



REPORT TO: MORAY COUNCIL ON 29 MARCH 2017

SUBJECT: PETITION TO ERECT A SAFETY BARRIER ON THE B9014 DUFFTOWN TO KEITH ROAD

BY: CORPORATE DIRECTOR (ECONOMIC DEVELOPMENT, PLANNING AND INFRASTRUCTURE)

1. PETITION DETAILS

1.1 Title of Petition: Erection of a Safety Barrier on the B9014 Dufftown to Keith Road.

1.2 Petitioner: Dufftown and District Community Council

1.3 Petition Statement:
The Community of Dufftown and District are extremely concerned about their safety when negotiating a severe bend situated on the B9014 at Parkmore Brae, and wish Moray Council to erect a safety barrier at this bend before a tragedy happens.

1.4 Action taken to resolve issues of concern before submitting the petition:

These are contained in the petition, a copy of which is attached as **APPENDIX 1** and are summarised as follows:-

- Raised with council officers by the public, through Community Councils, by local members and through MSP.
- Discussions with Council officers and a site visit.
- Some work has been done by the Council but the petitioners feel this is not enough.

1.5 Petition Process

In terms of the process for considering petitions this is a full hearing and council may decide as follows:-

- (a) Reject the petition (in whole or in part), stating reason,
- (b) For simple issues, instruct immediate action by the council without any further hearing or report, or
- (c) Pass the petition to the relevant director and chairperson to look into, with or without any specific direction as to action.

2. **BACKGROUND**

- 2.1 At the meeting of the Economic Development and Infrastructure Services Committee held on 31 January 2017 a preliminary hearing was held to consider the petition submitted by the Dufftown and District Community Council (paragraph 4 of the Minute refers). The Committee agreed to direct that the petition proceed to a full hearing to be heard by the full council and that a report be presented detailing the full background to the petition and that prior to the meeting a site visit be arranged. The site visit was held on 9 March 2017. All Elected Members were invited to attend the site visit.
- 2.2 In 2015, the trees adjacent to the B9014 were cut down as part of the adjacent forestry operations (location and before and after photographs attached as **APPENDIX 2**). This made the angle and nature of the slope down to the Keith & Dufftown Railway line clearly visible. This led members of the local community to raise concerns about road safety at this location, in particular the risk to drivers leaving the road (skidding or similar).
- 2.3 Council officers from the Transportation team carried out site visits and reviewed the need for a road restraint system (crash barrier).
- 2.4 The process used in deciding whether a road restraint system is required is to use Department for Transport (DfT)'s Design & Maintenance Guidance for Local Authority Roads – Provision of Road Restraint Systems (RRS) on Local Authority Roads, published in October 2011 (<http://www.ukroadsliaisongroup.org/download.cfm/docid/5803F825-EFC0-4858-B2A75D0DCE3382A9> and referred to as 'the guidance' for the rest of this report). It specifically states the alternative standard of TD19 in the Design Manual for Roads and Bridges is not appropriate for the majority of the UK's local road network as it is developed for high flow and high speed routes (this is used for trunk roads and motorways). This is the industry guidance, and whilst it does not preclude a local authority from having a different policy position, it is clear that local authorities should either follow the guidance or have a clearly stated policy position. The consequences of having a policy position that differs from this national guidance is set out later in this report.
- 2.5 As stated within the document itself, the guidance "provides an outline structure for this appraisal, with a series of criteria requiring analysis, each of which must be met in order for a RRS to be provided. The relevant tests are:-
- The hazardous feature cannot be relocated or redesigned.
 - Other means of reducing risk to vehicle occupants are inappropriate or unaffordable.
 - The expenditure on provision of a RRS has been justified using cost benefit analysis.
 - Installation of an acceptably compliant RRS is possible.
 - Installation of a RRS would not establish an unsustainable precedent resulting in extensive work along a route or at other similar locations.
 - The issue is of sufficient high priority when measured against other competing funding pressures to justify expenditure.

