

**Milltimber Brae Route (including Stonehaven Link) as announced in DECEMBER 2005**

| Proposal Details  |  |   |  |                |
|---|--|---|--|----------------|
| Name and address of authority or organisation promoting the proposal: |  | Scottish Executive                                |  |                |
| Proposal Name   | Milltimber Brae Route (including Stonehaven Link)  | Name of Planner                                   | AWPR Managing Agent                      |                |
| Proposal Description  | Dual two lane carriageway Special Road with grade separated junctions forming a key component of the Modern Transport System as identified in the MTS STAG Part 1. Additional fast link wide single carriageway with overtaking provision between Stonehaven and Maryculter. | Estimated Total Public Sector Funding Requirement | Capital Cost                             | £295m to £395m |
|   |  |   | Annual revenue support                   | -              |
|   |  |   | Present Value of costs                   | -              |
| Funding sought from   | The funding arrangements between the project partners (Scottish Executive, Aberdeen City Council, Aberdeenshire Council) have yet to be confirmed.   | Amount of Application                             | £295m to £395m (Predicted Out-turn Cost) |                |

| <b>Background Information</b> |  |
|-------------------------------|--|
| Geographic Context            | Aberdeen is the urban centre of North-East Scotland. The existing trunk road network runs through Aberdeen, with the local road network entering the city radially. The existing highway infrastructure in many areas is significantly constrained, with the trunk road bridge across the River Dee being unable to accommodate heavy goods vehicles and the trunk road through Aberdeen having a number of traffic signal controlled junctions and at grade roundabouts. In addition, over much of its length the trunk road is on a steep vertical alignment and is closely bounded by a mix of residential, leisure and commercial premises. These various constraints result in diversion by drivers onto local roads, causing further congestion across the network. The study area straddles the Aberdeenshire/Aberdeen City Council boundary and comprises primarily of Aberdeen's rural hinterland although it passes close to or through several built up areas within the city boundaries. The study area crosses the River Dee Special Area of Conservation and River Don (District Wildlife Site). The study area passes close to Aberdeen Airport and crosses the Aberdeen to Inverness railway line. |
| Social Context                | The study area comprises farmland and urban areas which are primarily industrial or residential. The radial routes which the study area crosses are primarily commuter routes connecting the urban areas to the west of the city centre and west of Aberdeen with the city. The main trunk roads are the A90 which runs from north to south and the A96 which heads west.  |
| Economic Context              | Congestion within Aberdeen has become of increasing concern, in terms of both environmental impacts associated with congested traffic and with the economic impact on areas north of Aberdeen. Economic activity within the study area is primarily agricultural. There are industrial estates at Tullos and Altens in the south, Westhill and Kirkhill on the western fringes and Bridge of Don and Blackdog in the north. Aberdeen Airport is located adjacent to Kirkhill Industrial Estate at Dyce in the west of the city. In built up areas, the main economic activity is that associated with residential areas, such as shops, restaurants and hotels. Economic activity is adversely affected due to complex journeys and increasing and unreliable journey times through the city. This affects both Aberdeen City and Aberdeenshire.   |

**Milltimber Brae Route (including Stonehaven Link) as announced in DECEMBER 2005**

| <b>Planning Objectives</b>  |  |
|---|--|
| Objective   | Performance against planning objective   |
| The planning objectives are detailed in the MTS and WPR STAG Part 1 Assessments. The AWPR objectives are grouped into the five Government Objectives and are detailed at the end of this Assessment Summary. These objectives are grouped into three categories below for assessment as planning objectives |  |
| Acceptability and Participation<br>(Objective AP1)  | Public consultation was held in March/April 2005. The results of the consultation are contained in a separate public consultation report. Although not presented as a specific route option at the consultations, the route is a combination of the Milltimber Brae Route with an additional single carriageway fast link between Stonehaven and Maryculter. The fast link generally follows the line of the Stonehaven leg of the Peterculter/Stonehaven Route.   |
| Deliverability<br>(Objective D1)  | Refer to the Implementability Appraisal and Government Objectives for Transport in this STAG Assessment.   |
| Reduce Congestion<br>(Objectives EV3, EV4, EA4, IT3, IT4, IT5, AB4)   | The Milltimber Brae Route (including Stonehaven Link) attracts good traffic flows which show some variation but in general are comparable with the Pitfodells and Murtle options. South of the A93 the traffic divides to travel to/from either Charleston or Stonehaven. Although it is further westwards, the inclusion of the Stonehaven Link generally results in a similar level of relief to the city as the Pitfodells and Murtle options. The Stonehaven Link also provides relief to the A90 between Stonehaven and Charleston.   |
| Improve Economic Activity<br>(Objectives EA3, EA4, IL3, IL4, IP2)   | For journeys between Charleston and Blackdog, and any intermediate points, the route provides a longer connection between proposed rail freight transfer depots, industrial estates and businesses, Park and Ride car parks, road and air links, than the Pitfodells and Murtle options, with a lower reduction in journey times and costs. However, the addition of the fast link from Stonehaven provides a more direct link to the south, which results in additional benefit for strategic traffic wishing to bypass Aberdeen. The route will facilitate the reallocation of road space to more appropriate priority forms of transport and integration with other public transport measures proposed in the MTS, with the residual volume of traffic on the existing roads being generally similar to the Pitfodells and Murtle options. The route provides an attractive link from residential areas on the periphery of Aberdeen and Aberdeenshire to the industrial estates and main employment areas on the periphery of Aberdeen and Aberdeenshire, reducing the need to travel through the city centre. |

