



# STRATEGIC TRANSPORT PROJECTS REVIEW

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## South West Scotland Region Option Sifting Update

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## Contents

<b>1. Introduction</b> .....	<b>1</b>
1.1. Background & Report Purpose .....	1
1.2. Summary of work undertaken to date .....	2
<b>2. Option Sifting</b> .....	<b>5</b>
2.1. Overview .....	5
2.2. Transport Planning Objectives .....	6
2.3. Option Sifting .....	8

## Appendices

**Appendix A:** Mapping of South West Scotland Transport Study – Initial Appraisal: Case for Change Objectives to STPR2 South West Regional Sub-Objectives

# 1. Introduction

## 1.1. Background & Report Purpose

Transport Scotland is currently undertaking the second Strategic Transport Projects Review (STPR2) to inform the Scottish Government’s transport investment programme over the next 20 years (2022 – 2042). STPR2 takes a national overview of the transport network with a focus on regions and will help deliver the vision, priorities and outcomes that are set out in the new National Transport Strategy (NTS2)<sup>1</sup>. STPR2 is being carried out in accordance with Scottish Transport Appraisal Guidance (STAG)<sup>2</sup> which is an objective-led, evidence-based transport appraisal process. The 4 key phases of STAG are illustrated in Figure 1.



**Figure 1: The 4 Key Phases to Scottish Transport Appraisal Guidance**

The Case for Change constitutes the first phase of STAG, with a Case for Change report having been developed for each of the STPR2 regions (see Figure 2). It sets out the evidence base for problems and opportunities linked to the transport network in the region, drawing on relevant data analysis, policy review and stakeholder engagement. These regional reports are supported by a [national level Case for Change report](#) which sets out the overarching vision for transport investment in Scotland and the challenges that must be addressed to support delivery of the priorities set out in NTS2. STPR2 specifically focusses on Scotland’s key strategic transport assets, which are wide ranging and varied. In the context of STPR2, the strategic transport network is defined as being:

- All transport networks and services owned, operated and funded directly by Transport Scotland;
- Transport access to Major Ports and Airports; and
- The inter-urban bus and active travel network and principal routes within the City Region areas.

Initial Appraisal – Case for Change reports have already been published for 3 of the 11 regions that now feed into STPR2, and are referred to as the ‘Advanced Regions’<sup>3</sup>:

<sup>1</sup> Transport Scotland, National Transport Strategy, February 2020, [www.transport.gov.scot/media/47052/national-transport-strategy.pdf](http://www.transport.gov.scot/media/47052/national-transport-strategy.pdf)

<sup>2</sup> Transport Scotland, Scottish Transport Appraisal Guidance (STAG), 2008, [www.transport.gov.scot/media/41507/j9760.pdf](http://www.transport.gov.scot/media/41507/j9760.pdf)

<sup>3</sup> During the Advanced Studies, terminology of the STAG appraisal phases was updated whereby ‘Pre-Appraisal’ was renamed as the ‘Initial Appraisal: Case for Change’ phase. The Borders Transport Corridors and Aberdeen City Region Deal Pre-Appraisals kept the

- South West Scotland region (South West Scotland Transport Study – Initial Appraisal: Case for Change) – This covers the Dumfries and Galloway Council Local Authority area and the southern parts of South and East Ayrshire Local Authority areas;
- Borders region (Borders Transport Corridors: Pre-Appraisal) – This covers the Scottish Borders Local Authority area; and
- North East region (Aberdeen City Region Deal – Strategic Transport Appraisal: Pre-Appraisal) – This covers the Aberdeen City and Aberdeenshire Local Authority areas.

The purpose of this report is to provide an update on the status of the South West Scotland Transport Study – Initial Appraisal: Case for Change (published January 2020) and its alignment with STPR2, which combine to effectively constitute the South West Scotland region’s Initial Appraisal: Case for Change.