- 2.6 As the guidance states, a “road restraint system [RRS] is intended to reduce the number and severity of injuries in the event that a vehicle leaves the road and would otherwise encounter a hazardous feature... the introduction of a RRS does not always make a situation totally safe and the installation of a compliant system may come at significant expense. Every year, there are injuries caused when vehicles hit RRSs”.
- 2.7 The assessment of need for a RRS in the guidance starts with a risk assessment. If a RRS is the most effective solution, there are further steps to be taken in making a decision to install. If there are non-RRS solutions, or no intervention is possible/necessary then these flow separately. The whole appraisal process is summarised in the chart below:-

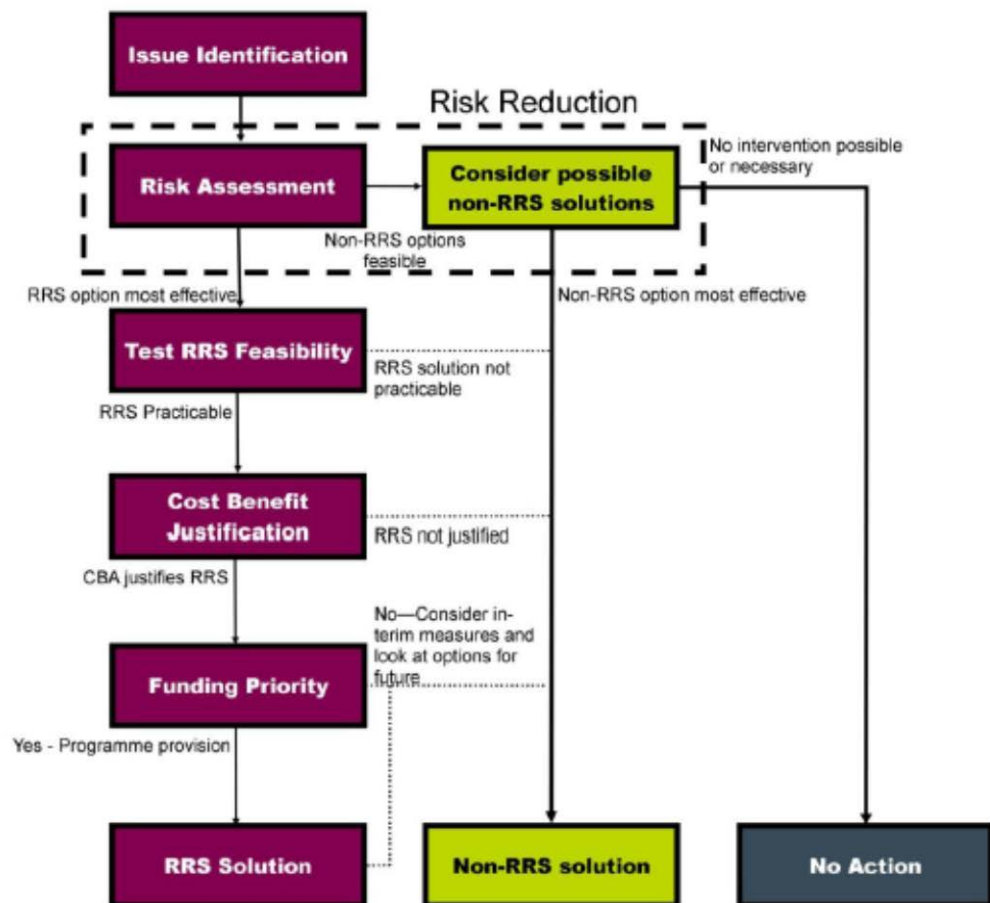


Figure 5.1 - Appraisal Process

- 2.8 The risk assessment was carried out by the Senior Engineer and Engineers in the Transportation team and approved by the Transportation Manager. The Senior Engineer and Engineers have the requisite experience and training to carry out this process, including professional civil engineering qualifications, road safety engineering competence and accident investigation & prevention skills. This team carries out many of the functions of the Council as Roads Authority.

- 2.9 Evaluating the risk using accident data is not appropriate as there have been no reported casualty collisions on this road in the last 3 years. Viewing this information in isolation would not lead to a recommendation to install a RRS.
- 2.10 The question of the impact on the railway should a vehicle leave the carriageway has previously been raised. Officers have looked at the risk assessment methodology for road/rail interface, however this was written for mainline rather than preserved routes. Despite this, the conclusion reached following this methodology is that the risk is low and no further action is required to specifically mitigate the risk of a vehicle reaching the railway line.
- 2.11 In carrying out the risk assessment in line with the national guidance, the following factors are quantified with each factor being scored:-
- (a) Location – type of road
The B9041 is a Rural B road and scores “3” for risk
 - (b) Layout
 - a. Bend radius
The location scores highly at “5” as five steps below desirable minimum radius with superelevation of 5%
 - b. Complexity of layout
The location scores “2” with some potential for lane changing, overtaking, positioning manoeuvres or avoiding action.
For layout, the largest of the two scores above is used in the overall calculation.
 - (c) Collision factors
 - a. Longitudinal features such as sign posts, trees, walls
The location scored “2” – hazard highly likely to be reached resulting in harm
 - b. Severity of outcome
The hazard is scored using a pre-populated table based on accident severity, and this scores “1” 20-30% KSI for primary hazard
 - (d) Consequential factors
 - a. Secondary incidents
Scored “0” – no secondary events likely
 - b. Network disruption
Scored “0” – no impact on network availability
 - c. Cost of damage
Scored “0” – no significant cost implications

The sum total risk of the factors scores 9. Scores of 9-13 are considered medium priority.

