officers trialled the use of the PGR Assessment Form in Leith and the City Centre at the following locations:
- Forrest Road/Teviot Place junction,
  - Easter Road/Duke Street junction,
  - Leith Street, between Calton Road and Waterloo Place.
- 3.22 The pilot consisted of using the procedure and forms to assess a number of stretches of PGR and produce recommendations.
- 3.23 Following the pilot minor changes have been made to the PGR assessment forms and procedure based on user feedback.
- 3.24 The pilot has shown that the PGR Assessment Procedure is an effective methodology for reviewing PGR and minimising its use in line with existing guidance. At the same time the PGR Procedure provides an essential formal audit record of the assessment undertaken and the resulting recommendations.

#### **Delivery**

- 3.25 With respect to existing PRG locations, the Assessment Procedure will be adopted by the Neighbourhood Roads Teams within Services for Communities. In general, assessments will be carried out according to available staff and financial resources. However the City Centre & Leith Neighbourhood team propose to commence assessments in the Autumn 2012, including those locations affected by the Hogmany Street Party.

- 3.26 With regard to the future deployment of guardrail, Council street design guidance will be updated to contain and reflect the PGR Procedure.
- 3.27 Locations of all existing PGR assessed using the process will be recorded. Pedestrian casualties will be monitored and recorded at all sites at which PGR is removed.

#### **4 Financial Implications**

- 4.1 The cost of implementing the PGR Procedure will be met from existing Neighbourhood budgets.
- 4.2 Removal of unnecessary PGR will reduce the Council's maintenance costs.

#### **5 Equalities Impact**

- 5.1 In undertaking a pre-assessment a score of 3 was achieved and, as a result, a Full Equalities Impact Assessment is not required.

#### **6 Environmental Impact**

- 6.1 There are no adverse environmental impacts arising from the draft PGR Assessment procedure; if implemented successfully it is likely to be visually beneficial. A Strategic Environmental Assessment is not required.

#### **7 Conclusions**

- 7.1 The draft PGR Assessment Procedure aims to optimise the use of PGR in the city and to make Edinburgh a more attractive place to walk for its residents and visitors.

## 8 Recommendations

8.1 It is recommended that the Committee:

- a) approves the PGR Assessment Procedure as summarised in this report for use by the Council in assessing existing and potential PGR locations; and
- b) notes that casualties will be monitored and recorded at all sites where PGR has been removed.
- c) refers this report to Neighbourhood Partnerships for discussion.
- d) requests the Director of Services for Communities to report back to a future meeting of this Committee with a programme for assessment of all existing guardrail in the city.

**Mark Turley**  
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Appendices	None
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Wards affected	All
Single Outcome Agreement	The PGR Assessment Procedure will contribute to the current National Outcomes: <b>(1)</b> - We live in a Scotland that is the most attractive place for doing business in Europe. <b>(10)</b> - We live in well-designed, sustainable places where we are able to access the amenities and services we need. <b>(12)</b> - We value and enjoy our built and natural environment and protect it and enhance it for future generations.
Background Papers	1 Removing Guardrail by TMS Consultants 2 PGR Assessment Procedure. Paper copies are available in the Group Rooms and it is available on line at <a href="http://www.edinburgh.gov.uk/cpol">www.edinburgh.gov.uk/cpol</a>

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