STPR Interventions

National

Intervention	301	Expansion of Trunk Road Intelligent Transport System
Description		Introduction of a toolkit of measures on the motorway and the trunk road network in Central Scotland, covering priority vehicle lanes, ramp metering and intelligent signing.
Justification		This intervention will contribute to several national objectives, including 'journey time reductions on the trunk road network for prioritised vehicles' and (improved) journey time reliability for all users while 'maximising the labour catchment area in city regions'. This will have a significant impact on road users through efficient management of the trunk road network and by providing journey time information. There are unlikely to be any deliverability issues with this intervention as it would be implemented in line with emerging best practice experience from across Scotland and the UK.

National objectives addressed:

Objective Addressed	*Promote 'competitive' inter-urban journey times.*
Objective Addressed	*Reduce inter-urban journey time on public transport.*
Objective Addressed	*Promote journey time reduction on the trunk road network for prioritised vehicles and users (e.g. high occupancy vehicles, freight, bus) where STAG appraisal demonstrates that a strong economic case can be balanced with environmental objectives. Elsewhere on the trunk road network provide improvements to journey time reliability.*
Objective Addressed	*Promote journey time reductions between the central belt and Aberdeen/Inverness primarily to allow business to achieve an effective working day when travelling between these centres.*
Objective Addressed	*Maximise the labour catchment area in city regions where economic evidence demonstrates that this is required (favouring public transport and high occupancy vehicles and balancing with other policy measures that promote reduction in need to travel i.e. planning policy).*
Objective Addressed	*Support the development and implementation of relevant proposed national developments identified in the NPF2.*
Objective Addressed	*Reduce CO2e emissions per person km.*
Objective Addressed	*To promote continuing reduction in accident rates and severity rates across the strategic transport network, recognising the need to continue the work of the Strategic Road Safety Plan through the STPR period.*
Objective Addressed	*Improve the competitiveness of public transport relative to the car.*

Intervention	302	Enhancing Rail System Capacity through Minor Improvements
Description		Upgrading of rail signalling to reduce headways and improve throughput and efficiency on the network.
Justification		This intervention will contribute to several national objectives, including 'competitive inter-urban journey times' and 'reduced journey times between the central belt and Aberdeen / Inverness' while 'maximising the labour catchment area in city regions' (through improved journey time reliability on the rail network). This will have a significant impact on those using the rail network, as the removal of rail bottlenecks will improve the journeys made by all users. In addition, the removal of bottlenecks and a transfer from road to rail, will contribute to reductions in CO2e emissions. There are unlikely to be any deliverability issues with this intervention, however, there may be some disruption to travellers during construction work. Where possible this would be programmed to take place during scheduled periods of routine maintenance.

National objectives addressed:

Objective Addressed	*Improve the competitiveness of public transport relative to the car.*
Objective Addressed	*Stabilise total CO2e emissions.*
Objective Addressed	*Reduce CO2e emissions per person km.*
Objective Addressed	*Maximise the labour catchment area in city regions where economic evidence demonstrates that this is required (favouring public transport and high occupancy vehicles and balancing with other policy measures that promote reduction in need to travel i.e. planning policy).*
Objective Addressed	*Promote journey time reductions between the central belt and Aberdeen/Inverness primarily to allow business to achieve an effective working day when travelling between these centres.*
Objective Addressed	*Promote 'competitive' inter-urban journey times.*
Objective Addressed	*Reduce inter-urban journey time on public transport.*

Intervention	303	Further Electrification of the Strategic Rail Network
Description		Electrification of the strategic rail network, focusing initially on the central belt.
Justification		This intervention will contribute to several national objectives, including reduced CO2e emissions and improved journey time reliability. Further electrification of the strategic rail network will encourage a transfer from road to rail by offering a more attractive and reliable service. The intervention will also contribute towards a reduction in CO2e emissions by reducing the number of diesel services and provide significant improvements to journey time reliability for existing users. There are unlikely to be any deliverability issues with this intervention, however, there may be some disruption to travellers during construction work, where possible this would be programmed to take place during scheduled periods of routine maintenance.

National objectives addressed:

Objective Addressed	*Improve the competitiveness of public transport relative to the car.*
Objective Addressed	*Promote seamless travel*
Objective Addressed	*Reduce inter-urban journey time on public transport.*
Objective Addressed	*Promote journey time reduction on the trunk road network for prioritised vehicles and users (e.g. high occupancy vehicles, freight, bus) where STAG appraisal demonstrates that a strong economic case can be balanced with environmental objectives. Elsewhere on the trunk road network provide improvements to journey time reliability.*
Objective Addressed	*Stabilise total CO2e emissions.*
Objective Addressed	*Reduce CO2e emissions per person km.*
Objective Addressed	*Improve overall perceptions of public transport.*

Intervention	304	Integrated Ticketing
Description		A national integrated ticketing system for all modes of public transport, similar to the system currently used in London and the Netherlands.
Justification		This intervention would make a significant contribution to several national objectives, including the promotion of 'seamless travel' and 'improved overall perception of public transport' by providing improved interchange between modes and improved quality of journey. This is expected to further contribute towards national objectives by encouraging greater use of public transport. This intervention would be delivered under current best practice through the ScotRail franchise, however further work would be required to provide the necessary framework of integration across the national bus / ferry network in Scotland.

National objectives addressed:

Objective Addressed	*Maximise the labour catchment area in city regions where economic evidence demonstrates that this is required (favouring public transport and high occupancy vehicles and balancing with other policy measures that promote reduction in need to travel i.e. planning policy).*
Objective Addressed	*Promote seamless travel*
Objective Addressed	*Improve the competitiveness of public transport relative to the car.*
Objective Addressed	*Improve overall perceptions of public transport.*

Intervention	305	Reconfiguration of the National Rail Timetable
Description		Reconfigure the national rail timetable according to a hierarchy of services (city-city, commuters, regional).
Justification		This intervention would have a significant contribution to several national objectives, including the promotion of 'seamless travel' and improving 'the competitiveness of public transport relative to the car' by providing improved service patterns and faster connections across the network. This is expected to further contribute towards national objectives by encouraging greater use of public transport. It is considered that this intervention would be deliverable under current best practice through the ScotRail franchise.

National objectives addressed:

Objective Addressed	*Promote seamless travel*
Objective Addressed	*Improve the competitiveness of public transport relative to the car.*
Objective Addressed	*Reduce CO2e emissions per person km.*
Objective Addressed	*Support the development and implementation of relevant proposed national developments identified in the NPF2.*
Objective Addressed	*Promote journey time reductions between the central belt and Aberdeen/Inverness primarily to allow business to achieve an effective working day when travelling between these centres.*
Objective Addressed	*Reduce inter-urban journey time on public transport.*
Objective Addressed	*Improve overall perceptions of public transport.*
Objective Addressed	*Maximise the labour catchment area in city regions where economic evidence demonstrates that this is required (favouring public transport and high occupancy vehicles and balancing with other policy measures that promote reduction in need to travel i.e. planning policy).*

Intervention	307	Creation of Strategic Park-&-Ride/Choose Sites and Quality Bus Corridors
Description		Creation of a series of strategic Park-&-Ride/Choose sites using a common branding and marketing campaign. Creation of appropriate bus priority measures and unique branding on elements of the strategic road network.
Justification		This intervention would significantly contribute to several national objectives, including the promotion of 'seamless travel', improving 'the competitiveness of public transport relative to the car' and maximising 'the labour catchment area in city regions'. The intervention would have a significant impact on objectives through the provision of seamless connections between cars and bus services, bus priority measures, consistent branding, high quality passenger information and reductions in journey time into the city centres. This is expected to further contribute towards national objectives by encouraging greater use of public transport. Delivery of this intervention should be straightforward as Park-&-Ride facilities are currently operating successfully in several areas. The intervention will be dependent on the provision by third parties of adequate bus services from the Park-&-Ride facility.