- 2.12 Where a site is categorised as medium priority, intervention may be required to introduce control measures to drive residual risk towards the Lower Priority Site category. The residual risk can be tolerated only if further risk reduction

is impracticable or requires action that is grossly disproportionate to the reduction in risk achieved.

- 2.13 On this basis, consideration was given to what could be done to reduce the risk. A more detailed look identified that over half the score came from the road alignment – being on a relatively tight double bend, therefore it was considered that the appropriate action was to mitigate the impact of the bend.
- 2.14 Action was taken to improve the quality of the warning signs to give drivers advance warning of the bend and to highlight the corner. Whilst the actions taken do not have a direct impact on the risk assessment outcome, Engineers consider that they are the appropriate mitigation for the risk.
- 2.15 The guidance specifically says that “In many cases the provision of a RRS can be considered as a ‘last resort’, on the grounds of cost, engineering difficulty or the visual impact of provision. As such the highways [sic – roads] authority may find it beneficial to consider whether other measures can be introduced that would assist in reducing the risk of vehicles leaving the carriageway or encountering a hazard when they leave the carriageway. Examples include:-
- Complete removal of the roadside hazard.
 - Relocation of the roadside hazard.
 - Replacement with passively safe street furniture.
 - Resurfacing or treatment of the carriageway to reduce the skid risk.
 - Speed control measures.
 - Re-alignment of the carriageway.
 - Installation of chevron and warning signs, including vehicle activated signs.
 - Installation of bollards.
 - Installation of passive roadside features as a visual cue to a hazard e.g. deformable reflective posts.”

It should be noted that this is the approach that has been taken to mitigate the risk level identified.

- 2.16 Another way of considering the matter is that the issue has been highlighted since the trees were removed. Risk is made up of two components: Likelihood and Impact. Looking at the change in the risk resulting from the removal of the trees there are two primary differences:-
- The likelihood of an incident has changed: The treeline used to demarcate the curve in the road giving drivers a visual guide as to the severity of the bend, there are now no clues for drivers to follow;
 - The impact of an incident has changed: In the event of a driver losing control a vehicle leaving the carriageway would potentially go down the steep slope rather than potentially hitting a tree.
- 2.17 In order to mitigate the likelihood of a vehicle leaving the road because of the lack of visual guide to the curve in the road, improved warning signs and verge marker posts were installed which now visually outline the curve of the road.

- 2.18 The impact has actually reduced as guidance shows that the impact of hitting a tree is greater than that of going down and embankment.
- 2.19 This approach supports the actions already taken and does not support the provision of a barrier.

3. LEGAL & FINANCIAL IMPLICATIONS

- 3.1 It is clear that a large portion of the community share concerns about the safety of this road. However, Council Officers have to consider the matter objectively, and in a way which enables them to assess the relative merits of RRS in the context of a limited budget for which there are numerous competing priorities.
- 3.2 The professional view, based on the process set out in Section 2 of this report, is that a safety barrier is not necessary on this road and that suitable works to mitigate the risk have already been carried out.
- 3.3 The guidance states that “road users bear responsibility for their own safety, and in general drivers have to ‘take the road as they find it’... The low risk of a roads authority being held liable in law is lessened further still if any departures from its own or national standards could be shown, via records, to have been adequately considered.” This does not detract from the Council’s role in promoting road safety and preventing accidents. The guidance further states:-

“Key requirements of this Guidance, that would be relevant during any form of legal challenge, are no different to those in TD19:

- i) The decision to provide or omit a RRS must be taken and recorded. It must not be allowed to happen by default;
- ii) The decision must be taken at the correct level in the organisation’ if necessary devolving responsibility to those who are best able to obtain and assess the evidence on which to base a decision;
- iii) The decision taker must not be afraid of doing nothing, if to do nothing is the proper conclusion of the assessment process outlined in this Guidance.”

