

Wicklow County Council

**N11/M11 Junction 4 to Junction 14  
Improvement Scheme**

Option Selection Report  
Appendix D8 - Human beings  
(Population)

265455-ARP-EGN-SWI-RP-LX-0005

C01 | 6 December 2021

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Job number 265455

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# 1 Human beings (Population)

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## 1.1 Introduction

This report details the environmental assessment of the Stage 2 Project Appraisal Matrix for the N11/M11 Scheme with respect to the Human beings constraints identified in **Section 4** (Human beings) of **Volume B**.

For the corridor assessment, the overall scheme has been split into two sections, i.e. the Northern Section and the Southern Section and the corridor options assessed are those discussed in **Chapter 8** of **Volume A**.

There are two zones associated with each corridor option referred to in the corridor assessment:

- The potential road “footprint” which is the potential landtake required to construct or improve the road; and
- The road “corridor” which is a 200m wide corridor centred around the alignment centre line for all off-line corridors. For the on-line Corridor Options 1 (North), 1 (South) and 5 (South), the width is variable, but is typically narrower than the width of the off-line corridors. The “footprint” sits inside the “corridor” boundary

A transport assessment forms part of this Stage 2 Project Appraisal Matrix. This assessment is included in **Section 1.5**. The transport scenarios that were assessed are as follows:

- Transport Scenario 5A – Parallel Links + Junction Rationalisation;
- Transport Scenario 5B – N11/M11 Additional Lane(s) & Junction Improvements; and
- Transport Scenario 4 – Bus Service Enhancements.

**Section 1.2** outlines the methodology that was used to carry out the assessment, and **Section 1.3** outlines the assessment criteria which were used. The Stage 2 assessment is presented in **Section 1.4** (Corridors) and **Section 1.5** (Transport Scenarios) and references are listed in **Section 1.6**.

## 1.2 Methodology

For the corridor options, impacts are assessed on the basis of how community facilities and general amenity are affected by the footprint and the wider corridor. The methodology is as described in **Appendix C8** (Human beings) of **Volume C**.

The assessment of each corridor option has been subjected to the same seven-point scale scoring proposed by the TII Project Appraisal Guidelines for National Roads (PAG) Unit 7.0 – Multi-Criteria Analysis<sup>1</sup> (hereafter referred to as the TII PAG).

For the Transport Scenarios, the assessment of 5A and 5B examines the impacts of the options on the functioning of the N11/M11. The impacts are described simply from north to south based on the criteria in **Section 1.3**. Data taken into account at this stage in the assessment includes:

- Maps of the corridors and drawings of the transport scenarios provided by the design team;
- Ordnance survey map #56, 1:50,000;
- Google Maps views including Google Streetview;
- Site visits at various times;
- Review of traffic data (AADTs) provided by the design team; and
- Review of public consultation responses.

The assessment considers the potential impacts that each option could present at a community level, rather than for individuals or identifiable properties, although impacts for individual businesses are discussed. Physical impacts on individual properties are addressed separately in **Appendix D11** (Material assets – non-agriculture) of **Volume D**, but this assessment does take into account the impact of possible demolitions or acquisitions where these could impact on the wellbeing of the residual community.

The significance of impacts described in the text relates to the assessment criteria and is informed by the definitions provided within the Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (EPA, draft August 2017)<sup>2</sup>. This in turn informs the scoring used according to the TII PAG<sup>1</sup>.

### 1.3 Assessment criteria

Five principal assessment criteria are used for the Human beings assessment:

- **General amenity.** This criterion is relevant to the corridor assessment principally as it affects residential quality of life or community wellbeing, or amenity and recreation, due to a combination of environmental effects (e.g. noise or visual) for which significance has been identified in respective chapters of the assessment.