National objectives addressed:

Objective Addressed	*Maximise the labour catchment area in city regions where economic evidence demonstrates that this is required (favouring public transport and high occupancy vehicles and balancing with other policy measures that promote reduction in need to travel i.e. planning policy).*
Objective Addressed	*Improve overall perceptions of public transport.*
Objective Addressed	*Improve the competitiveness of public transport relative to the car.*
Objective Addressed	*Reduce CO2e emissions per person km.*
Objective Addressed	*Promote journey time reduction on the trunk road network for prioritised vehicles and users (e.g. high occupancy vehicles, freight, bus) where STAG appraisal demonstrates that a strong economic case can be balanced with environmental objectives. Elsewhere on the trunk road network provide improvements to journey time reliability.*
Objective Addressed	*Reduce inter-urban journey time on public transport.*
Objective Addressed	*Promote seamless travel*

Intervention	308	Strategic Road Safety Plan
Description		Support the ten year Strategic Road Safety Plan through a combination of measures, programmes and policies supporting this strategy.
Justification		This intervention would significantly contribute to the objective 'to promote continuing reduction in accident rates and severity rates across the strategic transport network, recognising the need to continue the work of the Strategic Road Safety Plan through the STPR period' by achieving the national targets for casualty reductions, promoting network improvements and implementing initiatives that will support the plan. Improvements to the strategic road network would be deliverable through best practice, while other initiatives could be delivered through a range of partnerships.

National objectives addressed:

Objective Addressed	*To promote continuing reduction in accident rates and severity rates across the strategic transport network, recognising the need to continue the work of the Strategic Road Safety Plan through the STPR period.*

STPR Interventions

Aberdeen

Intervention	67	Aberdeen Airport Public Transport Interchange
Description		Co-locate Aberdeen Airport terminal and railway stations on the same site to create a public transport interchange.
Justification		Locating Aberdeen Airport terminal building on the same site as Dyce (Aberdeen Airport) railway station would provide better integration between the two modes. This intervention would significantly contribute towards the objective 'to improve accessibility, primarily by public transport, to and between the airport and Aberdeen city centre', by negating the need to transfer between the existing Dyce railway station and the airport terminal, which at present are remote from one another. The intervention would be implemented in line with current best practice.

Objectives addressed in Aberdeen:

Objective Addressed	*To improve accessibility, primarily by public transport, to and between the City Centre, Dyce, the airport and South East Aberdeen.*

Intervention	115	Aberdeen Bus Priority Measures and Park-&-Ride Network
Description		A network of Park-&-Ride sites and bus priority measures on the approaches to Aberdeen. The intervention also includes improvements at the A90/A96 junction.
Justification		This intervention would significantly contribute to the objective 'to improve accessibility, primarily by public transport, to and between the City Centre, Dyce, the airport and South East Aberdeen' by providing bus priority measures that would assist in reducing bus journey times across the city and significantly improve reliability. The Park-&-Ride facilities would improve access to these bus services for people living across the wider area around Aberdeen. Delivery of this interventions should be straightforward as Park-&-Ride facilities are currently operating successfully in several areas. The intervention will be dependent on the provision by third parties of adequate bus services from the Park-&-Ride facilities.

Objectives addressed in Aberdeen:

Objective Addressed	*To improve accessibility, primarily by public transport, to and between the City Centre, Dyce, the airport and South East Aberdeen.*

Intervention	162	Suburban Light/Heavy Rail Services Across Aberdeen
Description		A frequent service providing opportunities for through trips between the commuting towns on the outskirts of Aberdeen, with the opening of some new suburban rail stations. Trains services to and from Dyce Station would also be improved. This is expected to require additional suburban rolling stock, changes to track layout and construction of the new stations. This option also includes provision of Park-&-Ride, bus stops and access for cyclists and walkers at each station.
Justification		This intervention would significantly contribute to the objective of 'improving accessibility, primarily by public transport, to and between the City Centre, Dyce, the airport and South East Aberdeen' by providing more frequent cross-city rail services, connecting towns and communities such as Inverurie, Aberdeen City Centre and Stonehaven, as well as suburbs of Aberdeen such as Bridge of Don, Kintore, Cove Bay and Bieldside. This intervention would be implemented in line with current best practice.

Objectives addressed in Aberdeen:

Objective Addressed	*To improve accessibility, primarily by public transport, to and between the City Centre, Dyce, the airport and South East Aberdeen.*

STPR Interventions

Dundee

Intervention	15	Suburban Rail Services Across Dundee
Description		A frequent service from Arbroath to Perth, with a new station at Dundee West and calling at all intermediate stations. This would require additional suburban rolling stock, changes to track layout and signalling to allow for the increased service frequency and construction of the new station. Additional improvements to stations on this route to improve the environment for passengers are included.
Justification		This intervention would significantly contribute to the objective of 'improving bus/rail interchange opportunities' by increasing the number of rail services. This would significantly reduce the connection time between modes and make the interchange between modes more attractive. This intervention would also contribute to addressing the objective of 'improving public transport accessibility and competitiveness to Dundee West' by providing heavy rail connections to this area which do not presently exist. This intervention would be deliverable under current best practice, however there are potential environmental issues which may require mitigation during the planning and construction phases of this intervention.

Objectives addressed in Dundee:

Objective Addressed	*To improve the public transport accessibility and competitiveness to Dundee West.*
Objective Addressed	*To improve bus/rail interchange opportunities.*

Intervention	60	Dundee Northern Relief Road
Description		A new bypass around Dundee from the A90 west of Invergowrie to the A90 north of Dundee.
Justification		The A90 Kingsway is currently used as both a bypass for long distance traffic between Perth / Central Belt and the north east and by local traffic. This intervention would significantly contribute to the objective of 'reducing the conflict between long distance and local traffic' as the provision of a new bypass would enable long distance traffic to bypass the Kingsway. The Northern Relief Road would be delivered in line with current best practice, however there are potential environmental issues which would require mitigation during the planning and construction phases of this intervention.

Objectives addressed in Dundee:

Objective Addressed	*To reduce the conflict between longer distance and local traffic.*

Intervention	61	Grade Separation of Junctions on the A90 Kingsway in Dundee
Description		Grade separation of all/some roundabouts on the A90 Kingsway, with ramp metering at these and existing grade separated junctions.
Justification		Grade separation of the remaining roundabouts on the A90 Kingsway would significantly contribute towards the objective of 'reducing the conflict between long distance and local traffic' by removing delay to long distance traffic currently experienced at the existing roundabouts. Ramp metering would also reduce the impact of traffic joining the A90 on long distance traffic. The intervention would be delivered in line with current best practice, however due to the proximity of the road to residential and commercial properties along the length of the route there are potential environmental and land issues which would need to be addressed during the planning and construction phases of this intervention.

Objectives addressed in Dundee:

Objective Addressed	*To reduce the conflict between longer distance and local traffic.*

Intervention	62	Dundee Bus Priority and Park-&-Ride Network
Description		Network of Park-&-Ride sites on the A90 (West), A932, A90 (North), A92 (East) and A92 (Tay Road Bridge) approaches to Dundee, with associated bus priority measures into and through Dundee.
Justification		This intervention would significantly contribute to the objective 'to improve public transport accessibility and competitiveness to Dundee West' by providing bus priority measures that would significantly improve reliability, reduce bus journey times across the city and offer a more competitive alternative to the car. The Park-&-Ride facilities would improve access around Dundee, including to and from the rail station. The intervention would be implemented in line with current best practice.

Objectives addressed in Dundee:

Objective Addressed	*To improve the public transport accessibility and competitiveness to Dundee West.*
Objective Addressed	*To improve bus/rail interchange opportunities.*

Intervention	63	Co-locate Dundee Bus Station with Rail Station
Description		Remodel the existing bus and rail stations and locate them on the same site to create a public transport interchange.
Justification		Locating Dundee bus and rail stations on the same site would significantly contribute towards the objective 'to improve bus/rail interchange opportunities', thereby promoting seamless travel and improving strategic links between bus and rail. The intervention would be implemented in line with current best practice.