- 3.4 If Council were to decide that a barrier was required, then a detailed assessment of how much barrier should be provided would be needed. This would need to involve community representatives to ensure that the barrier would resolve the community’s concerns as discussion with various parties could put the barrier length at anything from 100m to 600m to adequately cover all concerns. Based on current information, it is estimated that the agreed length of barrier would be in the region of 200m. Total project costs would be in the region of £40,000 (£30,000 construction costs, £3,000 site investigations and management, £7,000 risk). This would require a departure from standards to be approved, as there is insufficient width to install a barrier to the required design standard. Ground investigations would be required to ensure that the barrier post depth and spacing would be adequate to resist traffic impact loads and the findings of these investigations could increase the

estimated costs. Without a departure from standards being approved, the site would require substantial earthworks and land negotiations, and the costs would be well into the hundreds of thousands of pounds.

- 3.5 If Council were minded to agree that a barrier should be erected, for legal and operational reasons, Officers would need to understand the basis of this decision. This could be based on a view that a different assessment process should have been applied, or a different result obtained – if so, this is normally viewed as a matter of professional judgement on which Officers' advice is accepted and so the difference of opinion would have to be clearly articulated. Alternatively, it might be based on the public perception of risk, but public perception of risk alone cannot be used as a differentiating factor because it is subjective. This would mean that officers could not explain or legally defend why some RRS were provided and not others and so officers would strongly advise against this. Lastly, it might be based on some other objective basis which makes this case exceptional and which would allow Officers to differentiate this case from others. Again, this would have to be clearly articulated to allow officers to apply a consistent policy across Moray.
- 3.6 Without advance warning on what criteria or reason for exception is applied by Council to justify the installation of a RRS in this case, it would be difficult to assess the impact that such a decision would have in similar circumstances across the network. As such, consideration will need to be given to the implications of the decision in relation to this petition and potentially require the need for a policy, which would be subject to a further report.
- 3.7 To illustrate this point, Officers have used the risk assessment methodology to score all sites that have been highlighted by members of the community as potentially meriting a RRS. Looking purely at the 15 locations which also score "9" on the assessment and do not have any RRS, this would equate to 1.5km of barrier, with an estimated total cost of £325,000. These locations are purely ones which have been raised by members of the community and do not constitute a comprehensive audit of Moray's road network. The scale of such a comprehensive audit is outside the existing capacity of the team without specific instruction and resource allocation from Council.
- 3.8 If Council is minded to instruct such additional work, the next opportunity to consider the funding allocation for this will be when the carry forwards from 2016/17 are considered. This is likely to be in June 2017, depending on the committee timetable for that time. This follows on from the decision of the Council on 30 March 2016 (paras 7 and 10 of the minute refers) to limit the opportunities of increasing capital expenditure and only to consider the full capital plan (never a single capital project in isolation) and must include consideration of the wider affordability of the plan and the requirement to comply with the Prudential Code. This change to the Council's financial governance arrangements was agreed in light of the fact that the current range of council service provision is financially unsustainable.

4. **SUMMARY OF IMPLICATIONS**

(a) Moray 2023: A Plan for the Future and Moray Corporate Plan 2015/17

This report relates to matters of the council as Roads Authority and the Community Planning priority of road safety.

(b) Policy and Legal

Officers have been using national guidance. It is recommended that whatever decision is taken in relation to this petition, a clear policy position is established – if necessary through a further report.

The legal implications are set out in Section 3 of the report.

(c) Financial implications

There is a sum of £43,000 in the capital plan for road safety barriers, which is used for repair and renewal of existing barriers that are considered to have a high risk rating using the guidance. Any decision to install additional barriers will require additional unbudgeted capital allocation. Under the financial regulations, this cannot be considered in isolation and would require to be part of the report on the capital programme when capital carry forwards from 2016/17 are considered.

(d) Risk Implications

It is important that the Council fulfils its statutory duties as Roads Authority and towards road safety. The legal position is set out in Section 3 of the report. A decision not to install barriers at this location has the risk of negative publicity. A decision to install barriers without a clear policy position has the risk of challenge on the grounds of objectivity. There is also risk to the financial position of the Council in taking on significant additional financial burdens.

(e) Staffing Implications

There are no staffing implications, unless a comprehensive audit of Moray's roads in relation to RRS is required.

(f) Property

There are no property implications.

(g) Equalities

There are no equalities implications.

(h) Consultations

The Principal Accountant, Head of Legal Services, Democratic Services Manager and Equalities Officer have been consulted and their comments incorporated into this paper.

5. CONCLUSIONS

- 5.1 There is a clear concern from the community about the safety of this road, however the evidence does not support the need for a safety barrier.**
- 5.2 If a barrier were to be provided then there are other locations where barriers have been requested which could also be considered, at a total estimated cost of £325,000.**

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Background Papers: Petition for the erection of a safety barrier on the B9041 Dufftown to Keith Road; Transportation and Legal Services files