



# STRATEGIC TRANSPORT PROJECTS REVIEW

PROTECTING OUR CLIMATE  
AND IMPROVING LIVES



## Appendix I Recommendation Appraisal Summary Tables – Explanatory Note

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# 1. Introduction

This introduction to Appendix I Recommendation Appraisal Summary Tables (ASTs) provides additional background information as an aid to the interpretation of the Recommendation ASTs that make up the rest of this appendix and includes the following:

- Section 2 - STPR2 Recommendations: A list of the 45 STPR2 recommendations;
- Section 3 - Sustainable Investment Hierarchy and the second National Transport Strategy (NTS2) Outcomes: A description of the Sustainable Investment Hierarchy and a list of the NTS2 outcomes which the STPR2 Recommendations are designed to support;
- Section 4 - Appraisal Scoring System: An explanation of the appraisal scoring system used in STPR2;
- Section 5 - Assessment Criteria: A list of all the assessment criteria used in STPR2 and confirmation of the cost bandings that have been applied to estimate the capital costs of STPR2 Recommendations; and
- Section 6 - Glossary of Terms: Definitions of technical terms and acronyms.

## 2. STPR2 Recommendations

1. Connected neighbourhoods
2. Active freeways and cycle parking hubs
3. Village-town active travel connections
4. Connecting towns by active travel
5. Long-distance active travel network
6. Behavioural change initiatives
7. Changing road user behaviour
8. Increasing active travel to school
9. Improving access to bikes
10. Expansion of 20mph limits and zones
11. Clyde Metro
12. Edinburgh & South East Scotland Mass Transit
13. Aberdeen Rapid Transit
14. Provision of strategic bus priority measures
15. Highland Main Line rail corridor enhancements
16. Perth-Dundee-Aberdeen rail corridor enhancements
17. Edinburgh/Glasgow-Perth/Dundee rail corridor enhancements
18. Supporting integrated journeys at ferry terminals
19. Infrastructure to provide access for all at railway stations
20. Investment in Demand Responsive Transport and Mobility as a Service
21. Improved public transport passenger interchange facilities
22. Framework for the delivery of mobility hubs
23. Smart, integrated public transport ticketing
24. Ferry vessel renewal and replacement, and progressive decarbonisation
25. Decarbonisation of the rail network
26. Decarbonisation of the bus network

27. Behavioural change and modal shift for freight
28. Zero emission vehicles and infrastructure transition
29. Access to Argyll (A83)
30. Trunk road and motorway safety improvements to progress towards 'Vision Zero'
31. Trunk road and motorway network climate change adaptation and resilience
32. Trunk road and motorway network renewal for reliability, resilience and safety
33. Future Intelligent Transport Systems
34. Traffic Scotland System Renewal
35. Intelligent Transport System renewal and replacement
36. Strategy for improving rest and welfare facilities for hauliers
37. Improving active travel on trunk roads through communities
38. Speed Management Plan
39. Sustainable access to Grangemouth Investment Zone
40. Access to Stranraer and the ports at Cairnryan
41. Potential Sound of Harris, Sound of Barra fixed link and fixed link between Mull and Scottish mainland
42. Investment in port infrastructure to support vessel renewal and replacement, and progressive decarbonisation
43. Major station masterplans
44. Rail freight terminals and facilities
45. High speed and cross-border rail enhancements

### **3. Sustainable Investment Hierarchy and NTS2 Outcomes**

The second National Transport Strategy (NTS2) states that the Sustainable Investment Hierarchy (SIH) will be used to inform future investment decisions. It prioritises transport options according to the hierarchy shown in Figure 1: first reducing the need to travel unsustainably; then maintaining and safely operating existing assets; then making better use of existing capacity; before finally, considering targeted infrastructure improvements.

The STPR2 Recommendation ASTs identify the position of each recommendation on this hierarchy.



**Figure 1: Sustainable Investment Hierarchy**

The NTS2 identified the following outcomes:

- provide fair access to services we need;
- be easy to use for all;
- be affordable for all;
- help deliver our net-zero target;
- adapt to the effects of climate change;
- promote cleaner, greener choices;
- get people and goods where they need to get to;
- be reliable, efficient and high quality;
- use beneficial innovation;
- be safe and secure for all;
- enable us to make healthy travel choices; and
- help make our communities great places to live.