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<sup>1</sup>Transport Infrastructure Ireland (TII) Project Appraisal Guidelines for National Roads Unit 7.0 - Multi-Criteria Analysis, 2016. Available from: <https://www.tiipublications.ie/library/PE-PAG-02031-01.pdf>

<sup>2</sup> Environmental Protection Agency (EPA), Guidelines on the Information to be Contained in Environmental Impact Assessment Reports, Draft 2017. Available from: <https://www.epa.ie/pubs/advice/ea/EPA%20EIAR%20Guidelines.pdf>

In addition, impacts can arise where the presence of a road adversely affects people's perception of community identity and belonging. This impact can arise from proximity to a road, or from the loss of a sense of neighbourhood identity due, for example, to a high proportion of local demolitions or losses of local services such as shops. There are links between general amenity and health or social inclusion given the importance of access to community facilities used by people, in particular sensitive subsets of the population such as older people, children and people with disabilities.

- **Journey characteristics.** This criterion takes account of journey patterns based on the nature of the road network and observed or projected journeys to urban destinations, workplaces and community facilities. Sub-criteria include journey time, journey time reliability, accessibility, and journey connectivity (the availability of connections between desired origins and destinations). These sub-criteria are assessed for all road users including private drivers, commercial drivers, public transport users, cyclists and pedestrians.
- **Journey amenity.** Relevant effects arise from the proximity to, volume of, or speed of traffic, as it affects the pleasantness, and perceived or actual safety, of pedestrians, cyclists, drivers and, if present, equestrians. This will also be affected by the facilities available for these road users (e.g. pavement footpaths, cycle paths), the separation of vehicular traffic from cyclists and pedestrians, the nature of any crossings/junctions to be negotiated, the proportion of Heavy Goods Vehicles (HGVs) and the location of public transport stops, including for school buses. For vulnerable road users, age and physical ability must be taken into account. Particular issues relevant to drivers include the separation of local traffic from through traffic, the ease of being able to join fast moving traffic, the exposure presented by road crossings or junctions, the legibility of the road network, i.e. being able to find one's way (including signage), and the inconvenience presented by traffic congestion.
- **Community severance.** This refers to the ability of people to access community facilities, workplaces, friends or neighbours, particularly as it affects sensitive receptors such as older people, children or people with disabilities. Physical severance can take the form of new severance, for example due to the insertion into the landscape of a new road or new road crossings, or it can take the form of relief from severance, for example from the provision of crossings facilities. Social severance can also occur where people feel contained without road boundaries affecting their sense of belonging or causing their social interaction with neighbours to diminish. Higher or lower traffic volumes can respectively affect both forms of severance.
- **Economic.** These impacts arise from changes in economic activity affecting local businesses or employment, either directly or indirectly. As well as impacts due to direct impacts on business premises, impacts can arise from changes in accessibility or associated changes in development opportunities for the local economy.

General amenity is largely affected by impacts on community facilities and therefore is addressed mainly within the corridor options analysis. The other criteria of journey characteristics, journey amenity, community severance and economic impacts are more relevant to the transport scenarios. However, there could be impacts due to community severance (positive or negative) arising from the physical presence of the road corridor (including traffic in general terms) and economic effects from direct impacts on commercial premises. Interactions with other disciplines such as Traffic, Material assets, Landscape and visual, and Noise and vibration, have also been taken into account for the assessment of both the corridor options and the transport scenarios.

## 1.4 Stage 2 Project Appraisal Matrix – corridor assessment

### 1.4.1 Northern Section

For both Corridor Option 1A (North) and 1B (North), the corridor footprint presents no distinct effect on the Little Bray Community Centre off Old Connaught View, or to an amenity green space immediately to the south, although this facility is right beside the corridor.

For Corridor Option 1A (North) an entire new Junction 7 (Bray South) is provided to the south of the existing location. A slight loss of passing trade is likely for the service station at the existing roundabout with Killarney Road. Both Corridor Option 1A (North) and Option 1B (North) pass beside Brennanstown Riding Centre. An impact on the buildings of this facility is avoided, but an economic impact is possible due to the direct impact of the junction on grazing land or on access.

For both options, existing direct private accesses to the N11/M11 will be replaced with alternative arrangements. This includes the access to Woodlands Academy which is severed by the northbound diverge from both Junction 7 (Bray South) options. In addition, there is an impact on the grounds of the Woodlands Academy for both corridor options, although this is more severe in the case of Corridor Option 1B (North). This prospective impact is of socio-economic relevance given that this is an educational facility, even though it is also a private business.