Objectives addressed in Dundee:

Objective Addressed	*To improve bus/rail interchange opportunities.*

STPR Interventions

Edinburgh

Intervention	72	Expand Edinburgh South-East Bus Priority and Park-&-Ride Network
Description		Bus priority measures on the South/East approaches to Edinburgh including the A1/A199, the A7/A68 between Dalkeith, Newtongrange and Edinburgh. Bus priority measures would also be implemented at the A1/A720 junction and at the A7/A720 Sheriffhall Roundabout. This intervention also includes bus priority measures on the Edinburgh City Bypass to encourage cross Edinburgh services to locations such as Edinburgh Park.
Justification		This intervention would significantly contribute to the objective to 'maintain the 60-minute commutable labour market area at the current level, with a particular focus on linking areas of economic activity' through expansion of the Park-&-Ride network and by providing bus priority, which would significantly reduce delay for existing and future bus users. Bus priority measures around the Edinburgh City Bypass would improve public transport connections between the economic areas located to the east and west of the city. Delivery of this interventions should be straightforward as Park-&-Ride facilities are currently operating successfully in several areas, however there may be impact due to physical constraints along the City Bypass The intervention will be dependent on the provision by third parties of adequate bus services from the Park-&-Ride facilities.

Objectives addressed in Edinburgh:

Objective Addressed	*To maintain the 60-minute commutable labour market area at the current level, with a particular focus on linking areas of economic activity.*

Objectives addressed in Corridor 20:

Objective Addressed	*To increase the attractiveness and capacity of public transport into Edinburgh to reduce crowding and forecast road congestion.*

Intervention	76	Upgrade Edinburgh Haymarket Public Transport Interchange
Description		Creation of a rail / tram / bus / coach / taxi interchange at Haymarket station, including reconstruction of Haymarket station to increase passenger circulation capacity.
Justification		This intervention would significantly contribute to the objective 'to enhance public transport interchange opportunities' by providing a multi-modal station, with easy transfer between a variety of public transport modes. This would significantly improve public transport access to areas in the north and west of Edinburgh. The construction of this intervention may impact on the operation of the rail network, however these constraints are not expected to impact on the overall deliverability.

Objectives addressed in Edinburgh:

Objective Addressed	*To enhance public transport interchange opportunities, where feasible to do so.*

Intervention	77	Edinburgh Waverley Public Transport Interchange
Description		Creation of a rail / bus / coach interchange at Edinburgh Waverley station, requiring significant station reconstruction works.
Justification		This intervention would significantly contribute to the objective 'to enhance public transport interchange opportunities' by providing a multi-modal station, with easy transfer between a variety of public transport modes, thereby removing the need to walk between the existing bus and rail stations. The construction of this intervention may impact on the operation of the rail network. In addition, due to the proximity of the World Heritage site mitigation measures would be required, which may impact on the configuration of the station buildings and associated infrastructure.

Objectives addressed in Edinburgh:

Objective Addressed	*To enhance public transport interchange opportunities, where feasible to do so.*

Intervention	84	Rail Service Frequency Enhancements between Edinburgh and Newcraighall
Description		Increase the service frequency between Edinburgh and Newcraighall to four trains per hour. This would require additional rolling stock, capacity enhancements at Waverley station through to Portobello Junction and the line between Portobello Junction and Newcraighall to allow for this increased frequency. Services could run through Edinburgh to provide cross city connections to Haymarket, Edinburgh Park, South Gyle or Livingston.
Justification		This intervention would significantly contribute to the objective 'to enhance public transport interchange opportunities' by providing twice as many services into Edinburgh than presently operate. Furthermore an increase in frequency between Edinburgh and Newcraighall would have a significant impact on increasing the attractiveness of public transport as it would reduce the average waiting time for a train. Reducing the average waiting times would improve interchanges between rail services and other modes of public transport. This intervention would be deliverable under current best practice through the ScotRail franchise.

Objectives addressed in Edinburgh:

Objective Addressed	*To enhance public transport interchange opportunities, where feasible to do so.*

Objectives addressed in Corridor 20:

Objective Addressed	*To increase the attractiveness and capacity of public transport into Edinburgh to reduce crowding and forecast road congestion.*

Intervention	114	Suburban Rail Services Across Edinburgh
Description		Cross Edinburgh service from Livingston North to Shawfair utilising the Edinburgh Suburban Line. This would require enhancement of the infrastructure, additional rolling stock and signalling.
Justification		This intervention would significantly contribute to the objective 'to maintain the 60-minute commutable labour market area at the current level, with a particular focus on linking areas of economic activity' by providing additional capacity and frequency and better connections to two of Edinburgh's areas of economic activity, West Edinburgh and South East Edinburgh. The delivery of this intervention would utilise the existing railway tracks, some of which is currently used for freight only.

Objectives addressed in Edinburgh:

Objective Addressed	*To maintain the 60-minute commutable labour market area at the current level, with a particular focus on linking areas of economic activity.*
Objective Addressed	*To enhance public transport interchange opportunities, where feasible to do so.*

Objectives addressed in Corridor 13:

Objective Addressed	*To increase public transport capacity and frequency between Livingston and Edinburgh.*

Intervention	121	Priority Vehicle Lane on the M8 between Junctions 1 and 3
Description		Widen the M8 motorway between Livingston (Junction 3) and the A720 (Junction 1) to provide a third lane dedicated to priority vehicles.
Justification		This intervention would significantly contribute to the objective 'to maintain the 60-minute commutable labour market area at the current level, with a particular focus on linking areas of economic activity' by significantly reducing the impact of congestion for bus users and improving links to west and central Edinburgh. The intervention would also provide benefits for goods vehicles if they were allowed to use the priority vehicle lane. There are a number of well developed and cost effective measures that can be applied where appropriate.

Objectives addressed in Edinburgh:

Objective Addressed	*To enhance public transport interchange opportunities, where feasible to do so.*
Objective Addressed	*To maintain the 60-minute commutable labour market area at the current level, with a particular focus on linking areas of economic activity.*

Objectives addressed in Corridor 13:

Objective Addressed	*To increase public transport capacity and frequency between Livingston and Edinburgh.*

Intervention	122	Priority Vehicle Lane on the M90/A90 between Halbeath and the Forth Road Bridge
Description		Widen the M90/A90 motorway between Halbeath and the Forth Road Bridge to provide a third lane dedicated to priority vehicles.
Justification		This intervention would significantly contribute to the objective 'to maintain the 60-minute commutable labour market area at the current level, with a particular focus on linking areas of economic activity' by significantly reducing the impact of congestion for bus users and improving links to west and central Edinburgh. The intervention would also provide benefits for goods vehicles if they were allowed to use the priority vehicle lane. This intervention would be deliverable under current best practice.

Objectives addressed in Edinburgh:	
Objective Addressed	*To maintain the 60-minute commutable labour market area at the current level, with a particular focus on linking areas of economic activity.*
Objectives addressed in Corridor 12:	
Objective Addressed	*To improve the efficiency of the M90/A90 during periods of peak demand with a focus on reducing the conflict between longer distance and local traffic.*
Objective Addressed	*To promote efficient and effective transport links to support the development and implementation of the proposed national developments at Rosyth, Forth Crossing and Edinburgh Airport identified in the NPF2.*
Objective Addressed	*To reduce Edinburgh to Perth public transport journey times and increase opportunities to travel by public transport.*
Objectives addressed in Corridor 14:	
Objective Addressed	*To reduce public transport journey time between Edinburgh and Dundee.*
Objective Addressed	*To improve the efficiency of the M90/A90 during periods of peak demand with a focus on reducing the conflict between longer distance and local traffic.*
Objective Addressed	*To promote efficient and effective transport links to support the development and implementation of the proposed national developments at Rosyth, Forth Crossing and Edinburgh Airport identified in the NPF2.*

Intervention	129	Priority Vehicle Lane on the A720 Edinburgh City Bypass
Description		Widen the A720 Edinburgh City Bypass to provide a third lane dedicated to priority vehicles. Includes junction improvements at the A1, Sheriffhall and Hermiston.
Justification		This intervention would significantly contribute to the objective 'to maintain the 60-minute commutable labour market area at the current level, with a particular focus on linking areas of economic activity' by significantly reducing the impact of congestion for bus users and improving links between the areas of economic activity located to the east and west of the city. Delivery may be impacted due to physical constraints along the City Bypass, however this issue could be mitigated during the planning and design stages.