**Milltimber Brae Route (including Stonehaven Link) as announced in DECEMBER 2005**

|   |  |
|---|--|
| <p>Enhance Safety<br/>(SA2, SA3)</p>                    | <p>A consistent, high quality route is provided on the AWPR with high capacity junctions to maximise user safety. The fast link to Stonehaven is a wide single carriageway with overtaking provision and as such has a higher accident risk than the other sections of the AWPR, and overall this option provides the greatest reduction in accidents.</p> |
| <p>Rationale for selection or rejection of proposal</p> | <p><i>Refer to separate Consolidation Assessment Report available from project website.</i></p>  |

| Implementability Appraisal |  |
|----------------------------|--|
| <p>Technical</p>           | <p><b>The scheme length and earthworks information are provided for the entire route. The other information is provided for the Southern and Western Section where options are being considered.</b></p> <p><b>Scheme Length</b><br/>33.4km plus 13km fast link between Stonehaven and Maryculter</p> <p><b>Cross Section</b></p> <p>The section of the route between Charleston and Blackdog is proposed as dual two lane carriageway. The fast link between Stonehaven and Maryculter is proposed as wide single carriageway with overtaking provision.</p> <p><b>Junctions (Southern Section)</b><br/>All directions at A90 at Stonehaven<br/>All directions at Charleston<br/>All directions at Maryculter<br/>All directions at A93<br/>All directions at A944</p> <p>The precise location of the Maryculter junction will be determined taking account of environmental and engineering constraints in the local area. This will include maintaining an appropriate separation from the proposed A93 junction.</p> <p><b>Local Routes</b><br/>Passes above B9077, above former Deeside Railway Line and below A93, and above A944.</p> <p><b>Earthworks</b><br/>Likely import of 2,600,000m<sup>3</sup> of acceptable material required.<br/>Embankments at Hare Moss (c.15m), Craingles Wood (c.15m), Milltimber Brae (c.15m), Foggieton (c15m) and North Westfield (c.30m).<br/>Excavation expected at Coneyhatch (c.17m), Hill of Blairs (c.20m), Hill of Milltimber (c.17m), Upper Beanshill (c.25m) and Craiglug (c.15m).<br/>The main technical/financial risk associated with this route is related to earthworks costs as no ground investigation information is available for the section between Stonehaven and Kingswells. It is estimated that approximately 5,400,000m<sup>3</sup> of landscape fill requires to be disposed of or reused within the works.</p> |

**Milltimber Brae Route (including Stonehaven Link) as announced in DECEMBER 2005**

| Implementability Appraisal |   |
|----------------------------|---|
|                            | <p><b>Structures</b><br/>Viaduct crossing of River Dee, of total length approximately 310m with main span of approximately 110m. Crossing is approximately 16m above flood plain level. Former Deeside Railway maintained by underpass (c.95m). Bridge over Aberdeen-Dundee Railway Line at Stonehaven. The key technical challenge will be the design and construction of the River Dee crossing in order to avoid impact on the River Dee SAC. No temporary or permanent supports are permitted within the SAC boundary.</p> <p>The route is a reasonably conventional greenfield route interfacing with key existing roads at junctions and other roads with access maintained over or under the route, where possible, with bridges. Few departures from standard are anticipated although there are likely to be steep gradients approaching the A93 from the north.</p> <p>There is a risk relating to programme as the route has not been developed to the same level as the Murtle Route. It is anticipated that this will add at least one year to the programme with the earliest completion date being 2011. Any delay beyond this date will affect the scheme cost estimate due to additional construction inflation.</p> |
| Operational                | Operation of the route will be undertaken through a PPP concession company and thereafter through the Scottish Executive term contract for management of the trunk road network.  |
| Financial                  | The scheme is likely to be procured as a Public Private Partnership (eg DBFO) project. Funding of the capital costs will be split between the funding partners Scottish Executive, Aberdeen City Council and Aberdeenshire Council. The funding arrangements between the project partners have yet to be confirmed.   |
| Public                     | Public consultation was held in March/April 2005. The results of the consultation are contained in a separate public consultation report. Although not presented as a specific route option at the consultations, the route is a combination of the Milltimber Brae Route with an additional wide single carriageway fast link with overtaking provision between Stonehaven and Maryculter. The fast link generally follows the line of the Stonehaven leg of the Peterculter/Stonehaven Route as presented at the public consultation.   |