**Table 1.1** gives the preference ratings for the two options. There is potentially an economic impact on the service station under Corridor Option 1A (North) due to the transfer of some traffic from the Southern Cross Relief Road to Junction 7 (Bray South) via the new proposed R768 Link Road.

Table 1.1: Corridor assessment – Northern Section

Assessment Criteria	Corridor Option 1A (North)	Corridor Option 1B (North)
Economic	Moderately negative	Moderately negative
Amenity	Not significant or neutral	Minor of slightly negative

Assessment Criteria	Corridor Option 1A (North)	Corridor Option 1B (North)
Overall qualitative assessment	Minor or slightly negative	Minor or slightly negative
Score / Impact Level	3	3
Preference	Preferred	Least Preferred

## 1.4.2 Southern Section

### 1.4.2.1 Corridor Option 1 (South)

In the Southern Section, the corridor includes two residential properties (one unoccupied) at Kilmacanoge. At Glenview a car dealership and two residential properties are encircled by the corridor in common with Corridor Option 5 (South), but would not be impacted, except indirectly by construction effects. The same is true of the garden centre on the opposite side of the N11 whose boundary is partially contained within the corridor and for which alternative access is likely to be provided from the business' secondary entrance off Foxborough Lane. There are further impacts here also on the boundaries of private properties which are addressed by **Section 1.4.2 of Appendix D11 (Material Assets – non-agriculture) of Volume D**.

This option continues to run through the Glen of the Downs as at present. As such, it would have a continuing significant negative impact on amenity. Access to the existing car park would be closed, removing a significant hazard (and journey amenity impact), but alternative access and parking arrangements would be provided.

For both Corridor Option 1 (South) and Corridor Option 5 (South), access to Kilpedder from the N11 would be restricted to Junction 11 (Greystones / Kilpedder / Kilcoole) as the connection with the L5046 would be closed. This impact would be slight for most local destinations noting that the destination for most journeys would be northbound, but it would require a diversion of over 800m for some properties, and over 1km for an organic farm. Access from the L1042 (Seaview) would also be closed but facilitated through a link road to the R774. These road closures will impact on the accessibility of the shop and car dealership at this location.

Both Corridor Option 1 (South) and Corridor Option 5 (South) include part of the yard space at a removals and storage business at the R772 at Junction 13 (Newtownmountkenedy / Newcastle).

### 1.4.2.2 Corridor Option 2 (South)

Corridor Option 2 (South) commences at Glenview and moves off-line across Downs Hill on the west side of the Glen of the Downs, before returning to an on-line section at Junction 12 (Newtownmountkennedy / Roundwood). The area is rural, but there is light amenity use of forest tracks up Downs Hill commencing off Old Downs Road or at the summit of the L1236. The cut would also be visible from a Landscape Character Area stretching from the Sugarloaf mountain across to the east of the Little Sugarloaf. This is addressed specifically in **Appendix D5** (Landscape and visual) of **Volume D**, although the location is a familiar entry point to County Wicklow and contributes in this way to the significant amenity and tourism value of the wider landscape.

Although the cut would be visible, the off-line section would reduce the volume of traffic through the Glen of the Downs. However, because the off-line section only re-joins the N11 at Garden Village, the existing road through the Glen of the Downs would continue to carry traffic (~15,000 AADT) from Kilpedder, Delgany and parts of Greystones. Nevertheless, residual traffic through the Glen of the Downs would be less than at present and the lower traffic noise, combined with the reduced physical and psychological severance would have a positive impact on the use of the amenity. Access to the car park would also be considerably safer as the road would no longer represent the national route. This is not a differentiating factor however as access to the car park will be safer for the on-line corridor options also.

Relief from existing severance would occur in the vicinity of the Downs area of Delgany and in Kilpedder due to the transfer of much traffic to the off-line section. No new local road connections are proposed here as part of the scheme. The steep terrain would continue to present a physical severance barrier in itself for pedestrians and cyclists for all options in the Downs, although this could be mitigated by the inclusion of improved foot or cycle paths. At present, there is a steep dirt path up to the Downs from below the flyover which is in very poor condition and which cannot be used by less physically able people.