Objectives addressed in Edinburgh:

Objective Addressed	*To maintain the 60-minute commutable labour market area at the current level, with a particular focus on linking areas of economic activity.*

Intervention	156	Intelligent Transport System Initiatives on the A720 Edinburgh City Bypass
Description		Intelligent Transport Systems, priority vehicle lanes, ramp metering, variable speed limits and hard shoulder running for priority vehicles on the A720 Edinburgh City Bypass.
Justification		This intervention would significantly contribute the objective of 'maintaining the 60-minute commutable labour market area at the current level, with a particular focus on linking areas of economic activity' and 'promoting efficient and effective transport links to support the development and implementation of the proposed national development at Edinburgh Airport identified in the NPF2' by reducing delays and congestion on the City Bypass. The various elements of the intervention will have a significant impact on road users through efficient management of the City Bypass. There are a number of well developed and cost effective measures that can be applied where appropriate. The introduction of an additional lane may be impacted due to physical constraints along the City Bypass, however this issue could be mitigated during the planning and design stages. There area number of well developed and cost effective measures that can be applied where appropriate.

Objectives addressed in Edinburgh:

Objective Addressed	*To maintain the 60-minute commutable labour market area at the current level, with a particular focus on linking areas of economic activity.*
Objective Addressed	*To promote efficient and effective transport links to support the development and implementation of the proposed national development at Edinburgh Airport identified in the NPF2.*

STPR Interventions

Glasgow

Intervention	25	Divert Cumbernauld and Falkirk Grahamston Services to Glasgow Queen Street Low Level
Description		Electrification of the Glasgow to Cumbernauld and Falkirk Grahamston line (along with the construction of the Garngad Curve) and diversion of these services into Glasgow Queen Street Low Level. Also includes the construction of new stations at Blochairn, Bannockburn and Bonnybridge and turnback facilities at Kelvinhaugh.
Justification		This intervention would significantly contribute to the objective 'rail capacity and connectivity issues in central Glasgow' by diverting services from Falkirk Grahamston and Cumbernauld from Glasgow Queen Street high level to the low level platforms. This would result in an increase in capacity on this route, in addition to allowing an increase in services between Glasgow Queen Street and Croy. The diversion of the services into the low level platforms would also significantly improve connectivity between the west of Glasgow and the north by providing a same platform interchange. Additionally this intervention would contribute to the objective to 'increase the public transport access to and between areas of economic activity and regeneration with minimal need for interchange' by running services directly to communities such as Partick, Clydebank, Dalmuir and Milngavie from Cumbernauld and Falkirk. This would also provide an improved connection from the north of Glasgow to the regeneration area along the Clyde Waterfront. It is considered that this intervention would be deliverable under current best practice.

Objectives addressed in Glasgow:	
Objective Addressed	*To address rail capacity and connectivity issues in central Glasgow.*
Objective Addressed	*To increase the public transport access to and between areas of economic activity and regeneration with minimal need for interchange.*
Objectives addressed in Corridor 9:	
Objective Addressed	*To address current and forecast rail overcrowding into Glasgow.*

Intervention	41	M77 Corridor Bus Priority Measures and Park-&-Ride Network
Description		Bus priority measures, including hard shoulder bus lanes or guided busways to serve Glasgow city centre and the south west of Glasgow.
Justification		This intervention would significantly contribute to the objective 'to increase the public transport access to and between areas of economic activity and regeneration with minimal need for interchange' by reducing the impact of increased congestion on journey times and journey time reliability for bus services into Glasgow city centre and the south west of the city. The proposed Park-&-Ride facilities would improve access to these bus services for people living in a wide area to the south and south west of the city. Delivery of this interventions should be straightforward as Park-&-Ride facilities are currently operating successfully in several areas. Delivery of this interventions should be straightforward as Park-&-Ride facilities are currently operating successfully in several areas. The intervention will be dependent on the provision by third parties of adequate bus services from the Park-&-Ride facilities.

Objectives addressed in Glasgow:

Objective Addressed	*To increase the public transport access to and between areas of economic activity and regeneration with minimal need for interchange.*

Intervention	43	Glasgow Subway Upgrade and Modernisation
Description		Upgrade and modernisation of Glasgow Subway to optimise performance and increase frequency.
Justification		This intervention would significantly contribute to the objectives 'to address rail capacity and connectivity issues in central Glasgow' and 'to increase the public transport access to and between areas of economic activity and regeneration with minimal need for interchange' by increasing rail capacity between Glasgow city centre, Glasgow's West End, Govan and communities between Govan and the city centre. This would have a significant impact on accessibility between these communities, the city centre and the Clyde Waterfront and would also have a positive impact on journey times beyond Glasgow from these communities, by reducing the average wait time when interchanging between modes. The upgrading and modernisation of the existing subway line and facilities would be deliverable under current best practice.

Objectives addressed in Glasgow:

Objective Addressed	*To increase the public transport access to and between areas of economic activity and regeneration with minimal need for interchange.*
Objective Addressed	*To address rail capacity and connectivity issues in central Glasgow.*

Intervention	44	Divert Whifflet and Edinburgh (via Shotts) Rail Services to Glasgow Central Low Level
Description		The conversion of diesel services to electric traction and diverting them into the Glasgow Central Low Level (Argyle Line). This would also require turnback facilities at Exhibition Centre or improvements to the line between Partick and Hyndland. Whifflet services would be extended to Ravenscraig with a new station at Carnbroe.
Justification		This intervention would significantly contribute to the objectives 'to address rail capacity and connectivity issues in central Glasgow' and 'to increase the public transport access to and between areas of economic activity and regeneration with minimal need for interchange' by increasing service frequency between Glasgow city centre and Whifflet and increasing rail capacity into Glasgow. It would also significantly improve connectivity between Whifflet and communities to the west of Glasgow city centre, including the regeneration areas along the River Clyde, by providing the same platform interchange at Glasgow Central Low Level. There would be no deliverability issues with this intervention as it would be implemented in line with current best practice.

Objectives addressed in Glasgow:

Objective Addressed	*To increase the public transport access to and between areas of economic activity and regeneration with minimal need for interchange.*
Objective Addressed	*To address rail capacity and connectivity issues in central Glasgow.*

Intervention	48	Construction of Glasgow Crossrail
Description		This would involve the reopening of the Glasgow City Union Line for passenger trains, with two new spurs. The first spur, the Strathbungo Link, would be from Muirhouse South Junction to the City Union Line. The second spur would be from the City Union Line on to the North Electric Line heading west at High Street. Some services from the south and west would be diverted from Glasgow Central high level to Glasgow Queen Street low level, some additional services would run into both Glasgow Central and Glasgow Queen Street and additional services would also run across Glasgow from the south and west to the east and north without serving either of the two main stations.
Justification		This intervention would significantly contribute to the objectives targeted at improving public transport in and around the economic centre of Glasgow and the regeneration areas by increasing rail capacity into Glasgow through a transfer of services that currently operate into Glasgow Central high level to divert into Glasgow Queen Street low level. This would allow new services to operate into Glasgow Central high level. The services which would operate into Glasgow Queen Street low level would be able to run through Glasgow and serve communities to the west of the city centre, providing significantly improved connections to the regeneration areas along the Clyde Waterfront. This would also remove the need for passengers who travel from the south of Glasgow to Aberdeen or Inverness to have to transfer between Glasgow Central and Glasgow Queen Street, reducing the journey time to the north and making public transport as a choice, more attractive. This intervention would be deliverable under current best practice, however there are potential environmental issues due to size and scale of this intervention which would almost certainly require mitigation during the planning and construction phases of this intervention.