| <b>Government's Objectives for Transport</b>   |   |  |
|--|---|--|
| <p>The AWPR objectives are detailed overleaf. These are also the objectives referred to in the Planning Objectives Assessment. Please note that the environmental assessment covers the southern and western corridors only, except for property counts which relate to the entire scheme. The environmental assessment is split into categories included in DMRB Volume 11. In addition, separate assessments describing the cumulative impacts on the River Dee SAC and a general assessment of impacts on special needs facilities are included. The individual categories do not contain reference to these impacts to avoid double counting of impacts. The assessment indicates the potential for impacts or benefits prior to mitigation.</p> |   |  |
| <b>Objective</b>   | <b>Assessment Summary</b>   | <b>Supporting Information</b>  |
| Environment  | <p>River Dee SAC<br/><b>Potential for major cost or negative impact</b></p> | <p>Crosses the Dee SAC with qualifying species including salmon, otters and the endangered freshwater pearl mussel.</p> <p>Crossing over the River Dee SAC upstream of Inchgarth reservoir with separate bridges for the main carriageway and slip roads. Potential impacts on tributaries, namely Crynoch Burn which is within the SAC boundary, and Shanna Burn, Burn of Ardoe and Milltimber Burn.</p> <p>Increased surface water run-off due to impermeable road surface may result in detrimental impacts to water quality/quantity.</p> <p>Potential for groundwater impacts through run off or surface water discharges.</p> <p>Potential for pollution to reach the SAC as a result of runoff from accidental spills.</p> <p>Potential impacts through noise and vibration, increased sediment flow and potential pollution associated with construction activities.</p> <p>Mitigation will include adopting measures and design solutions to control noise and vibration and sediment run off during construction; and ecological mitigation and sustainable drainage systems during operation.</p> |

**Milltimber Brae Route (including Stonehaven Link) as announced in DECEMBER 2005**

| <b>Government's Objectives for Transport</b>   |  |   |
|--|--|---|
| <p>The AWPR objectives are detailed overleaf. These are also the objectives referred to in the Planning Objectives Assessment. Please note that the environmental assessment covers the southern and western corridors only, except for property counts which relate to the entire scheme. The environmental assessment is split into categories included in DMRB Volume 11. In addition, separate assessments describing the cumulative impacts on the River Dee SAC and a general assessment of impacts on special needs facilities are included. The individual categories do not contain reference to these impacts to avoid double counting of impacts. The assessment indicates the potential for impacts or benefits prior to mitigation.</p> |  |   |
| <b>Objective</b>   | <b>Assessment Summary</b>  | <b>Supporting Information</b>   |
|  | <p>Special Needs Residential Facilities<br/><b>Potential for major cost or negative impact</b></p> | <p>Camphill Estate residential facility for children 230m west of the route at Milltimber Brae. There are approximately 60 pupils at Milltimber. Route is elevated approximately 10m high located immediately east of Milltimber Brae. Potential impacts due to noise and vibration, visual impacts, air quality and during construction.</p> |
|  | <p>Land Use (property impacts)<br/><b>Potential for major cost or negative impact</b></p>          | <p>36 properties require demolition including 18 at Milltimber. Close proximity to Storybook Glen, including crossing of the main access. Approx 100m from the International School. Close proximity to Kippie Lodge. Close proximity to urban areas. Impacts on agriculture along the length of the route.</p>                               |



| <b>Government's Objectives for Transport</b>   |  |   |
|--|--|---|
| <p>The AWPR objectives are detailed overleaf. These are also the objectives referred to in the Planning Objectives Assessment. Please note that the environmental assessment covers the southern and western corridors only, except for property counts which relate to the entire scheme. The environmental assessment is split into categories included in DMRB Volume 11. In addition, separate assessments describing the cumulative impacts on the River Dee SAC and a general assessment of impacts on special needs facilities are included. The individual categories do not contain reference to these impacts to avoid double counting of impacts. The assessment indicates the potential for impacts or benefits prior to mitigation.</p> |  |   |
| <b>Objective</b>   | <b>Assessment Summary</b>  | <b>Supporting Information</b>   |
|  | <p>Noise and Vibration<br/><b>Potential for moderate cost or negative impact</b></p> | <p>During operation, traffic movement along the route would result in an increase in traffic noise to properties. This has been estimated as:</p> <ul style="list-style-type: none"> <li>• 49 properties within 50m</li> <li>• 65 properties within 100m</li> <li>• 200 properties within 200m</li> <li>• 307 properties within 300m</li> </ul> <p>Sensitive receptors include the International School. (360 Pupils)</p> <p>Noise reductions along Anderson Drive and other current commuter routes and city streets due to reduced traffic volumes.</p> <p>Mitigation such as low noise surfacing, bunds and noise barriers will be employed where appropriate.</p> <p>Please also refer to the Special Needs Residential Facilities Section.</p> |
|  | <p>Air Quality<br/><b>Potential for minor cost or negative impact</b></p>            | <p>Potential for localised air quality impacts for some properties along the route, once operational.</p> <p>Potential for localised air quality improvements within the city's designated Air Quality Management Zone and along Anderson Drive and other current commuter routes.</p> <p>Please also refer to the Special Needs Residential Facilities Section.</p>  |