Corridor Option 2 (South) passes behind an oil distribution business and then across part of a long-established organic farm, shop and cafe which serves as both a business and an amenity. This impact is addressed specifically in **Appendix D10** (Material assets – agriculture) of **Volume D**. At Garden Village, 19 residential properties on the edge of the development fall into the corridor and could potentially amount to an impact at a community level. However, they are not included in the design footprint and so are assumed not to be directly impacted. Furthermore, this section of Corridor Option 2 (South) is slightly more distant from these properties than the current N11.

During the construction stage, the depth of the cut will require the removal of a significant volume of material. The direction of movement of construction HGVs is not determined at this stage, but any southbound movement would return to the N11 only to the south of The Downs and Kilpedder.

### 1.4.2.3 Corridor Option 5 (South)

The widening of this corridor option has no impacts of a socio-economic nature which differ to those of Corridor Option 1 (South) already discussed.

### 1.4.2.4 Corridor Option 6 (South)

Corridor Option 6 (South) commences at Glenview before moving off-line from the existing N11, re-joining the existing mainline between the existing Junction 10 (Delgany / Drummin) and Junction 11 (Greystones / Kilpedder / Kilcoole). The off-line section of Corridor Option 6 (South) includes a tunnel segment aimed at avoiding impacts on the Glen of the Downs. At Glenview two residential properties are encircled by the corridor (similar to Corridor Options 1 (South) and 5 (South)) but would not be impacted, except indirectly by construction effects. A car dealership is included in the footprint for this corridor option west of the N11 at Glenview. The tunnel entrance itself requires an alignment to the west of the existing road and would be visible from the north. This would have a visual impact on amenity, albeit one mitigated by the lower traffic noise, but also an indirect economic one in terms of the portal's visibility from the Glenview Hotel. This net environmental impact is addressed in **Appendix D5** (Landscape and visual) of **Volume D** and in **Appendix D7** (Noise and vibration) of **Volume D**.

Residual traffic through the Glen of the Downs would be much less than at present, but not insignificant given that the road will continue to carry a light level of traffic (~3,000 AADT) from Delgany and parts of Greystones (at least without traffic management measures elsewhere). Other traffic would be attracted to use the R774 as at present. Nevertheless, the much lower traffic noise, combined with the reduced physical and psychological severance would have a significant positive impact on use of the Glen of the Downs amenity. As with the Corridor Option 2 (South), access to the car park would also be considerably safer as the road would no longer represent the national route.

Physical severance would be reduced in The Downs but would persist in Kilpedder. There would be relief from both physical and social severance in the vicinity of the southern extension of Glen Road due to a proposed overbridge on the R762, and specifically for around 13 properties, although the steep terrain would still present a severance barrier in itself. This impact could, however, be mitigated further by the inclusion of improved pedestrian or cycle paths as with the other options.

The location of the southern portal to the tunnel would extend south of the Downs. This would mitigate local effects during the construction stage on the community in the Downs. Excavated material from the tunnel would be removed from the northern portal so the movement of construction vehicles would not impact on the Downs, but rather on receptors to the north with a temporary, if significant impact, on local residential amenity.

Table 1.2: Corridor assessment – Southern Section

Assessment Criteria	Corridor Option 1 (South)	Corridor Option 2 (South)	Corridor Option 5 (South)	Corridor Option 6 (South)
Construction stage				
Residential amenity and severance (temp construction)	Minor or slightly negative	Major or highly negative	Minor or slightly negative	Moderately negative
Operational stage				
Economic	Not significant or neutral	Moderately negative	Not significant or neutral	Minor or slightly negative
Amenity (Glen of the Downs/ Downs Hill)	Not significant or neutral	Moderately negative (on balance)	Not significant or neutral	Major or highly positive
Amenity (organic farm)	Nor significant or Neutral	Minor or slightly negative	Not significant or Neutral	Not significant or neutral
Residential amenity and Severance	Not significant or neutral	Moderately positive	Not significant or neutral	Minor or slightly positive
Qualitative Assessment	Not significant or neutral	Moderately negative	Not significant or neutral	Moderately positive
Score / Impact Level	4	2	4	5
Preference	Intermediate	Least preferred	Intermediate	Preferred

In making the comparisons above, Corridor Option 2 (South) is argued to be creating a new impact on Downs Hill. Under this option, traffic will be transferred from the Glen of the Downs and the amenity here will improve as a consequence. However, the existing on-line route will continue to carry a reasonably high volume of traffic from Kilpedder, Delgany and parts of Greystones, despite no longer being a national road. In the case of Corridor Option 1 (South) and Corridor Option 5 (South), the impact on the Glen of the Downs is an established one.