Objectives addressed in Glasgow:

Objective Addressed	*To increase the public transport access to and between areas of economic activity and regeneration with minimal need for interchange.*
Objective Addressed	*To address rail capacity and connectivity issues in central Glasgow.*
Objective Addressed	*To promote journey time reductions, particularly by public transport, between the central belt and Aberdeen/Inverness primarily to allow business to achieve an effective working day when travelling between these centres.*

Intervention	50	New Cross Glasgow Rail Tunnel connecting Shields, Muirhouse, Cowlairs and Bellgrove
Description		This intervention would include the construction of a heavy rail tunnel across Glasgow with a new underground city centre station. The tunnel would connect the network south of the Clyde with the network to the north and east of Glasgow city centre. This would require significant infrastructure works.
Justification		This intervention would significantly contribute to the objectives 'to address rail capacity and connectivity issues in central Glasgow' and 'increase the public transport access to and between areas of economic activity and regeneration with minimal need for interchange' by providing a step change in rail capacity into Glasgow. This intervention would allow a significant number of services to run across Glasgow from areas such as Inverclyde and Ayrshire to Edinburgh, Stirling and north of the Central Belt to Dundee and Aberdeen, which would reduce the need to interchange between Glasgow Central and Glasgow Queen Street stations. This intervention would be deliverable under current best practice, however there are potential environmental issues due to size and scale of this intervention which would almost certainly require mitigation during the planning and construction phases of this intervention.

Objectives addressed in Glasgow:	
Objective Addressed	*To increase the public transport access to and between areas of economic activity and regeneration with minimal need for interchange.*
Objective Addressed	*To address rail capacity and connectivity issues in central Glasgow.*
Objectives addressed in Corridor 9:	
Objective Addressed	*To address current and forecast rail overcrowding into Glasgow.*

Intervention	51	Lengthen Trains and Platforms in Strathclyde
Description		The introduction of longer trains across the Strathclyde area would necessitate the lengthening of platforms at stations within this area, as well as additional rolling stock and capacity enhancements at Glasgow Central.
Justification		This intervention would significantly contribute to the objective 'to address rail capacity and connectivity issues in central Glasgow' by increasing the number of coaches on services across Strathclyde and thereby providing additional seating capacity, without having to run any additional services. This would improve public transport accessibility to Glasgow city centre and across the region. This intervention would be deliverable through the ScotRail franchise.

Objectives addressed in Glasgow:	
Objective Addressed	*To address rail capacity and connectivity issues in central Glasgow.*
Objectives addressed in Corridor 9:	
Objective Addressed	*To address current and forecast rail overcrowding into Glasgow.*
Objectives addressed in Corridor 13:	
Objective Addressed	*To increase public transport capacity and reduce journey time between Edinburgh and Glasgow.*
Objectives addressed in Corridor 15:	
Objective Addressed	*To increase rail capacity between Ayrshire and Glasgow including the Kilmarnock line.*
Objectives addressed in Corridor 17:	
Objective Addressed	*To increase capacity and reduce journey times by public transport between Glasgow and Inverclyde.*

Intervention	53	Glasgow Light Rapid Transit Network and Busway System
Description		This would see the development of a light rapid transit network across Glasgow. This would be a mixture of new lines, lines on existing redundant infrastructure and conversion of heavy rail to light rail. This intervention could also include a busway system along the River Clyde, connecting in to Clyde Fastlink and continuing west to serve Clydebank, Renfrew and Glasgow Airport.
Justification		This intervention would significantly contribute to the objective to improve 'rail capacity and connectivity', would 'increase the public transport access to and between areas of economic activity and regeneration' and promote efficient and effective transport links to Glasgow Airport by releasing capacity on railway services into Glasgow, which would reduce the demand for travel on the heavy rail network. The LRT network would significantly improve public transport accessibility from parts of the conurbation that are not currently served by rail and provide direct connections across the city, including the city centre, regeneration areas along the River Clyde and areas of economic activity such as Hillington and Glasgow Airport. This intervention would be implemented in line with current best practice.

Objectives addressed in Glasgow:	
Objective Addressed	*To promote efficient and effective transport links to support the development and implementation of the proposed national development at Glasgow Airport identified in the NPF2.*
Objective Addressed	*To address rail capacity and connectivity issues in central Glasgow.*
Objective Addressed	*To increase the public transport access to and between areas of economic activity and regeneration with minimal need for interchange.*
Objectives addressed in Corridor 17:	
Objective Addressed	*To promote efficient and effective transport links to support the development and implementation of the proposed national development at Glasgow Airport identified in the NPF2.*

Intervention	116	M74 Bus Priority Measures and Park-&-Ride Network between Glasgow City Centre and Areas to the South-East
Description		Bus priority measures, including hard shoulder bus lanes or guided busways to serve Glasgow city centre and Park-&-Ride facilities accessible from the motorway.
Justification		This intervention would significantly contribute to the objective 'to increase the public transport access to and between areas of economic activity and regeneration with minimal need for interchange' by significantly reducing the impact of increased congestion on journey times and journey time reliability into Glasgow city centre and the Clyde Gateway regeneration area. The Park-&-Ride facilities would also improve access to these bus services for people living in the wider area. Delivery of this interventions should be straightforward as Park-&-Ride facilities are currently operating successfully in several areas. The intervention will be dependent on the provision by third parties of adequate bus services from the Park-&-Ride facilities.

Objectives addressed in Glasgow:

Objective Addressed	*To increase the public transport access to and between areas of economic activity and regeneration with minimal need for interchange.*

Intervention	175	New River Clyde Rail Crossing and Glasgow Outer-Suburban Circular Rail Service
Description		This intervention would involve a number of new and upgraded rail links in Glasgow. A new crossing of the River Clyde would be provided, connecting the line to and from Paisley Gilmour Street with the line between Jordanhill and Yoker. A new chord would be provided at Anniesland to connect the North Electric Line with the branch from Maryhill. A number of lines and junctions would be upgraded, such as the City Union Line and Bellgrove Junction. Starting at Maryhill and working clockwise, a new outer-suburban service would use the existing Maryhill Branch to Cowlairs, the City Union to Shields and the new link under the Clyde to Jordanhill and onwards to Maryhill. Services would also operate from west or south of Paisley (e.g. Gourock or Ayr), across the river to communities such as Airdrie, Dalmuir and Milngavie.
Justification		This intervention would significantly contribute to the objectives of 'addressing rail capacity and connectivity issues in central Glasgow' and 'increasing the public transport access to and between areas of economic activity and regeneration with minimal need for interchange' by significantly improving connectivity within and across Glasgow through new direct rail connections between communities that are not currently connected. This intervention would be implemented in line with current best practice, however there are potential environmental issues which may need to be mitigated during the construction phase of this intervention.

Objectives addressed in Glasgow:

Objective Addressed	*To increase the public transport access to and between areas of economic activity and regeneration with minimal need for interchange.*
Objective Addressed	*To address rail capacity and connectivity issues in central Glasgow.*

Intervention	182	New Glasgow City Centre Rail Terminal at St Enoch
Description		Construction of a new St Enoch Station to the south of the St Enoch Centre. This would connect with the Glasgow City Union Line with connections both north towards Bellgrove and south towards Barrhead and Paisley.
Justification		This intervention would significantly contribute to the objective 'to increase public transport access to and between areas of economic activity and regeneration with minimal need for interchange' and 'to address rail capacity and connectivity issues in central Glasgow' by providing a new station in the centre of Glasgow that can be accessed from a number of existing railway routes. The intervention would provide a step change in the provision of public transport, serving journeys through and to Glasgow reducing the impact of interchange. This intervention would be implemented in line with current best practice, however there are potential environmental issues which may need to be mitigated during the construction phase of this intervention.

