

5.10 Vehicle Travellers

5.10.1 Introduction

This section of the report addresses the impact of the proposed scheme on vehicle travellers. Firstly the section addresses their views from the road as they travel along, and secondly it addresses the predicted increase or decrease in driver stress levels as a result of the proposed road network and alignment.

5.10.2 Objectives

The objective at this stage is to undertake a broad assessment identifying the variations in views from the road, landscape character and quality between route options. The objective is also to establish the extent of stress drivers would experience due to frustration, fear of potential accidents and uncertainty relating to the route being followed.

5.10.3 Methodology

Generally at this stage assessment of views from the road will not be a significant factor, especially as the area is neither ecologically or visually sensitive, thus only a broad assessment of the potential views within the three route corridors has been made. Driver Stress is assessed in accordance with the requirements of DMRB 11.3.4.7 (Assessing Driver Stress), where new or improved alignments are assessed against a three point descriptive scale of driver stress (Low, Moderate and High).

5.10.4 Views from the Road

The three route corridors, would provide differing views near Toome, while the views near Castledawson would be very similar.

Near Toome the north corridor would traverse the unspoilt wetlands south of Lough Beg, with fine views across the water to the distant wooded shores and Church Island spire. The south corridor would have less appealing views of the industrial and residential developments to the rear of The Elk inn.

Towards Castledawson, all three corridors would provide views of the pastoral landscape with grazed fields and hedgerow. The north corridor would provide short-distance views to the outskirts of Castledawson.

By way of mitigation for all route options, the following issues should be considered:

- Landscape planning to be an integral part of the proposal to ensure sensitive detailed alignment development, reduction of visual impacts and creation / retention of key views to improve the driving experience;
- Retain important, mature tree features such as avenues, woodland and prominent clusters and single stands; and
- Signage to be located sensitively and ideally no gantries in rural areas.

5.10.5 Driver Stress Levels

Driver stress is defined for the purposes of an environmental assessment as the adverse mental and psychological effects experienced by a driver traversing a road network. Driver stress can be categorised into three levels: low, medium and high. They are caused by a number of categories, discomfort, annoyance, frustration or fear, culminating in physical and emotional tension that detracts from the value and safety of a journey. The extent of the stress experienced depends on the drivers' ability to cope with such situations. A

commuter will find busy rush hour traffic less stressful than a less experienced driver who may not know the route as well. Driver stress is caused by the three main factors:

- Frustration – a driver's inability to drive at a speed consistent with his or her wishes in relation to the general standard of the road;
- Fear – the presence of other vehicles, inadequate sight distances and the likelihood of pedestrians, especially children, stepping on to the road; and
- Route Uncertainty – inadequate signage.

Frustration is caused by the driver's inability to drive at their desired speed in comparison to the standard of road. The primary causes of these conditions are congestion (heavy traffic levels such as rush hour), road works causing delays, poor road standards and diversions and intersections. The quality of an intersection will affect the drivers stress levels, a poor intersection because of bad visibility is more likely to increase driver stress levels.

Fear is caused by a driver's lack of control in their surroundings. The presence of other drivers, inadequate sight distances and the potential for pedestrians (particularly children) to step onto the road all serve to increase driver stress levels. Bad weather, poor narrow roads, inadequate road surfacing and a high proportion of heavy goods vehicles on the road also contribute to the increasing stress levels. Poor road lighting, road improvement schemes and inadequate road signs for the driver's purposes increase the potential for confusion and increase levels of fear.

Available research suggests that a finely graded assessment of driver stress is not justified. As a result, levels of driver stress attributable to different sections of road are classed as high, moderate or low, in accordance with the guidance outlined in the DMRB. Given the preliminary stage of this project, and the broad route corridors under consideration, a curtailed assessment is considered appropriate for this stage.

Existing Situation

Given the existing traffic flows and speeds, and particularly the number, frequency and scale of the at-grade junctions, it is considered that driver stress levels are 'high' during peak flow periods on the existing A6 between Toome and Castledawson. Driver stress levels are considered 'moderate' on those roads connecting at the principal junctions on the existing network, due to the high volumes of traffic on the A6 and associated delays joining or crossing this strategic road.

Proposed Improvements

Construction of a high standard dual carriageway between Toome and Castledawson would result in improved safety and shorter more consistent journey times on this key strategic route. It is therefore considered that driver stress levels would be assessed as 'moderate' for the new dual carriageway and for the main connecting roads. Driver stress levels for the secondary minor road network is unlikely to be significantly affected and therefore would continue to be assessed as 'moderate'.