Both Corridor Option 2 (South) and, to a greater extent, Corridor Option 6 (South) remove a high proportion of traffic through the Glen of the Downs. The impact on the organic farm is both economic and affects its value as an amenity, with the latter assessed relative to the amenity impact on the Glen of the Downs and Downs Hill.

Corridor Option 6 (South) is preferred on balance given the greater proportion of traffic removed through Glen of the Downs and the avoidance of new impacts on Downs Hill associated with Corridor Option 2 (South).

## 1.5 Stage 2 Project Appraisal Matrix – transport assessment

Refer to **Chapter 7 of Volume A** for full details on the proposed transport scenarios. To provide some further explanation of the significance levels assigned to scenarios in this transport assessment, the relative number of people or users likely to be affected by each solution is indicated by the magnitude defined in brackets in Table 1.3, namely, low magnitude, moderate magnitude and high magnitude. The term ‘magnitude’ is coming from the EPA Guidelines<sup>2</sup>.

### 1.5.1 Transport Scenario 5A

There are several key elements which distinguish the relative assessment of Transport Scenario 5A from Transport Scenario 5B. The former removes access to the mainline from both the Junction 5 (Bray North) northbound diverge and southbound merge and Junction 6 (Bray / Fassaroe) and replaces this mainline access with a network of parallel service roads that is wider than Transport Scenario 5B and which caters for local trips.

The two Junction 7 (Bray South) options for Corridor Option 1A (North) and Corridor Option 1B (North) are applicable to either Transport Scenario 5A or Transport Scenario 5B.

The existing southbound merge to the M11 would be closed at Junction 5 (Bray North) under Transport Scenario 5A and southbound journeys would instead continue via a two-way parallel road on the western side of the N11 to Old Connaught Avenue and Fassaroe.

This would have the impact of transferring approximately 22,000 vehicles from the mainline N11, easing traffic flow and improving journey amenity. The availability of access to Old Connaught Avenue from the north via the parallel service road would provide for positive journey amenity in that it would allow local residents to avoid congestion at the roundabout between the southbound diverge and Dublin Road and at the signalised junction between Old Connaught Avenue and Dublin Road in Bray. The inclusion of a roundabout at the top of the parallel road from the south would slightly enhance driver journey amenity, but have a mixed effect for pedestrian crossings, including a negative impact for pedestrian (including school) journeys on the north side of Old Connaught Avenue for which mitigation in the form of a signalised crossing would be recommended. Traffic continuing southbound on the parallel road would need to continue to Junction 6 (Bray/Fassaroe) to join a one-way southbound parallel road on the eastern side of the N11. The connections to the M11 at this location would be closed, but access is facilitated by the parallel roads without socio-economic impact, but for the positive impact of refuse wagons from the depot here being accommodated by the parallel road rather than needing to join the mainline M11. A one-way northbound parallel road terminates at the existing roundabout for the R918 at this point, while the one-way southbound parallel road continues to the Bray Southern Cross Roundabout.

The two parallel roads from this point southwards are shared by Transport Scenario 5B. They would have a positive impact on journey amenity and safety by collecting local traffic that currently finds its way onto the mainline N11/M11.

Significant positive impacts would be realised in line with the scheme's objectives to provide safer provision for active travel as both pedestrians and cyclists who are not facilitated by the current road arrangements, but who would be able to use these parallel roads. The two existing pedestrian bridges at Kilbride and Kilmacanoge would be retained. The southbound parallel service road would serve traffic using Upper Dargle Road, Dargle Lane, and Herbert Road. There is a distinct positive impact for journey amenity and safety for traffic accessing Dargle Lane and Herbert Road compared with the existing access arrangement direct from the N11. The positive impact applies also to access to Kilbride Church and to the car dealership and lawnmower shop on Dargle Lane. No significant loss of passing trade would be expected for either of the commercial businesses here due to the safer access of the premises and the continued visibility from the N11. The northbound parallel road on the west side of the N11 would commence at Junction 7 (Bray South) and serve Kilcrouney Lane, the R117, the R918 and Old Connaught Avenue. There is a safety gain at the entrance to the R117 due to the parallel road compared with the current tight entrance which can require rapid deceleration when leaving the N11.