Objectives addressed in Glasgow:	
Objective Addressed	*To address rail capacity and connectivity issues in central Glasgow.*
Objective Addressed	*To increase the public transport access to and between areas of economic activity and regeneration with minimal need for interchange.*
Objectives addressed in Corridor 1:	
Objective Addressed	*To enhance public transport accessibility and reduce public transport journey time to and from Inverness.*
Objectives addressed in Corridor 15:	
Objective Addressed	*To increase rail capacity between Ayrshire and Glasgow including the Kilmarnock line.*

STPR Interventions

Inverness

Intervention	55	Inverness Southern Bypass from the A96 to A82
Description		New link road from the A96 at Smithton to the A9 at Inshes, upgrade to dual carriageway, and then upgrading the existing B8082 between Inshes and Dores Roundabout, new crossing of the Caledonian Canal and the River Ness between Dores Roundabout and the A82 at Torvean.
Justification		This intervention would significantly contribute to the objective 'to reduce the conflict between longer distance and local traffic' by allowing long distance traffic from the A9 and A96 to the A82 to avoid Inverness city centre. It would also further reduce conflict and contribute to the objective of 'improving connectivity, particularly by public transport between Inverness city centre and the growth area to the east including Inverness Airport' by allowing traffic between the A9 and A96 to avoid Raigmore Interchange. Reducing this conflict and delay at Raigmore could significantly benefit trips from the south heading into Inverness or east towards Nairn, and also reduce delays for trips from Inverness Airport, Nairn and communities east of Inverness travelling into Inverness city centre. This intervention would be deliverable under current best practice, however there are potential environmental issues during the second element of this intervention, due to the crossings of both the River Ness and Caledonian Canal which would require mitigation during the planning and construction phases of this intervention.

Objectives addressed in Inverness:

Objective Addressed	*To improve connectivity, particularly by public transport between Inverness city centre and the growth area to the east including Inverness Airport.*
Objective Addressed	*To reduce the conflict between longer distance and local traffic.*

Objectives addressed in Corridor 4:

Objective Addressed	*To improve connectivity, particularly by public transport between Inverness city centre and the growth area to the east including Inverness Airport.*

STPR Interventions

Perth

Intervention	161	Grade separation of Broxden and Inveralmond roundabouts
Description		Grade separation of Broxden and Inveralmond roundabouts.
Justification		This intervention would significantly contribute to the objectives to 'promoting continuing reduction in accident rates and severity rates across the strategic transport network' and 'reducing emissions per person kilometre' by significantly reducing congestion and improving the smooth flow of traffic, including heavy goods vehicles, along the A9 around Perth. This intervention would be deliverable under current best practice, however land constraints adjacent to Inveralmond Roundabout would require mitigation within the planning and design stages.

Objectives addressed in Perth:	
Objective Addressed	*To contribute to reducing the emissions per person kilometre.*
Objective Addressed	*To promote continuing reduction in accident rates and severity rates across the strategic transport network.*
Objectives addressed in Corridor 6:	
Objective Addressed	*To promote journey time reductions, particularly by public transport, between the central belt and Inverness primarily to allow business to achieve an effective working day when travelling between these centres.*
Objective Addressed	*To improve the operational effectiveness of the A9 as it approaches Perth and Inverness.*
Objectives addressed in Corridor 9:	
Objective Addressed	*To reduce the severity of accidents to the national average.*
Objective Addressed	*To promote journey time reductions, particularly by public transport, between the central belt and Aberdeen/Inverness primarily to allow business to achieve an effective working day when travelling between these centres.*

STPR Interventions

1 Inverness to Wick / Thurso and Northern Isles

Intervention	1	Augment Far North Line Rail Services with Express Coach Services
Description		Coach stop facilities to serve communities north of Inverness, including those in the Black Isle and Dornoch areas. Services would provide direct connections with Northern Isles ferries. This intervention would also include improvements to the A9 to reduce journey time variability and the introduction of Park-&-Ride services.
Justification		This intervention contributes to the objective to 'enhance public transport accessibility and reduce public transport journey time to and from Inverness' by providing express coach facilities along the Far North Line. This would improve public transport accessibility significantly by allowing a more frequent service to operate and for it to call at communities not served by the existing railway line. Furthermore, public transport journey times would also improve as some services would take a more direct route than the existing rail line. There would be no deliverability issues with this intervention, however detailed discussions with bus/rail operators, the local authority and the Regional Transport Partnership would be required.

Objectives addressed in this corridor:

Objective Addressed	*To enhance public transport accessibility and reduce public transport journey time to and from Inverness.*

Intervention	109	Speed Enforcement Measures on the A9 north of Inverness and on the A99
Description		Speed Enforcement Measures on the A9 north of Inverness and on the A99 at locations where vehicle speed is a contributing factor to accidents.
Justification		This intervention would significantly contribute to the objective 'to reduce fatal and severe accident rates' and is likely to make a significant impact by ensuring greater compliance with speed limits. There are a number of well developed and cost effective measures that can be applied where appropriate.

Objectives addressed in this corridor:

Objective Addressed	*To reduce the fatal and severe accident rates to the national average or lower.*

Intervention	110	Online Trunk Road Improvements on the A9 North of Tore Roundabout and the A99
Description		Measures such as realignment and widening of carriageway and junction improvements at specific locations on the A9.
Justification		This intervention would significantly contribute to the objective 'to reduce fatal and severe accident rates to the national average or lower' by providing safe overtaking opportunities and improved road standards along the route. This intervention would be implemented in line with current best practice, however there are potential environmental issues which may need to be mitigated during the construction phase of this intervention.

Objectives addressed in this corridor:

Objective Addressed	*To reduce the fatal and severe accident rates to the national average or lower.*

Intervention	126	Rail Infrastructure and Service Enhancements on the Far North Line
Description		Improvements on the existing railway line between Inverness and Wick/Thurso to improve line speeds, reduce journey times and increase service frequencies. This is expected to include new rolling stock, upgrading the quality of the track and dynamic loops.
Justification		This intervention would significantly contribute to the objective 'to enhance public transport accessibility and reduce public transport journey time to and from Inverness' by making track improvements to the Far North Line between Inverness and the far north of Scotland. This intervention would be implemented in line with current best practice, however there are potential environmental issues which may need to be mitigated during the construction phase of this intervention.

Objectives addressed in this corridor:

Objective Addressed	*To enhance public transport accessibility and reduce public transport journey time to and from Inverness.*

STPR Interventions

2 Inverness to Ullapool and Western Isles

Intervention	78	Speed Enforcement Measures on the A9 between Inverness and Tore and on the A835
Description		Speed Enforcement Measures on the A9 between Inverness and Tore and on the A835 between Tore and Ullapool at locations where vehicle speed is a contributing factor to accidents.
Justification		This intervention would significantly contribute to the objective 'to reduce fatal and severe accident rates' and is likely to make a significant impact by ensuring greater compliance with speed limits. There are a number of well developed and cost effective measures that can be applied where appropriate.

Objectives addressed in this corridor:

Objective Addressed	*To reduce the accident, fatal and severe rates to the national average.*

Intervention	79	Online Trunk Road Improvements on the A835 between Tore Roundabout and Ullapool
Description		Measures such as realignment of carriageway and junction improvements at specific locations on the A835.
Justification		This intervention would significantly contribute to the objective 'to reduce fatal and severe accident rates to the national average or lower' by providing safe overtaking opportunities and improved road standards along the route. This intervention would be implemented in line with current best practice, however there are potential environmental issues which may need to be mitigated during the construction phase of this intervention.