## 1.2. Summary of work undertaken to date

For the purposes of taking forward STPR2, analysis of transport-related problems and opportunities has been undertaken at both national and regional levels, with regional level analysis undertaken across 11 regions. The South West Scotland Transport Study constituted Dumfries & Galloway as well as the southern parts of South and East Ayrshire. The regions that have been formed for the purposes of taking forward the development of STPR2 in relation to the South West Scotland Study area are South West Scotland, covering the Dumfries and Galloway Local Authority area, and Ayrshire and Arran, covering East, North and South Ayrshire authorities. These are shown Figure 2 (overleaf).

Each STPR2 region has been considered separately in terms of the data analysis, summary of problems and opportunities, region specific Transport Planning Objectives and option generation. However, given that the South West Scotland Transport Study – Initial Appraisal: Case for Change and Borders Transport Corridors: Pre-Appraisal reports were developed in advance of the other regions, and given the close links and geographical similarities between them, including the formation of the South of Scotland Enterprise, the South West and Borders regions have been grouped together for the purposes of stakeholder engagement forming the South of Scotland Regional Transport Working Group. The Ayrshire and Arran Regional Transport Working Group has been formed to engage with East, North and South Ayrshire local authorities.

The aforementioned regional problems and opportunities analysis, objective setting and option generation exercises are outlined for the South West Scotland region in the South West Scotland Transport Study – Initial Appraisal: Case for Change report which was published in January 2020<sup>4</sup>. The South West Scotland region, along with the Borders and North East regions, form ‘advanced’ regions that had Case for Change work undertaken prior to the commencement of STPR2. The recent Case for Change analysis for STPR2 has therefore focussed on the 8 remaining regions, and Scotland as a whole, to take these to the same stage as the advanced regions. The Case for Change reports were published

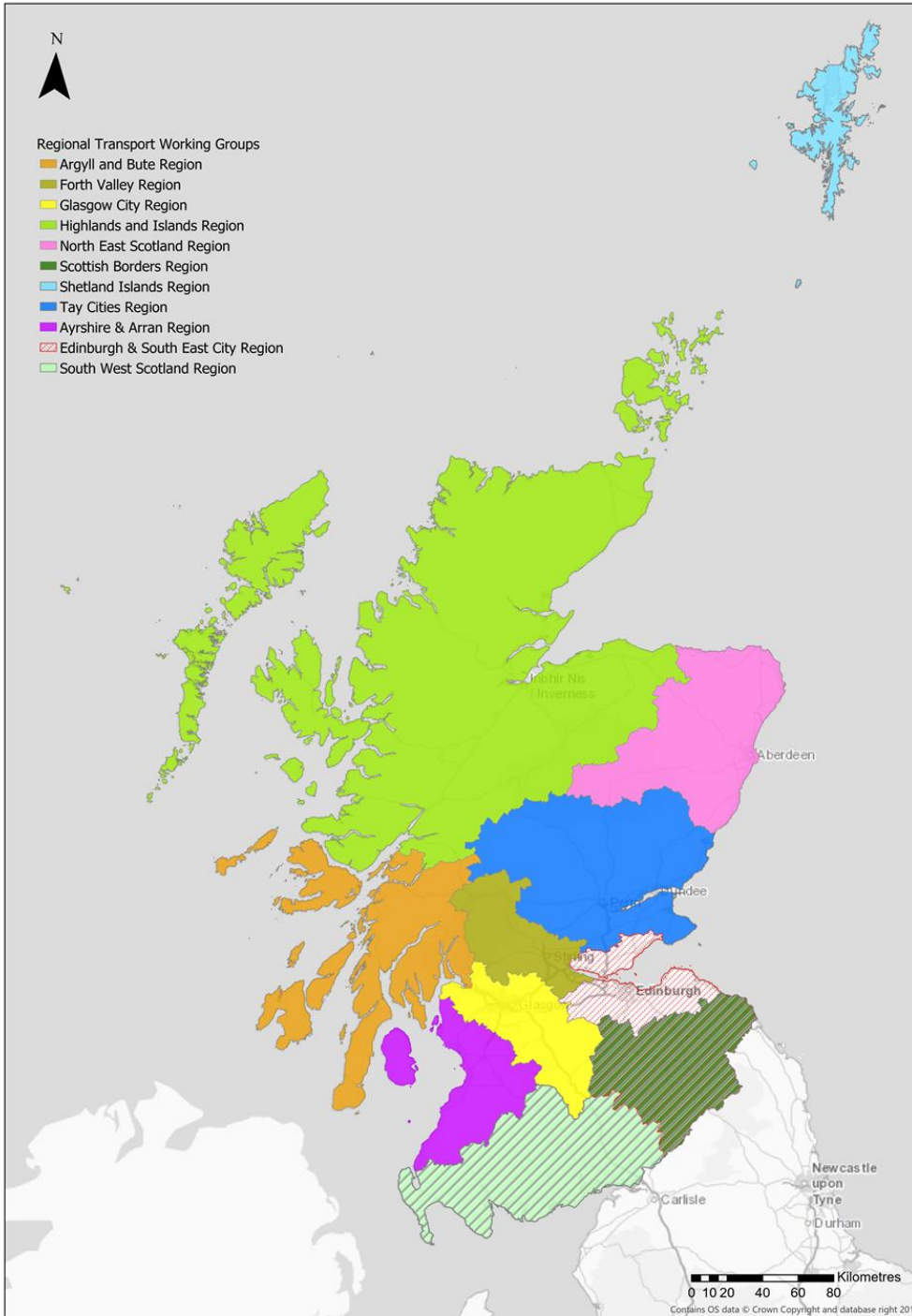
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‘Pre-Appraisal’ terminology (for reporting consistency), whilst conversely the South West Scotland Transport Study (the last of the 3 to be commissioned) adopted the new Case for Change terminology for reporting purposes.