The parallel roads terminate at Junction 7 (Bray South) for which either junction layout applies to Transport Scenario 5A and Transport Scenario 5B. A one-way parallel road continues south to Kilmacanoge. This will connect to the one-way parallel road that is currently being constructed on the eastern side of the existing N11 at Kilmacanoge which will provide for a significant improvement in access and therefore journey amenity to a cul-de-sac, for roadside businesses, and for Bohilla Lane.

The one-way northbound parallel road to Junction 7 (Bray South) will be a new feature that would provide journey access benefits and improved journey amenity for Holyglen Road, Avoca and other businesses on the west side of the N11. A slight impact is possible on passing trade for some businesses, although this would be more significant in the case of the service stations which would be entirely dependent on a lower volume of traffic using the parallel roads.

Significant severance would remain at Kilmacanoge. Social severance would be extended by the greater width of the corridor but would be lessened for both options in comparison with the existing arrangement by the presence of slower moving traffic on the parallel roads adjacent to properties. Access to Kilmacanoge from the N11, including to a school, playing fields, church and pub/restaurant, as well as to the R755, would be via the southbound parallel road from Junction 7 (Bray South) and not from the mainline.

The southbound merge of Junction 8 (Kilmacanoge / Roundwood) would be closed under Transport Scenario 5A. Traffic travelling south from Kilmacanoge would need to divert northwards to Junction 7 (Bray South) to gain access to the southbound lane of the N11. A reduction in traffic volumes on the R755 is predicted which would have a positive impact on neighbourhood severance, including potentially for Kilmacanoge National School. The northbound slip from

the N11 under this option would be closed and this could encourage some use of the narrow Quill Lane from Junction 9 (Glenview) by local traffic.

If so, the volume of traffic would be light, but it would have an impact on journey amenity, including pedestrians and cyclists, given the narrow width and winding nature of the minor road.

Local access arrangements at Junction 9 (Glenview) are retained, including for the Glenview Hotel, local residences and businesses. At the Downs, the restricted left-in left-out southbound access at Junction 10 (Delgany / Drummin) would be closed along with both the northbound slip from the R762 and access onto Drummin Lane. This will provide a gain to journey amenity given the proximity of these exits where they join the N11 (although traffic is very light on Drummin Lane). However, both northbound and southbound journeys from the R762 from Delgany would need to travel south over an overbridge to join the N11/M11 at Junction 11 (Greystones / Kilpedder / Kilcoole). This would complement the positive effect on journey amenity for users of the N11/M11 of the removal of much other road access to the mainline, but present a significant detour and negative impact for local northbound journeys and encourage some higher use of alternative roads.

## 1.5.2 Transport Scenario 5B

Transport Scenario 5B has a less extensive network of parallel service roads than Transport Scenario 5A. An extra lane is added between Junction 5 (Bray North) and Junction 7 (Bray South) to increase on-line capacity such that Transport Scenario 5B would have three lanes from the N11/M11 - M50 tie-in at Junction 4 (City Centre/Dún Laoghaire) to Junction 7 (Bray South). The two Junction 7 (Bray South) options for Corridor Option 1A (North) and Corridor Option 1B (North) are applicable to either transport scenario.

Overall, Transport Scenario 5B includes capacity improvements comprising additional third lanes on the existing N11/M11 between Junction 4 (City Centre/Dún Laoghaire) and Junction 7 (Bray South) with these lanes being an alternative to the use of parallel service roads between Junction 5 (Bray North) and Junction 6 (Bray/Fassaroe) in Transport Scenario 5A.