| <b>Government's Objectives for Transport</b>   |   |   |
|--|---|---|
| <p>The AWPR objectives are detailed overleaf. These are also the objectives referred to in the Planning Objectives Assessment. Please note that the environmental assessment covers the southern and western corridors only, except for property counts which relate to the entire scheme. The environmental assessment is split into categories included in DMRB Volume 11. In addition, separate assessments describing the cumulative impacts on the River Dee SAC and a general assessment of impacts on special needs facilities are included. The individual categories do not contain reference to these impacts to avoid double counting of impacts. The assessment indicates the potential for impacts or benefits prior to mitigation.</p> |   |   |
| <b>Objective</b>   | <b>Assessment Summary</b>   | <b>Supporting Information</b>   |
|  | <p>Water Quality, Drainage and Flood defence<br/><b>Potential for major cost or negative impact</b></p> | <p>Potential impacts on Megray Burn, Burn of Muchalls, Back Burn, Burn of Monquich, Cairnie Burn, Silver Burn, and numerous field drains.</p> <p>Potential impacts on Red Moss (SAC).</p> <p>Increased surface water run-off due to impermeable road surface may result in detrimental impacts to water quality/quantity.</p> <p>Soil compaction, realignment of field drains and ditches, culverting of burns and other construction works may potentially affect local drainage systems.</p> <p>Potential for groundwater impacts through soakaways, disturbance of contaminated land or surface water discharges.</p> <p>Potential for pollution to reach local waterways as a result of runoff from accidental spills.</p> <p>Run-off from road drainage may reach local waterways and may result in detrimental impacts to water quality/quantity.</p> <p>Proposed crossings for all affected watercourses may result in changes to local water quantity/flows.</p> <p>Mitigation such as sustainable drainage systems will be employed.</p> |

| Government's Objectives for Transport  |  |  |
|--|--|--|
| <p>The AWPR objectives are detailed overleaf. These are also the objectives referred to in the Planning Objectives Assessment. Please note that the environmental assessment covers the southern and western corridors only, except for property counts which relate to the entire scheme. The environmental assessment is split into categories included in DMRB Volume 11. In addition, separate assessments describing the cumulative impacts on the River Dee SAC and a general assessment of impacts on special needs facilities are included. The individual categories do not contain reference to these impacts to avoid double counting of impacts. The assessment indicates the potential for impacts or benefits prior to mitigation.</p> |  |  |
| Objective  | Assessment Summary   | Supporting Information   |
|  | <p>Disruption Due to Construction<br/><b>Potential for major cost or negative impact</b></p> | <p>Potential for temporary localised minor decreases in air quality due to dust, plant and equipment during construction.</p> <p>Potential for temporary localised increases in noise due to plant, equipment and works during construction.</p> <p>Short term potential significant adverse impact on North Deeside Road corridor.</p> <p>During construction DMRB recognises that impacts are greatest for properties within 100m of the works. This has been estimated as:</p> <ul style="list-style-type: none"> <li>• 49 properties within 50m</li> <li>• 65 properties within 100m</li> </ul> <p>Construction of bridge and smaller proposed crossings could result in short term impact through increased sediment flow and potential pollution associated with construction activities.</p> <p>Short term impacts on landscape and visual amenity during construction.</p> <p>Mitigation will include adopting measures and design solutions to control noise, vibration and sediment run off during construction.</p> <p>Please also refer to the Special Needs Residential Facilities Section.</p> |

| <b>Government's Objectives for Transport</b>   |  |  |
|--|--|--|
| <p>The AWPR objectives are detailed overleaf. These are also the objectives referred to in the Planning Objectives Assessment. Please note that the environmental assessment covers the southern and western corridors only, except for property counts which relate to the entire scheme. The environmental assessment is split into categories included in DMRB Volume 11. In addition, separate assessments describing the cumulative impacts on the River Dee SAC and a general assessment of impacts on special needs facilities are included. The individual categories do not contain reference to these impacts to avoid double counting of impacts. The assessment indicates the potential for impacts or benefits prior to mitigation.</p> |  |  |
| <b>Objective</b>   | <b>Assessment Summary</b>  | <b>Supporting Information</b>  |
|  | <p>Biodiversity<br/><b>Potential for major cost or negative impact</b></p> | <p>Skirts Megray ancient woodland and Limpet Wood which will be affected (minor). Mitigation could be provided to reduce this impact.</p> <p>Red Moss (SAC) falls within the route corridor which may affect the hydrological regime and result in direct habitat loss (major). It may not be possible to fully mitigate this impact.</p> <p>Route severs connection between two large areas of ancient woodland (total 170ha), Craingles Wood and Cleanhill Wood, resulting in habitat loss and profound habitat fragmentation (major). Severe habitat fragmentation and the loss of mature woodland will not be able to be fully mitigated.</p> <p>Crosses over Deeside Railway Line DWS (moderate). Mitigation could be provided to reduce this impact.</p> <p>Route would pass along western edge of long-established woodland north of Milltimber (moderate). Mitigation could be provided to reduce this impact.</p> <p>Skirts southern edge of Hare Moss for 100m which could result in the alteration of the hydrogeological regime and thus the vegetation supported. (moderate). Mitigation could be provided to reduce this impact.</p> |

| <b>Government's Objectives for Transport</b>   |  |   |
|--|--|---|
| <p>The AWPR objectives are detailed overleaf. These are also the objectives referred to in the Planning Objectives Assessment. Please note that the environmental assessment covers the southern and western corridors only, except for property counts which relate to the entire scheme. The environmental assessment is split into categories included in DMRB Volume 11. In addition, separate assessments describing the cumulative impacts on the River Dee SAC and a general assessment of impacts on special needs facilities are included. The individual categories do not contain reference to these impacts to avoid double counting of impacts. The assessment indicates the potential for impacts or benefits prior to mitigation.</p> |  |   |
| <b>Objective</b>   | <b>Assessment Summary</b>  | <b>Supporting Information</b>   |
|  | <p>Visual Amenity and Landscape<br/><b>Potential for major cost or negative impact</b></p> | <p>Construction within a landscape which has a generally high sensitivity and quality.</p> <p>Traverses through Area of Landscape Significance (in Aberdeenshire Local Plan) for approximately 1.4km.</p> <p>Approximately 33km (72%) of the route lies within Greenbelt.</p> <p>Please also refer to the Special Needs Residential Facilities Section.</p> |