<sup>4</sup> Transport Scotland, South West Scotland Transport Study – Initial Appraisal: Case for Change, 2020: <https://www.transport.gov.scot/media/47032/swsts-initial-appraisal-case-for-change-including-appendices.pdf>



in draft in 2020<sup>5</sup> and will be republished alongside this report following previous feedback.



**Figure 2: STPR2 Regions**

As part of the development of the respective Case for Change documents, a process of option sifting has been undertaken on the STPR2 options long list. Option sifting is recommended in STAG where a study generates a large number of options, this list

<sup>5</sup> Transport Scotland, Strategic Transport Projects Review 2, 2020:  
<https://www.transport.gov.scot/our-approach/strategy/strategic-transport-projects-review-2/#section-63218>

should, for appraisal purposes, be reduced to a manageable level through option sifting.

The STPR2 option sifting methodology was developed to build upon those sifting methodologies adopted for the advanced regions, but adopts specific STPR2 transport planning objectives (TPOs), sifting criteria and the additional scope refinements.

The STPR2 option sifting exercise differs slightly from that undertaken for the advanced regions. Therefore, to ensure consistency for the remainder of the STPR2 process, it was decided to review the advanced region option sifting exercises and re-assess their options long lists by applying the STPR2 option sifting methodology. The updated results for the advanced regions will be fed into the subsequent appraisal of options (i.e. the Preliminary and Detailed Appraisal stages of STAG), in parallel with the 8 other regions.

## 2. Option Sifting

### 2.1. Overview

The option sifting methodology adopted for the South West Scotland Transport Study – Initial Appraisal: Case for Change was multi-criteria based whereby each option from an options long list was reviewed and sifted in or out against the following criteria:

- Whether the option was strategic/regional;
- Whether the option met the study objectives (and addressed the regional problems and opportunities); and
- Whether there were any potential issues or risks associated with the delivery of the option in relation to feasibility, affordability and acceptability.