The impact for the central section between Junction 6 (Bray/Fassaroe) and Junction 7 (Bray South) is as for Transport Scenario 5A in that there would be a one-way southbound parallel road between the vicinity of Dargle Lane and Junction 7 (Bray South) and a one-way northbound parallel road between Junction 7 (Bray South) and Junction 6 (Bray/Fassaroe). In line with the scheme's objectives to provide safer provision for active travel, pedestrians and cyclists would be able to make use of the parallel lanes, but only where these occur between Junction 6 (Bray/Fassaroe) and Junction 7 (Bray South). The two existing pedestrian bridges at Kilbride and Kilmacanoge would be retained. The parallel road between the vicinity of Dargle Lane and Junction 7 (Bray South) would have a positive impact on journey amenity and safety by collecting local traffic from this lane, from Herbert Road and Kilbride Church.

The parallel roads terminate at Junction 7 (Bray South) for which the junction layout for either Corridor Option 1A (North) or 1B (North) is applicable for Transport Scenario 5B as with Transport Scenario 5A.

A one-way parallel road would run south from Junction 7 (Bray South) to Kilmacanoge while a one-way northbound parallel road would run from Kilmacanoge to the existing accesses at Glencormack and Avoca. Southbound journeys onto the N11 from Kilmacanoge would still be possible from Junction 8 (Kilmacanoge / Roundwood). Access would also be possible northbound from the N11. In other respects, comments on social severance and access to community facilities are as for Transport Scenario 5A.

At the Downs, northbound access from the R762 to the N11 would be retained, but the smaller Drummin Road access would be closed, reducing the negative effect of having two access points so close.

Table 1.3: Traffic management scenario assessment

Assessment Criteria	Transport Scenario 5A	Transport Scenario 5B
Journey characteristics to Old Connaught	Moderately positive (low magnitude)	Not significant or neutral
Journey amenity Old Connaught (non-vehicle)	Minor or slightly negative (moderate magnitude)	Not significant or neutral
Journey amenity Fassaroe	Minor or slightly positive (low magnitude)	Not significant or neutral (high magnitude)
Journey characteristics and amenity vicinity Herbert Road	Major or highly positive x 3 (high magnitude)	Major or highly positive x3 (high magnitude)
Economic Dargle Lane	Imperceptible (low magnitude)	Imperceptible (low magnitude)
Journey amenity/safety Entrance R117	Minor or slightly positive (moderate magnitude)	Minor or slightly positive (moderate magnitude)
Journey amenity and access Kilmacanoge	Major or highly positive x 2 (north/south) (high magnitude)	Major positive or highly x 2 (north/south) (high magnitude)
Journey characteristics Kilmacanoge	Moderately negative (high magnitude)	Minor or slightly negative (high magnitude)
Economic Kilmacanoge	Minor or slightly negative (moderate magnitude)	Neutral-Minor or slightly negative
Journey amenity Drummin Lane	Minor or slightly positive	Minor or slightly positive
Journey characteristics R762 northbound	Moderately negative	Not significant or neutral
<b>Qualitative Assessment</b>	<b>Moderately positive</b>	<b>Minor or slightly positive</b>

Assessment Criteria	Transport Scenario 5A	Transport Scenario 5B
Preference	Preferred	Least preferred

On balance, Transport Scenario 5A is preferred as the larger network of parallel access roads has the effect of separating local traffic from through traffic and of reducing the frequency of junction connection with the mainline N11/M11.

It therefore improves the journey amenity for both local journeys and through journeys, although it will take time for people to adjust to the new arrangements. There are, however, some locations where Transport Scenario 5A will have a negative impact on journey characteristics.

### 1.5.3 Transport Scenario 4

In advance of estimates of likely passenger numbers and the impact on residual traffic on the N11/M11, it is not possible to arrive at an assessment of the full benefits of this scenario relative to the others. There would also be implications for traffic movement given the narrow corridor. However, a public transport scenario would have a significant positive impact in facilitating the movement of people without access to a private car.

## 1.6 References

Advice Notes for Preparing Environmental Impact Statements (EPA draft September 2015)

Draft Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (EPA, draft August 2017)

Environmental Impact Assessment of Projects – Guidance on the preparation of the Environmental Impact Assessment Report (European Commission 2017)

Guidelines for treatment of tourism in an Environmental Impact Statement (Fáilte Ireland, 2011)

Project Appraisal Guidelines for National Roads Unit 7.0 – Multi Criteria Analysis. (TII 2016)