Objectives addressed in this corridor:

Objective Addressed	*To reduce the accident, fatal and severe rates to the national average.*

STPR Interventions

3 Inverness to Fort William and Western Isles

Intervention	2	Speed Enforcement Measures on the A82 between Inverness and Fort William, the A87, the A887 and the A830.
Description		Speed Enforcement Measures on the A82 between Inverness and Fort William, the A87, the A887 and the A830 at locations where vehicle speed is a contributing factor to accidents.
Justification		This intervention would significantly contribute to the objective 'to reduce the accident rate to current national average without adversely impacting on accident severity' and is likely to make a significant impact by ensuring greater compliance with speed limits. There are a number of well developed and cost effective measures that can be applied where appropriate.

Objectives addressed in this corridor:

Objective Addressed	*To reduce the accident rate to current national average without adversely impacting on accident severity (see also Corridor 7).*

Intervention	9	Online Trunk Road Improvements on the A82 between Fort William and Inverness, A87, A887 and A830
Description		Measures such as hard strip provision for agricultural vehicles, realignment of particular stretches of the route and junction improvements along the A82.
Justification		This intervention would significantly contribute to the objective 'to reduce the accident rate to the current national average without adversely impacting on accident severity' by providing safe overtaking opportunities and improved road standards along the route. This intervention would be implemented in line with current best practice, however there are potential environmental issues which may need to be mitigated during the construction phase of this intervention.

Objectives addressed in this corridor:

Objective Addressed	*To reduce the accident rate to current national average without adversely impacting on accident severity (see also Corridor 7).*

STPR Interventions

4 Aberdeen to Inverness

Intervention	3	Upgrade A96 to Dual Carriageway between Inverness and Nairn
Description		Upgrade the A96 to dual carriageway between Nairn and Inverness. Further improvements to Raigmore Interchange, including bus priority measures.
Justification		This intervention would significantly contribute to the objectives of 'improving connectivity particularly by public transport between Inverness city centre and the growth areas to the east, including Inverness Airport'; 'reducing the accident rate and severity to the national average'; and 'improving journey time and increased opportunities to travel, particularly by public transport between Aberdeen and Inverness'. Upgrading the A96 to dual carriageway between Nairn and Inverness would have a significant impact on reducing accident rates by providing a higher standard of road compared with the existing single carriageway. It would also significantly improve connectivity between Inverness and communities to the east by reducing journey times, along this section of the corridor, and for longer distance journeys between Aberdeen and Inverness. This intervention would be deliverable under current best practice, however there are potential environmental issues which may need to be mitigated during the construction phase of this intervention.

Objectives addressed in this corridor:

Objective Addressed	*To improve connectivity, particularly by public transport between Inverness city centre and the growth area to the east including Inverness Airport.*
Objective Addressed	*To reduce the accident rate and severity rate to current national average.*
Objective Addressed	*To improve journey time and increase opportunities to travel, particularly by public transport, between Aberdeen and Inverness.*

Objectives addressed in Inverness:

Objective Addressed	*To improve connectivity, particularly by public transport between Inverness city centre and the growth area to the east including Inverness Airport.*

Intervention	4	New Bypasses on the A96
Description		Bypasses on the A96 around the towns of Nairn, Keith and Elgin.
Justification		This intervention would significantly contribute to the objectives of 'reducing the accident rate and severity rate to current national average' and to 'improve journey time and increase opportunities to travel, particularly by public transport, between Aberdeen and Inverness' by reducing both the number of accidents in the corridor and the conflict between long distance and local trips that occurs within the town centres. Reducing this conflict and the associated delays would significantly contribute to improving journey times between Aberdeen and Inverness. This intervention would be deliverable under current best practice, however there are potential environmental issues which may require mitigation during the planning and construction phases of this intervention.

Objectives addressed in this corridor:

Objective Addressed	*To improve journey time and increase opportunities to travel, particularly by public transport, between Aberdeen and Inverness.*
Objective Addressed	*To reduce the accident rate and severity rate to current national average.*

Intervention	5	Speed Enforcement Measures on the A96
Description		Speed Enforcement Measures on the A96 between Aberdeen and Inverness at locations where vehicle speed is a contributing factor to accidents.
Justification		This intervention would significantly contribute to the objective 'to reduce the accident rate and severity rates to current national average' and is likely to make a significant impact by ensuring greater compliance with speed limits. There are a number of well developed and cost effective measures that can be applied where appropriate.

Objectives addressed in this corridor:

Objective Addressed	*To reduce the accident rate and severity rate to current national average.*

Intervention	6	A96 Road Safety Improvements
Description		The introduction of sections of WS2+1, climbing lanes, junction improvements, overtaking lay-bys and hard strips for agricultural vehicles at specific locations.
Justification		This intervention would significantly contribute to the objective of 'reducing the accident rate and severity rate to the current national average' by providing targeted traffic engineering interventions at specific locations. The improved road standard and safer overtaking opportunities would have a significant impact on reducing the number and severity of accidents. This intervention would be deliverable under current best practice, however there are potential environmental issues which may need to be mitigated during the construction phase of this intervention.

Objectives addressed in this corridor:

Objective Addressed	*To reduce the accident rate and severity rate to current national average.*

Intervention	8	A96 Dual Carriageway between Inverness and Aberdeen
Description		Upgrade the existing single carriageway A96 to dual carriageway, with bypasses around the towns of Nairn, Keith and Elgin.
Justification		This intervention would significantly contribute to the objectives of 'improving connectivity, particularly by public transport between Inverness city centre and the growth area to the east including Inverness Airport', 'reducing accident rate and severity rate to the current national average' and 'to improve journey time, and increase opportunities to travel, particularly by public transport, between Aberdeen and Inverness' by providing a dual carriageway designed to modern standards between the two cities. Dualled sections and bypasses of the three towns along the route could significantly benefit private car trips, freight and trips by coach as well. This intervention would also have more localised benefits and would help to improve connectivity between Inverness and the growth areas to the east. Furthermore, by upgrading this road to modern design standards a reduction in accident rates would be expected. This intervention would be deliverable under current best practice, however there are potential environmental issues which may require mitigation during the planning and construction phases of this intervention.

Objectives addressed in this corridor:	
Objective Addressed	*To improve journey time and increase opportunities to travel, particularly by public transport, between Aberdeen and Inverness.*
Objective Addressed	*To reduce the accident rate and severity rate to current national average.*
Objective Addressed	*To improve connectivity, particularly by public transport between Inverness city centre and the growth area to the east including Inverness Airport.*

Objectives addressed in Inverness:	
Objective Addressed	*To improve connectivity, particularly by public transport between Inverness city centre and the growth area to the east including Inverness Airport.*

Intervention	56	Inverness Bus Priority Measures and Park-&-Ride
Description		Bus based Park-&-Ride site at Dalcross with a link to Inverness Airport, including bus priority measures on the A96 and at Raigmore Interchange.
Justification		This intervention would significantly contribute to the objective 'to improve connectivity, particularly by public transport between Inverness city centre and the growth area to the east including Inverness Airport' by providing facilities to support bus services and priority measures that would help ensure competitive and reliable bus journey times. Park-&-Ride facilities would enable trips to originate from a wide area and continue their journey to Inverness city centre by public transport. The bus priority measures would also significantly improve journey times and journey time reliability for longer distance bus services. Delivery of this interventions should be straightforward as Park-&-Ride facilities are currently operating successfully in several areas. The intervention will be dependent on the provision by third parties of adequate bus services from the Park-&-Ride facilities.

Objectives addressed in this corridor:

Objective Addressed	*To improve journey time and increase opportunities to travel, particularly by public transport, between Aberdeen and Inverness.*
Objective Addressed	*To improve connectivity, particularly by public transport between Inverness city centre and the growth area to the east including Inverness Airport.*

Objectives addressed in Inverness:

Objective Addressed	*To improve connectivity, particularly by public transport between Inverness city centre and the growth area to the east including Inverness Airport.*

Objectives addressed in Corridor 6:

Objective Addressed	*To reduce journey time and increase opportunities to travel between Inverness and Perth (and hence onwards to the central belt).*

Intervention	58	Rail Service Enhancements between Inverness and Nairn
Description		Increased frequency of rail services between Nairn and Inverness, including a new station at Dalcross with Park-&-Ride facilities. This would include infrastructure enhancements, additional rolling stock and construction of a new station.
Justification		This intervention would significantly contribute to the objective 'to improve connectivity, particularly by public transport between Inverness and the areas to the east including Inverness Airport' by increasing rail service frequencies and providing a new rail station close to Inverness Airport. This intervention would be deliverable under current best practice, however there are potential environmental issues which may need to be mitigated during the construction phase of this intervention.