The STPR2 Recommendation ASTs identify the NTS2 outcomes which could be addressed by each recommendation.

## 4. Appraisal Scoring System

The detailed appraisal has been undertaken in line with STAG guidance using the seven-point scale, defined as follows:

- Major positive                   +++

The recommendation is anticipated to have a major positive contribution to achievement of the objective, or has a major (positive) benefit on the appraisal criterion. In relation to aspects of deliverability, the assessment is very positive with minimal projected risk, and strong supporting evidence/examples can be provided.

- Moderate positive               ++

The recommendation is anticipated to have a moderate positive contribution to achievement of the objective, or have a moderate (positive) benefit on the appraisal criterion. In relation to aspects of deliverability, the assessment is positive with minimal projected risk, and supporting evidence/examples can be provided.

- Minor positive                    +

The recommendation is anticipated to contribute to the achievement of the objective but not significantly, or have a minor (positive) benefit on the appraisal criterion. In relation to aspects of deliverability, the overall assessment is positive with relatively low risk, and some evidence/examples can be provided.

- Neutral                               0

The recommendation is related to but is not anticipated to have any effect on the achievement of the objective, or has no effect (neither positive or negative) on the appraisal criterion, or the assessment of the category is neither positive nor negative.

- Minor Negative                   -

The recommendation is anticipated to detract from the achievement of the objective but not significantly, or have a minor (negative) impact on the appraisal criterion. In relation to aspects of deliverability, the overall assessment is negative with some identified risks and/or uncertainty.

- Moderate Negative               --

The recommendation is anticipated to have a moderate negative impact on the achievement of the objective, or have a moderate (negative) impact on the appraisal criterion. In relation to aspects of deliverability, the overall assessment is negative with identified risks and/or a degree of uncertainty.

- Major Negative                   ---

The recommendation is anticipated to have a major negative impact on the achievement of the objective, or have a major (negative) impact on the appraisal criterion. In relation to aspects of deliverability, the overall assessment is strongly negative with multiple identified risks and/or a high degree of uncertainty.

## 5. Assessment Criteria

The detailed appraisal considers the performance of each recommendation against the following criteria, using the seven-point scale outlined in Section 4 above. The criteria are:

- The five STPR2 Transport Planning Objectives (TPOs):
  - 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; and
  - A reliable and resilient strategic transport system that is safe and secure for users.
- The five STAG criteria:
  - Environment – encompassing Biodiversity and Habitats, Geology and Soils, Land Use, Water, Drainage and Flooding, Air Quality, Historic Environment, Landscape, and Noise and Vibration
  - Climate Change – encompassing Greenhouse Gas Emissions, Vulnerability to Effects of Climate Change, and Potential to Adapt to Effects of Climate Change;
  - Health, Safety and Wellbeing – encompassing Accidents, Security, Health, Access to Health and Wellbeing Infrastructure and Visual Amenity;
  - Economy – encompassing Transport Economic Efficient (TEE) and Wider Economic Impact (WEI); and
  - Equality and Accessibility – encompassing Public & Active Travel Network Coverage, Comparative Accessibility by People Groups and Geographic Location, and Affordability.
- The three deliverability criteria:
  - Feasibility – of construction and operation, and status of technology and timescale or cost risks;
  - Affordability – scale of financial burden and risks associated with operating costs and likely revenue; and
  - Public Acceptability – likely public response to option with reference to consultation findings where appropriate.
- The five Statutory Impact Assessment criteria:
  - Strategic Environmental Assessment (SEA);
  - Equalities Impact Assessment (EqIA);
  - Island Communities Impact Assessment (ICIA);
  - Children's Rights and Wellbeing Impact Assessment (CRWIA); and
  - Fairer Scotland Duty Assessment (FSDA).