The option sifting methodology adopted for STPR2 is also multi-criteria based, following similar steps as the South West Scotland Transport Study – Initial Appraisal: Case for Change, but has a number of additional / different criteria. These criteria are as follows:

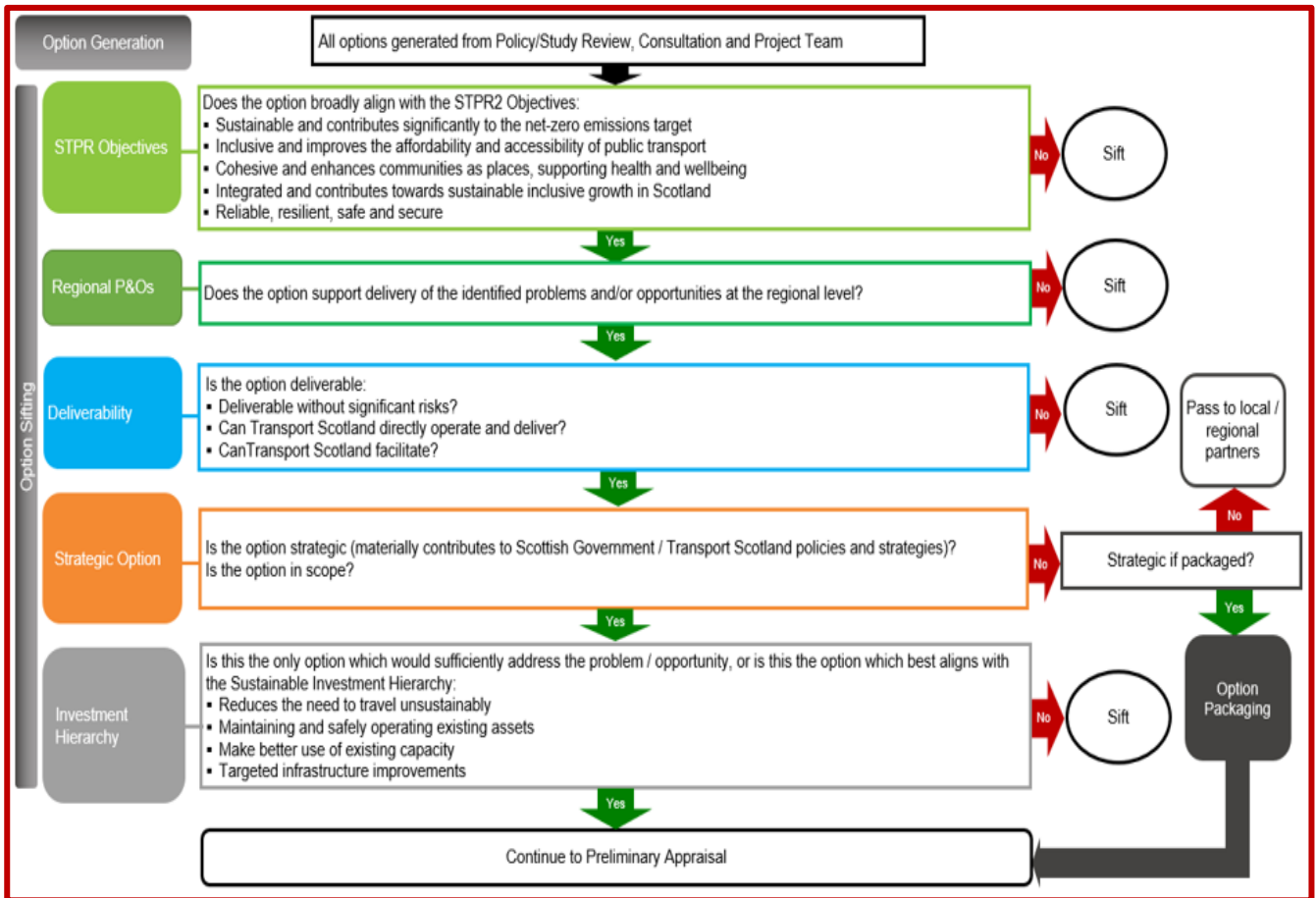
- Does the option align with the STPR2 national objectives:
  - A sustainable strategic transport system that contributes significantly to the Scottish Government’s net zero emissions target
  - An inclusive strategic transport system that improves the affordability and accessibility of public transport
  - A cohesive strategic transport system that enhances communities as places, supporting health and wellbeing
  - An integrated strategic transport system that contributes towards sustainable inclusive growth in Scotland
  - A reliable and resilient strategic transport system that is safe and secure for users
- Is the option strategic – an option is defined as strategic if it materially contributes to Scottish Government/Transport Scotland policies and strategies (see further detail on the STPR2 strategic definition in the [National Case for Change](#) document);
- Is the option in scope – is it considered specifically in scope for STPR2 (see further detail on STPR2 scope in the [National Case for Change](#) document); and
- How well does the option align to the National Transport Strategy Sustainable Investment Hierarchy<sup>6</sup> – Options are sifted out if another option addresses the same problem/opportunity and better aligns with the Sustainable Investment Hierarchy.