**Government's Objectives for Transport**

The AWPR objectives are detailed overleaf. These are also the objectives referred to in the Planning Objectives Assessment. Please note that the environmental assessment covers the southern and western corridors only, except for property counts which relate to the entire scheme. The environmental assessment is split into categories included in DMRB Volume 11. In addition, separate assessments describing the cumulative impacts on the River Dee SAC and a general assessment of impacts on special needs facilities are included. The individual categories do not contain reference to these impacts to avoid double counting of impacts. The assessment indicates the potential for impacts or benefits prior to mitigation.

| Objective | Assessment Summary  | Supporting Information  |
|-----------|---|---|
|           | <p>Cultural Heritage<br/><b>Potential for minor cost or negative impact</b></p> | <p>Passes 500m to east of Ury House (Grade B Listed)</p> <p>Passes 310m to east of Netherly Bridge (Grade C (S) Listed)</p> <p>Passes 90m east of Kingcausie House (Grade B listed) and sundials(Grade B &amp; C Listed respectively)</p> <p>150m west of Parish Kirk Manse (also known as Kirkton of Maryculter) (Category C(s) Listed)</p> <p>200m west of Maryculter Parish Kirk (also known as Maryculter Parish Church) (Category B Listed)</p> <p>250m west of Camp College, Kirton of Maryculter (Category C(s) Listed)</p> <p>Passes 270m to north east of Eastland House, (Grade C listed)</p> <p>250m east of Mill Inn Maryculter (Category C (s) Listed)</p> <p>120m east of Milton Bridge (Category C (s) Listed)</p> <p>Passes 250m to west of Kennerty House (Grade B Listed)</p> <p>Potential for direct impact upon Beanshill March/Boundary Stone (Grade B listed)</p> <p>Passes 215m west of Westfield Boundary Stone (Grade B Listed)</p> <p>Passes 250m south east of Boundary stone No 26 (Grade B Listed) and 310m south east of Boundary stone No 27 (Grade B Listed)</p> <p>Passes 320m to north west of Brotherfield Boundary stone (Grade B Listed)</p> <p>Passes 90m west of Quakers (Friends) Burial Ground at Kingswells. (Grade C listed)</p> |

| Government's Objectives for Transport  |   |   |
|--|---|---|
| <p>The AWPR objectives are detailed overleaf. These are also the objectives referred to in the Planning Objectives Assessment. Please note that the environmental assessment covers the southern and western corridors only, except for property counts which relate to the entire scheme. The environmental assessment is split into categories included in DMRB Volume 11. In addition, separate assessments describing the cumulative impacts on the River Dee SAC and a general assessment of impacts on special needs facilities are included. The individual categories do not contain reference to these impacts to avoid double counting of impacts. The assessment indicates the potential for impacts or benefits prior to mitigation.</p> |   |   |
| Objective  | Assessment Summary  | Supporting Information  |
|  | Pedestrians, Equestrians, Cyclists and Community Effects<br><b>Potential for moderate cost or negative impact</b> | On the basis of currently available information, there is potential for recreational pathways (including bridleways and cycleways) to be directly impacted through severance or indirectly affected through visual and noise disturbance. There is also potential for pedestrian and cycleway access to community facilities to be disrupted. The design will maintain pathways as far as practicable.  |
|  | Vehicle Travellers<br><b>Potential for minor benefit</b>  | Over half of the route is bordered by cutting which severely inhibits views. Elsewhere, there is an attractive mixture of open and enclosed views south of the River Dee with a greater variety of long-, medium- and short range views north of the river. North of the river, views are enclosed for the majority of the route by extensive roadside cutting with limited intermittent views restricted to medium-range by mature woodland.<br><br>Based on the traffic flows provided, driver stress is estimated to be low. |