- Specifically, the SEA has included an assessment of the options against the following specific SEA objectives:
  1. Reduce emissions from Scotland's transport sector by reducing the need to travel and encouraging modal shift and help meet Scotland's wider targets to reduce greenhouse gas emissions;
  2. Adapt the transport network to the predicted effects of climate change;
  3. Reduce all forms of transport-related air pollution and improve air quality throughout Scotland;
  4. Improve quality of life and human health and increase sustainable access to essential services, employment and the natural environment;
  5. Reduce noise and vibration associated with the transport network;
  6. Promote, invest in, build and maintain infrastructure to support the development of high-quality places;
  7. Improve safety on the transport network;
  8. Promote and improve the sustainable use of the transport network;
  9. Reduce use of natural resources;
  10. Protect, maintain and improve the quality of water bodies and wetlands that could be directly or indirectly affected by transport infrastructure (with respect to Water Framework Directive targets) and protect against the risk of flooding;
  11. Protect, maintain and enhance biodiversity and ecosystem services, avoiding damage to or loss of designated and undesignated wildlife or geological sites;
  12. Safeguard and improve soil quality in Scotland, particularly high value agricultural land and carbon-rich soil;
  13. Protect and enhance (where appropriate) historic and archaeological sites and other culturally and historically important features, landscapes and their settings; and
  14. Safeguard and enhance the character and diversity of the Scottish landscape and areas of valuable landscape.
- The eight cost bands that have been used to determine the estimated capital costs of the recommendation are as follows:
  - Band 1: Under £25m;
  - Band 2: £26m - £50m;
  - Band 3: £51m - £100m;
  - Band 4: £101m - £500m;
  - Band 5: £501m - £1,000m;
  - Band 6: £1,001m - £2,500m;
  - Band 7: £2,501m - £5,000m; and
  - Band 8: Over £5,000m

## 6. Glossary of Terms

**High Scenario** – this scenario assumes no policy ambition on car kilometres and is similar to a traditional “Do Minimum” forecast. It is fully referred to as “High growth sensitivity with no policy ambition on car km”. Further information is provided in Appendix F.

**Low Scenario** – this scenario assumes a 20 per cent reduction policy ambition on car kilometres. It is fully referred to as “Low growth sensitivity with a 20% reduction policy ambition on car km”. Further information is provided in Appendix F.

### Acronyms

Acronyms and their definitions are provided below.

APPI	Assembly of Planning Policy Inputs process (land use planning data)
AST	Appraisal Summary Table
BRT	Bus Rapid Transit
BSL	British Sign Language
CAV	Connected and Autonomous Vehicle
CCRA3	Climate Change Risk Assessment 3
CCTV	Closed-Circuit Television
CHFS	Clyde and Hebrides Ferry Services
C-ITS	Cooperative Intelligent Transport Systems
COSLA	Convention of Scottish Local Authorities
CRWIA	Child Rights and Wellbeing Impact Assessment
CSR	Capital Spending Review
CT	Community Transport
DMRB	Design Manual for Roads and Bridges
DRT	Demand Responsive Transport
ECML	East Coast Main Line
EqIA	Equality Impact Assessment
FSDA	Fairer Scotland Duty Assessment
FMS	Fault Management System
GDP	Gross Domestic Product
HGV	Heavy Goods Vehicles



HRA	Habitat Regulations Appraisal
HS2	High Speed Two
ICIA	Island Communities Impact Assessment
ICP	Islands Connectivity Plan
IDM	Investment Decision Making
IIP	Infrastructure Investment Plan
IMS	Incident Management System
ISM	Individual, Social, Material
ITS	Intelligent Transport System
KSI	Killed and Seriously Injured
LGV	Light Goods Vehicle
MaaS	Mobility as a Service
MSP	Member of the Scottish Parliament
NaPTAT	National Public Transport Accessibility Tool
NIFS	Northern Isles Ferry Service
NPF4	National Planning Framework 4
NSET	National Strategy for Economic Transformation
NTS2	National Transport Strategy 2
OBR	Office for Budget Responsibility
ORR	Office of Rail and Road
PIA	Personal Injury Accident
RET	Road Equivalent Tariff
RTP	Regional Transport Partnership
RTWG	Regional Transport Working Group
SAC	Special Area of Conservation
SCOTS	Society of Chief Officers of Transportation in Scotland
SCSP	Smarter Choices, Smarter Places
SEA	Strategic Environmental Assessment
SOLACE	Society of Local Authority Chief Executives and Senior Managers
SPA	Special Protection Area

STAG	Scottish Transport Appraisal Guidance
STPR2	Strategic Transport Projects Review 2
TELMoS	Transport and Economic Land-use Model of Scotland
TMfS	Transport Model for Scotland
TPO	Transport Planning Objective
TSNCC	Traffic Scotland National Control Centre
TSS	Traffic Scotland System
WCML	West Coast Main Line
WS2+1	Wide single 2+1 carriageway cross-section, 2 lanes one direction, 1 lane opposing direction