The assessment of how well an option addresses the regional problems and opportunities is retained, as is the deliverability assessment. An outline of the complete STPR2 option sifting methodology is shown at Figure 3:

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<sup>6</sup> The Sustainable Investment Hierarchy will be used to inform future investment decisions and ensure transport options that focus on reducing inequalities and the need to travel unsustainably are prioritised, maintaining and safely operating existing assets and making better use of existing capacity. Only following these steps will investment involving targeted infrastructure improvements be considered. Transport Scotland, National Transport Strategy (Pg 43), February 2020, [www.transport.gov.scot/media/47052/national-transport-strategy.pdf](http://www.transport.gov.scot/media/47052/national-transport-strategy.pdf)





**Figure 3: STPR2 Option Sifting Methodology**

## 2.2. Transport Planning Objectives

Transport Appraisal undertaken in accordance with STAG should be objective led. Objectives should express the outcomes sought by the study and be based on a comprehensive and evidenced understanding of problems and opportunities in the study area. As such the South West Scotland Transport Study – Initial Appraisal: Case for Change developed 5 TPOs which sought to address the key problem and opportunity themes of the region, these were:

- TPO1: Reduce journey times across the strategic transport network in the study area to the ports at Cairnryan.
- TPO2: Reduce accident rates and the severity of accidents on the trunk road network in the South West of Scotland.
- TPO3: Improve the resilience of the Strategic Transport Network across the South West of Scotland.
- TPO4: Improve journey quality across the road, public transport and active travel networks in the South West of Scotland.
- TPO5: Improve connectivity (across all modes) for communities in the South West of Scotland to key economic, education, health and cultural centres including Glasgow, Edinburgh, Ayr, Kilmarnock and Carlisle.

STPR2 has now formed a set of national objectives that align closely with the 4 priorities, 12 outcomes and 14 policies contained within the NTS2<sup>7</sup> plus a fifth objective relating to a safe, reliable and resilient transport network. These overarching national objectives are supported by a series of sub-objectives. These have been developed to apply uniquely to each region, in the case of the South West Scotland region to address the problems and opportunities outlined in the South West Scotland Transport Study – Initial Appraisal: Case for Change and taking cognisance of its original objectives. The 5 national STPR2 objectives, and their sub-objectives specific to the South West Scotland region, are shown below:

- A sustainable strategic transport system that contributes significantly to the Scottish Government's net zero emissions target
  - Reduce the consumption of fossil fuels from the strategic transport system in South West Scotland and enable a shift to more sustainable modes of transport.
  - Increase the mode share of active travel, particularly for shorter everyday journeys in the main population centres and between settlements within the South West Scotland region.
  - Increase the mode share of public transport within the region and to key centres in other regions, including Glasgow, Edinburgh, Ayr, Kilmarnock and Carlisle, by providing viable alternatives to single occupancy car use and improving journey quality across the network.
  - Reduce emissions generated by the strategic transport system, with a focus on the strategic road network and congested areas in and around Dumfries.
- An inclusive strategic transport system that improves the affordability and accessibility of public transport
  - Increase public transport mode share in South West Scotland by improving integration opportunities between bus and rail and for active travel on public transport.
  - Improve mobility and inclusion, recognising the specific needs of remote communities in South West Scotland and disadvantaged and vulnerable groups.
  - Reduce transport poverty by increasing travel choice, with particular focus on areas out with the main centres and in communities in South West Scotland with high levels of deprivation.
  - Reduce the reliance on private car for access to key centres for healthcare, employment, education and cultural sites by improving public transport and active travel connectivity in the region.
- A cohesive strategic transport system that enhances communities as places, supporting health and wellbeing
  - Reduce the adverse impacts of the strategic transport system on communities by embedding the place principle in changes to the strategic transport system.
  - Increase the mode share of active travel, particularly for shorter everyday journeys in the main population centres and for visitors travelling within the South West region.
  - Reduce demand for unsustainable travel arising from nationally significant growth

<sup>7</sup> Transport Scotland, National Transport Strategy 2, 2020:

<https://www.transport.gov.scot/publication/national-transport-strategy-2/>

areas, taking cognisance of the emerging NPF4.

- An integrated strategic transport system that contributes towards sustainable inclusive growth in Scotland
  - Increase sustainable access between labour markets and key centres for employment, education and training across the region.
  - Increase competitiveness of key domestic and international markets by reducing transport costs, journey times and improving journey time reliability for commercial transport routes including links to Glasgow, Edinburgh, Kilmarnock, Carlisle, Prestwick international airport, the M74 corridor and the ports at Cairnryan.
  - Increase resilience of access to key domestic and international markets to encourage people to live, work, study, visit and invest in South West Scotland.
  - Increase the mode share of freight by sustainable modes in South West Scotland.
- A reliable and resilient strategic transport system that is safe and secure for users .
  - Increase resilience of the strategic transport system across South West Scotland to reduce the impacts of disruption, with a particular focus on access to the ports at Cairnryan and M74 and the Glasgow South Western Line.
  - Reduce accident rates and the severity of accidents on the trunk road network in the South West of Scotland.
  - Improve resilience in the region through climate change adaptation within the management and maintenance of trunk road and rail infrastructure.
  - Improve perceived and actual security of the strategic transport system across the South West of Scotland.

A mapping exercise was undertaken to ensure that the STPR2 regional sub-objectives for the South West Scotland region aligned with the South West Scotland Transport Study – Initial Appraisal: Case for Change objectives, and to ensure that no gaps were identified.

The mapping exercise, as detailed in Appendix A, confirmed that all of the South West Scotland Transport Study – Initial Appraisal: Case for Change objectives map to at least 1 STPR2 overarching objective and sub-objective, whilst several map to 2 or 3 STPR2 overarching objectives and sub-objectives. This exercise provides confidence in the alignment of STPR2 and South West Scotland Transport Study – Initial Appraisal: Case for Change objectives and so can be taken forward for use in the next stage of STPR2 appraisal for the South West region.

## 2.3. Option Sifting

Following completion of the South West Scotland Transport Study – Initial Appraisal: Case for Change option sifting exercise, a total of 23 options were retained for further consideration.

The updated option sifting exercise for the South West Scotland region, using the current STPR2 sifting methodology, considered all 23 options from the South West Scotland Transport Study – Initial Appraisal: Case for Change.

Ultimately the updated option sifting exercise for the region using the STPR2 sifting methodology identified a total of 22 options that should be taken forward for more detailed development and appraisal through the next stage of the STPR2 process.