**Milltimber Brae Route (including Stonehaven Link) as announced in DECEMBER 2005**

| <b>Government's Objectives for Transport</b>   |  |  |
|--|--|--|
| <p>The AWPR objectives are detailed overleaf. These are also the objectives referred to in the Planning Objectives Assessment. Please note that the environmental assessment covers the southern and western corridors only, except for property counts which relate to the entire scheme. The environmental assessment is split into categories included in DMRB Volume 11. In addition, separate assessments describing the cumulative impacts on the River Dee SAC and a general assessment of impacts on special needs facilities are included. The individual categories do not contain reference to these impacts to avoid double counting of impacts. The assessment indicates the potential for impacts or benefits prior to mitigation.</p> |  |  |
| Objective  | Assessment Summary   | Supporting Information   |
|  | <p>Geology and Soils<br/><b>Potential for moderate cost or negative impact</b></p> | <p>There are no sites of geological interest identified and although some rock cutting will be required the associated impact would be considered as negligible.</p> <p>The potential for made ground contamination is expected to be restricted to the numerous infilled sand pits scattered across the relevant areas of drift deposits beneath the route. The significance of any impact will depend mainly on the specific nature of the infill at each pit.</p> <p>The route is known to cross peat deposits, including adjacent to Red Moss, and the integrity of these may be affected by impact on the quality and /or quantity of their water, if not appropriately mitigated by road construction design.</p> <p>Groundwater is expected to be at shallow depth in the vicinity of significant watercourses and below other areas of low lying ground. Where road cutting is required in these areas, such that the water table is intercepted, there will be a local reduction in water table levels. This may be significant if local vegetation and habitat, or private water supplies, are dependant on groundwater.</p> |
|  | <p>Policies and Plans<br/><b>Does not comply with Local Plans</b></p>              | <p>This route does not comply with the line in the draft Aberdeen City Council and Aberdeenshire Council local plans. Both local plans anticipated that the AWPR would proceed as the Murtle Route, no other route has this benefit.</p>   |
| Safety   | <p>Accident Savings (PV1)<br/><b>Minor Benefit</b></p>                             | <p>There are slight differences between the routes but the order of savings across all routes is approximately £4m per annum at 2025. Overall this combined option provides the greatest reduction in accidents.</p>   |