The 1 option from the South West Scotland Transport Study – Initial Appraisal: Case for Change which is now not considered appropriate to take forward within STPR2 is Option 12 ‘Development of Enhanced Diversionary Routes and Route Planning: Package of measures and improvements to the secondary road network which performs a strategic function when the trunk road network is closed to increase resilience of the transport network’. The reason for sifting this option out is as follows:

- Option relates to local roads - local roads are out of scope for STPR2, unless they: Provide access to major ports or airports; Provide access to nationally significant National Planning Framework (NPF4) sites; and / or Facilitate changes to the strategic road network, including in the provision of bus priority or active travel.

Further to this, the description of 2 of the 23 option/packages have required review as currently they do not fully meet the scope of STPR2:

- Option Package No.21: Road Capacity Enhancements between Dumfries and the A74(M) (Development of road capacity enhancements between Dumfries and the A74(M), such as partial dualling which would improve overtaking opportunities, and/or bypasses. Package also potentially includes considering the possibility to re-classify the status of the A701 and A709 roads).
- Option Package No.22: Road Safety Measures between Dumfries and the A74(M) (Implementation of targeted measures between Dumfries and the A74(M), such as road geometry, bends, junction improvements and measures to address pinch points).

Road capacity enhancements and road safety measures on the local road network is deemed to be out of scope of STPR2 (unless they provide access to a major port, airport or NPF4 site, or are used to provide strategic bus priority or strategic active travel links). The options above therefore only refer to the A701 trunk road given that that A709 is a local road (it should be noted that access to the A74(M) from Dumfries via the A75 is captured separately under A75 specific options detailed in the South West Scotland Transport Study). Re-classifying the status of routes from local road to trunk road and vice versa has also been confirmed as being out of scope for STPR2 and therefore this reference within Option Package No.21 will also require updating going forward.

Table 1 outlines the short listed options for the South West Scotland region that will progress to the next stage of appraisal for STPR2<sup>8</sup>. Note that Option 21 has been modified to remove reference to re-classifying the status of the A701 and A709 roads and it is further noted that Options 21 and 22 do not refer to the A709 local road.

<sup>8</sup> See the [National Case for Change](#) document for Topics/Options/Projects that are out of scope for STPR2, which includes revenue funding related options.

**Table 1: Final List of South West Scotland Transport Study – Initial Appraisal: Case for Change Options for consideration through STPR2**

REF	SOUTH WEST SCOTLAND TRANSPORT STUDY – INITIAL APPRAISAL: CASE FOR CHANGE OPTIONS AND MODIFIED OPTIONS RETAINED FOLLOWING STPR2 SIFTING EXERCISE
SW-1	<p><b>Improved transport integration at main hubs</b> Package of measures to improve integration of transport at main transport hubs and interchanges (e.g. Stranraer, Dumfries and Lockerbie), including improved integration of bus and rail times, improved cycle connectivity to rail stations and ticket integration</p>
SW-2	<p><b>Development of the Strategic Active Travel Network</b> Package of measures to develop the Strategic Active Travel Network in the South West of Scotland to better connect communities to key destinations, including cycle paths parallel to trunk roads and improvements to the National Cycle Network.</p>
SW-3	<p><b>New Rail Stations on the Glasgow South Western Line</b> New rail stations on the Glasgow South Western Line, such as at Cumnock, Thornhill, Eastriggs, Pinwherry, Dunragit and South of Ayr.</p>
SW-4	<p><b>Enhanced Rail Services on the Glasgow South Western Line</b> Package of measures to enhance rail services on the Glasgow South Western Line, such as rail service, rolling stock and infrastructure improvements and Stranraer Station relocation.</p>
SW-5	<p><b>New Rail Stations on the West Coast Main Line</b> New station at Beattock</p>
SW-6	<p><b>Enhanced Rail Services on the West Coast Main Line</b> Package of measures to enhance rail services on the West Coast Main Line, such as increased services operating from and improved access to rail services at Lockerbie, including increased park and ride provision</p>
SW-7	<p><b>New Rail Link between Dumfries and Stranraer</b> Development of a rail link between Dumfries and Stranraer.</p>
SW-8	<p><b>New Rail Link between Stranraer and Cairnryan</b> Development of a rail link between Stranraer and Cairnryan.</p>
SW-9	<p><b>New Rail link between the Glasgow South Western Line and the West Coast Main Line</b> Development of a rail link between the Glasgow South Western Line and the West Coast Main Line.</p>
SW-10	<p><b>Enhanced Rail Freight Capacity</b> Enhancement of rail freight capacity, such as freight hubs at Girvan and Barrhill.</p>
SW-11	<p><b>Development of the Timber Transport Network</b> Package of measures to support the transport of timber freight by road, rail and sea in the South West of Scotland.</p>
SW-13	<p><b>Development of Enhanced Service, Rest Areas and Laybys</b> Package of measures to deliver improved rest provision for all road users in the South West of Scotland, such as truck/lorry stops and rest facilities on the A75 and A77 and enhanced laybys for buses on main routes</p>
SW-14	<p><b>HGV Speed Limit Increase</b> HGV speed limit increase to 50mph on the trunk road network in the South West of Scotland</p>