Milltimber Brae Route (including Stonehaven Link) as announced in DECEMBER 2005

| Government's Objectives for Transport  |  |  |                                 |              |                                 |       |                              |       |            |        |                         |       |                        |       |               |       |                |        |               |       |       |        |                |      |                     |  |
|--|--|--|---------------------------------|--------------|---------------------------------|-------|------------------------------|-------|------------|--------|-------------------------|-------|------------------------|-------|---------------|-------|----------------|--------|---------------|-------|-------|--------|----------------|------|---------------------|--|
| <p>The AWPR objectives are detailed overleaf. These are also the objectives referred to in the Planning Objectives Assessment. Please note that the environmental assessment covers the southern and western corridors only, except for property counts which relate to the entire scheme. The environmental assessment is split into categories included in DMRB Volume 11. In addition, separate assessments describing the cumulative impacts on the River Dee SAC and a general assessment of impacts on special needs facilities are included. The individual categories do not contain reference to these impacts to avoid double counting of impacts. The assessment indicates the potential for impacts or benefits prior to mitigation.</p> |  |  |                                 |              |                                 |       |                              |       |            |        |                         |       |                        |       |               |       |                |        |               |       |       |        |                |      |                     |  |
| Objective  | Assessment Summary   | Supporting Information   |                                 |              |                                 |       |                              |       |            |        |                         |       |                        |       |               |       |                |        |               |       |       |        |                |      |                     |  |
| Economy  | Traffic volumes (2010 AADT)                                  | <p><b>AWPR 2010 Flows</b></p> <table border="0"> <tr><td>A90 (S) Stonehaven – Maryculter</td><td>11900</td></tr> <tr><td>A90 (S) Charleston – Maryculter</td><td>15500</td></tr> <tr><td>Maryculter – A93</td><td>25800</td></tr> <tr><td>A93 – A944</td><td>30200</td></tr> <tr><td>A944 – North Kingswells</td><td>32000</td></tr> <tr><td>North Kingswells – A96</td><td>40900</td></tr> <tr><td>A96 – A947</td><td>12500</td></tr> <tr><td>A947 – A90 (N)</td><td>16900</td></tr> </table>   | A90 (S) Stonehaven – Maryculter | 11900        | A90 (S) Charleston – Maryculter | 15500 | Maryculter – A93             | 25800 | A93 – A944 | 30200  | A944 – North Kingswells | 32000 | North Kingswells – A96 | 40900 | A96 – A947    | 12500 | A947 – A90 (N) | 16900  |               |       |       |        |                |      |                     |  |
|  |  | A90 (S) Stonehaven – Maryculter  | 11900                           |              |                                 |       |                              |       |            |        |                         |       |                        |       |               |       |                |        |               |       |       |        |                |      |                     |  |
|  |  | A90 (S) Charleston – Maryculter  | 15500                           |              |                                 |       |                              |       |            |        |                         |       |                        |       |               |       |                |        |               |       |       |        |                |      |                     |  |
|  |  | Maryculter – A93   | 25800                           |              |                                 |       |                              |       |            |        |                         |       |                        |       |               |       |                |        |               |       |       |        |                |      |                     |  |
|  |  | A93 – A944   | 30200                           |              |                                 |       |                              |       |            |        |                         |       |                        |       |               |       |                |        |               |       |       |        |                |      |                     |  |
|  |  | A944 – North Kingswells  | 32000                           |              |                                 |       |                              |       |            |        |                         |       |                        |       |               |       |                |        |               |       |       |        |                |      |                     |  |
|  |  | North Kingswells – A96   | 40900                           |              |                                 |       |                              |       |            |        |                         |       |                        |       |               |       |                |        |               |       |       |        |                |      |                     |  |
|  |  | A96 – A947   | 12500                           |              |                                 |       |                              |       |            |        |                         |       |                        |       |               |       |                |        |               |       |       |        |                |      |                     |  |
|  |  | A947 – A90 (N)   | 16900                           |              |                                 |       |                              |       |            |        |                         |       |                        |       |               |       |                |        |               |       |       |        |                |      |                     |  |
|  |  | <table border="0"> <thead> <tr> <th>Existing Roads</th> <th>Without AWPR</th> <th>With AWPR</th> <th></th> </tr> </thead> <tbody> <tr><td>King Street at Bridge of Don</td><td>33900</td><td>30500</td><td>(-10%)</td></tr> <tr><td>Market Street</td><td>28100</td><td>25500</td><td>(-9%)</td></tr> <tr><td>Bridge of Dee</td><td>32000</td><td>27500</td><td>(-14%)</td></tr> <tr><td>Auchmill Road</td><td>41300</td><td>37100</td><td>(-10%)</td></tr> <tr><td>Netherley Road</td><td>3400</td><td>Access traffic only</td><td></td></tr> </tbody> </table> | Existing Roads                  | Without AWPR | With AWPR                       |       | King Street at Bridge of Don | 33900 | 30500      | (-10%) | Market Street           | 28100 | 25500                  | (-9%) | Bridge of Dee | 32000 | 27500          | (-14%) | Auchmill Road | 41300 | 37100 | (-10%) | Netherley Road | 3400 | Access traffic only |  |
|  |  | Existing Roads   | Without AWPR                    | With AWPR    |                                 |       |                              |       |            |        |                         |       |                        |       |               |       |                |        |               |       |       |        |                |      |                     |  |
|  |  | King Street at Bridge of Don   | 33900                           | 30500        | (-10%)                          |       |                              |       |            |        |                         |       |                        |       |               |       |                |        |               |       |       |        |                |      |                     |  |
|  |  | Market Street  | 28100                           | 25500        | (-9%)                           |       |                              |       |            |        |                         |       |                        |       |               |       |                |        |               |       |       |        |                |      |                     |  |
|  |  | Bridge of Dee  | 32000                           | 27500        | (-14%)                          |       |                              |       |            |        |                         |       |                        |       |               |       |                |        |               |       |       |        |                |      |                     |  |
| Auchmill Road  | 41300  | 37100  | (-10%)                          |              |                                 |       |                              |       |            |        |                         |       |                        |       |               |       |                |        |               |       |       |        |                |      |                     |  |
| Netherley Road   | 3400   | Access traffic only  |                                 |              |                                 |       |                              |       |            |        |                         |       |                        |       |               |       |                |        |               |       |       |        |                |      |                     |  |
| Journey time savings (PV2)   | £1,180,569,000   |  |                                 |              |                                 |       |                              |       |            |        |                         |       |                        |       |               |       |                |        |               |       |       |        |                |      |                     |  |
| Vehicle Operating Costs (PV3)  | -£6,305,000  |  |                                 |              |                                 |       |                              |       |            |        |                         |       |                        |       |               |       |                |        |               |       |       |        |                |      |                     |  |
| User Charges (PV4)   | -£123,000  |  |                                 |              |                                 |       |                              |       |            |        |                         |       |                        |       |               |       |                |        |               |       |       |        |                |      |                     |  |
| Private Sector Revenue Impact (PV5)  | -£2,220,000  |  |                                 |              |                                 |       |                              |       |            |        |                         |       |                        |       |               |       |                |        |               |       |       |        |                |      |                     |  |
| Public Sector Investment Costs (PV6)   | £294,174,000   |  |                                 |              |                                 |       |                              |       |            |        |                         |       |                        |       |               |       |                |        |               |       |       |        |                |      |                     |  |
| Public Sector Operating Costs (PV7)  | £17,172,000  |  |                                 |              |                                 |       |                              |       |            |        |                         |       |                        |       |               |       |                |        |               |       |       |        |                |      |                     |  |
| Taxation impacts (PV8)   | £1,952,000   |  |                                 |              |                                 |       |                              |       |            |        |                         |       |                        |       |               |       |                |        |               |       |       |        |                |      |                     |  |
| Present Value of Benefits (PV1+PV2+PV3+PV4+PV5)  | £1,171,921,000 (Note: Accident Savings PV1 are not included) |  |                                 |              |                                 |       |                              |       |            |        |                         |       |                        |       |               |       |                |        |               |       |       |        |                |      |                     |  |
| Present Value of Costs (PV6+PV7+PV8)   | £313,298,000   |  |                                 |              |                                 |       |                              |       |            |        |                         |       |                        |       |               |       |                |        |               |       |       |        |                |      |                     |  |

**Milltimber Brae Route (including Stonehaven Link) as announced in DECEMBER 2005**

| <b>Government's Objectives for Transport</b>   |  |  |
|--|--|--|
| <p>The AWPR objectives are detailed overleaf. These are also the objectives referred to in the Planning Objectives Assessment. Please note that the environmental assessment covers the southern and western corridors only, except for property counts which relate to the entire scheme. The environmental assessment is split into categories included in DMRB Volume 11. In addition, separate assessments describing the cumulative impacts on the River Dee SAC and a general assessment of impacts on special needs facilities are included. The individual categories do not contain reference to these impacts to avoid double counting of impacts. The assessment indicates the potential for impacts or benefits prior to mitigation.</p> |  |  |
| Objective  | Assessment Summary   | Supporting Information   |
|  | Net Present Value (PVB-PVC)                                      | £858,623,000   |
|  | Benefit to Cost Ratio (PVB/PVC)                                  | 3.7  |
|  | Overall Economy Assessment<br><b>Moderate Benefit</b>            | Similar BCR achieved as the Milltimber Brae option on its own. Similar overall benefits as the Pitfodels option, and significantly greater benefits than other options. Capital expenditure exceeds lowest by £85m - £115m.  |
| Integration  | Transport Integration<br><b>Moderate Benefit</b>                 | The route provides access between proposed rail freight transfer depots, industrial estates and businesses, Park and Ride car parks, road and air links. The route will facilitate the reallocation of road space to more appropriate priority forms of transport and integration with other public transport measures proposed in the MTS. The level of integration will be similar to the Pitfodels and Murtle options due to the generally similar volumes of traffic using the route and generally similar reduction of traffic levels on existing roads.                              |
|  | National Transport Targets<br><b>Complies to a lesser degree</b> | The route provides access between proposed rail freight transfer depots, industrial estates and businesses, Park and Ride car parks, road and air links. The route will facilitate the reallocation of road space to more appropriate priority forms of transport and integration with other public transport measures proposed in the MTS. The route attracts generally similar traffic flows from the city and as such provides similar opportunities to implement other public transport improvements. However, the route does not constrain traffic growth on the trunk road corridor. |
| Accessibility and Social Inclusion   | Accessibility and Social Inclusion<br><b>Moderate Benefit</b>    | Supports development of public transport improvements as proposed within Modern Transport System to a similar degree to the Pitfodels and Murtle options.  |

**Milltimber Brae Route (including Stonehaven Link) as announced in DECEMBER 2005**

| <b>Government's Objectives for Transport</b>   |   |   |
|--|---|---|
| <p>The AWPR objectives are detailed overleaf. These are also the objectives referred to in the Planning Objectives Assessment. Please note that the environmental assessment covers the southern and western corridors only, except for property counts which relate to the entire scheme. The environmental assessment is split into categories included in DMRB Volume 11. In addition, separate assessments describing the cumulative impacts on the River Dee SAC and a general assessment of impacts on special needs facilities are included. The individual categories do not contain reference to these impacts to avoid double counting of impacts. The assessment indicates the potential for impacts or benefits prior to mitigation.</p> |   |   |
| Objective  | Assessment Summary  | Supporting Information  |
|  | Change in Severance – Global Impact<br><b>Moderate Benefit</b>        | Route reduces severance within city, and reduces severance between destinations currently reached via Aberdeen. |
|  | Change in Severance – Local Impact<br><b>Moderate Negative Impact</b> | Introduces severance at Milltimber.   |

## **Aberdeen Western Peripheral Route Objectives**

### **Acceptability and Participation**

**AP1** The strategy will be developed through public participation and be endorsed by the Community.

### **Deliverability**

**D1** The strategy will be achievable, both practically and financially, and demonstrate best value.

### **Environmental Objectives**

**EV3** - To reduce the impact of traffic, including in particular HGV traffic, on Aberdeen and the surrounding area whilst incurring minimal damage to the natural environment.

**EV4** - To contribute towards reducing air pollution problems, particularly in the city centre where the problems are greatest.

### **Economic Objectives**

**EA3** - To provide access between proposed rail freight transfer depots, industrial estates and businesses, Park and Ride car parks, road and air links, to ensure journey times and costs are minimised.

**EA4** - To reduce congestion and remove the bottleneck in the Trans European Network thereby increasing the reliability of journey times through and around the City, helping to limit the effects of peripherality nationally and internationally.

### **Safety Objectives**

**SA2** - To provide a consistent, high quality, efficient and effective route with a minimal number of high quality, high capacity junctions to maximise user safety.

**SA3** - To reduce the traffic levels on the existing road networks thereby reducing the risk of accidents.

### **Integration Objectives**

**IT3** - To produce a consistent standard of route that will bypass the city from A90 (North) to A90 (South) and attract nonessential traffic away from Aberdeen and inappropriate minor routes.

**IT4** - To allow the reallocation of road space to more appropriate priority forms of transport.

**IT5** - To provide access between proposed Park and Ride car parks.

**IL3**- To provide good accessibility to the land required for the sustainable development of Aberdeen

**Milltimber Brae Route (including Stonehaven Link) as announced in DECEMBER 2005**

IL4- To provide an attractive link from residential areas on the periphery of Aberdeen and Aberdeenshire to the industrial estates and main employment areas on the periphery of Aberdeen and Aberdeenshire, reducing the need to travel through the city centre.

IP2- To produce a route which will improve access to employment and generate job opportunities thereby contributing to the social inclusion policies of both Councils.

**Accessibility Objectives**

AB4- To significantly reduce the level of traffic in Aberdeen without reducing accessibility to or within the city.