REF	<b>SOUTH WEST SCOTLAND TRANSPORT STUDY – INITIAL APPRAISAL: CASE FOR CHANGE OPTIONS AND MODIFIED OPTIONS RETAINED FOLLOWING STPR2 SIFTING EXERCISE</b>
<b>SW-15</b>	<b>A75 Capacity Enhancements</b> Development of capacity enhancement measures on the A75, such as partial dualling, town/village bypasses and improved overtaking opportunities.
<b>SW-16</b>	<b>A75 Safety Measures</b> Implementation of targeted measures, such as improvements to road geometry, bends and junction improvements to improve safety on the A75. Package will also include consideration of safety camera deployments through the Scottish Safety Camera Programme annual site prioritisation exercise.
<b>SW-17</b>	<b>A77 Capacity Enhancements</b> Development of capacity enhancement measures on the A77, such as partial dualling, town/village bypasses and improved overtaking opportunities.
<b>SW-18</b>	<b>A77 Safety Measures</b> Implementation of targeted measures, such as improvements to road geometry, bends and localised junction improvements to improve safety on the A77. Package will also include consideration of safety camera deployments through the Scottish Safety Camera Programme annual site prioritisation exercise.
<b>SW-19</b>	<b>A76 Capacity Enhancements</b> Development of capacity enhancement measures on the A76, such as improved overtaking opportunities and town/village bypasses.
<b>SW-20</b>	<b>A76 Safety Measures</b> Implementation of targeted measures, such as route improvements to enhance road geometry, bends and junction improvements to improve safety on the A76.
<b>SW-21</b>	<b>Road Capacity Enhancements between Dumfries and the A74(M)</b> Development of road capacity enhancements between Dumfries and the A74(M), such as partial dualling which would improve overtaking opportunities, and/or bypasses.
<b>SW-22</b>	<b>Road Safety Measures between Dumfries and the A74(M)</b> Implementation of targeted measures between Dumfries and the A74(M), such as road geometry, bends, junction improvements and measures to address pinch points.
<b>SW-23</b>	<b>Junction Improvements (M6)</b> Improvements to the M6 for North to West movements (i.e. coming off the A74(M) north to the A75).

The following option will not be progressed further in STPR2, along with those already identified by the South West Scotland Transport Study – Initial Appraisal: Case for Change as being sifted out (as these remain sifted out):

REF	<b>SOUTH WEST SCOTLAND TRANSPORT STUDY – INITIAL APPRAISAL: CASE FOR CHANGE OPTIONS REMOVED FOLLOWING STPR2 SIFTING EXERCISE</b>
<b>SW-12</b>	<b>Development of Enhanced Diversionary Routes and Route Planning</b> Package of measures and improvements to the secondary road network which performs a strategic function when the trunk road network is closed to increase resilience of the transport network.

# APPENDICES

## Appendix A: Mapping of South West Scotland Transport Study – Initial Appraisal: Case for Change Objectives to STPR2 South West Regional Sub-Objectives