Objectives addressed in this corridor:

Objective Addressed	*To improve connectivity, particularly by public transport between Inverness city centre and the growth area to the east including Inverness Airport.*

Objectives addressed in Inverness:

Objective Addressed	*To improve connectivity, particularly by public transport between Inverness city centre and the growth area to the east including Inverness Airport.*

Intervention	142	Rail Service Enhancements between Aberdeen and Inverness
Description		Improvements to the railway between Aberdeen and Inverness to allow increase Would require line speed improvements, track capacity, signalling improvements and additional rolling stock. Possible addition to include electrification of the line.
Justification		This intervention would significantly contribute to the objective 'to improve journey time and increase opportunities to travel, particularly by public transport, between Aberdeen and Inverness' and 'to improve connectivity, particularly by public transport between Inverness city centre and the growth area to the east including Inverness Airport' by providing a more frequent and faster service at regular intervals through the day. This intervention will provide a significant impact through an hourly frequency service and a reduction in journey time by approximately 30 minutes. This intervention would be deliverable under current best practice through the ScotRail franchise, however there are potential environmental issues which may need to be mitigated during the construction phase of this intervention.

Objectives addressed in this corridor:

Objective Addressed	*To improve journey time and increase opportunities to travel, particularly by public transport, between Aberdeen and Inverness.*
Objective Addressed	*To improve connectivity, particularly by public transport between Inverness city centre and the growth area to the east including Inverness Airport.*

Intervention	152	Express Coach Service Facilities between Aberdeen and Inverness
Description		Facilities along the corridor to support an express coach service between Aberdeen and Inverness. This would include high quality waiting facilities, real time information, integration with rail and local bus services, bus priority measures and bus lanes.
Justification		This intervention would significantly contribute to the objective of 'improving journey time and opportunity to travel, particularly by public transport, between Aberdeen and Inverness' by significantly improving journey time reliability through fewer stops and bus priority measures. Improved waiting facilities, real time information and integration of express coach and local bus services would increase opportunities to travel by public transport and make public transport more attractive to users. This intervention would be deliverable in line with current best practice.

Objectives addressed in this corridor:

Objective Addressed	*To improve journey time and increase opportunities to travel, particularly by public transport, between Aberdeen and Inverness.*

STPR Interventions

5 Dundee to Aberdeen

Intervention	16	Rail Service Enhancements between Aberdeen, Dundee, Edinburgh and Glasgow
Description		Direct and half hourly express service with reduced journey times between Aberdeen and Dundee, with one train an hour to Glasgow and one train an hour to Edinburgh, and no stops at intermediate settlements . This would require line speed improvements, additional loops to allow freight trains to be passed, upgraded signalling to reduce the headway times and it may require work to remove the single track at Montrose. It is also likely to require more powerful rolling stock which may be best utilised through electrification. This would be complementary to the Aberdeen and Dundee suburban rail interventions which retain rail services for intermediate settlements.
Justification		This intervention would significantly contribute to the objective 'to improve public transport competitiveness between Dundee and Aberdeen' and 'to promote journey time reductions, particularly by public transport, between the central belt and Aberdeen primarily to allow business to achieve an effective working day when travelling between these centres' by significantly improving rail journey times between the two cities. This intervention would be deliverable under current best practice, however there are potential environmental issues which may require mitigation during the planning and construction phases of this intervention.

Objectives addressed in this corridor:	
Objective Addressed	*To improve the public transport competitiveness between Aberdeen and Dundee (and hence onwards to the central belt).*
Objective Addressed	*To promote journey time reductions, particularly by public transport, between the central belt and Aberdeen primarily to allow business to achieve an effective working day when travelling between these centres.*
Objectives addressed in Aberdeen:	
Objective Addressed	*To promote journey time reductions, particularly by public transport, between the Aberdeen and the central belt primarily to allow business to achieve an effective working day when travelling between these centres.*
Objectives addressed in Dundee:	
Objective Addressed	*To promote journey time reductions, particularly by public transport, between Aberdeen and the central belt primarily to allow business to achieve an effective working day when travelling between these centres.*
Objectives addressed in Edinburgh:	
Objective Addressed	*To promote journey time reductions, particularly by public transport, between the central belt and Aberdeen/Inverness primarily to allow business to achieve an effective working day when travelling between these centres.*
Objectives addressed in Glasgow:	

Objective Addressed	*To promote journey time reductions, particularly by public transport, between the central belt and Aberdeen/Inverness primarily to allow business to achieve an effective working day when travelling between these centres.*
Objectives addressed in Perth:	
Objective Addressed	*To promote journey time reductions, particularly by public transport, between the central belt and Aberdeen/Inverness primarily to allow business to achieve an effective working day when travelling between these centres.*
Objectives addressed in Corridor 9:	
Objective Addressed	*To promote journey time reductions, particularly by public transport, between the central belt and Aberdeen/Inverness primarily to allow business to achieve an effective working day when travelling between these centres.*
Objectives addressed in Corridor 11:	
Objective Addressed	*To promote journey time reductions, particularly by public transport, between the central belt and Aberdeen primarily to allow business to achieve an effective working day when travelling between these centres.*
Objectives addressed in Corridor 14:	
Objective Addressed	*To promote journey time reductions between the central belt and Aberdeen/Inverness primarily to allow business to achieve an effective working day when travelling between these centres.*

Intervention	145	Rail Freight Enhancements between Mossend, Grangemouth and Aberdeen via Perth
Description		An increased number of available paths for freight trains between Mossend, Grangemouth, Dundee and Aberdeen via Perth, increased length of loops and removal of speed limits that are below 75mph for freight trains. Increased loading gauge to permit larger containers to be carried and provision of bi-directional signalling along the route to reduce the impact of engineering works.
Justification		This intervention would significantly contribute to the objective 'to contribute to reducing both overall emissions and emissions per person kilometre through providing for alternatives to road freight movement in the corridor'. These improvements would make it considerably more attractive for freight hauliers to move containers and other goods by rail, by reducing journey times, allowing freight to arrive at times suitable for the final receiver and allowing standard 9' 6" deep sea containers to be carried. This intervention would be implemented in line with current best practice, however there are potential environmental issues which may need to be mitigated during the construction phase of this intervention.

Objectives addressed in this corridor:

Objective Addressed	*To contribute to reducing both overall emissions and emissions per person kilometre through providing for alternatives to road freight movement on the corridor.*

Intervention	167	Roll On-Roll Off Rail Freight Enhancements between Mossend, Grangemouth and Aberdeen/Inverness via Perth
Description		A full upgrade of the route between the central belt, Aberdeen and Inverness to allow roll-on/roll-off freight trains to operate. This would require extensive works to increase the loading gauge, route availability and number of trains operating. Signalling improvements would facilitate bi-directional running and 24 hour access to the route. New facilities in the central belt, Perth, Aberdeen and Inverness will allow goods vehicles to drive on and off and electrification will allow services to be operated by electric locomotives.
Justification		This intervention would encourage the transfer of freight traffic from road to rail and therefore significantly contribute to the objective of 'reducing emissions between Dundee and Aberdeen' by reducing the variability of journey times on the A9 and A90 through the removal of slower moving vehicles. This intervention would be deliverable under current best practice, however there are potential environmental issues which may require mitigation during the planning and construction phases of this intervention.

Objectives addressed in this corridor:

Objective Addressed	*To contribute to reducing both overall emissions and emissions per person kilometre through providing for alternatives to road freight movement on the corridor.*

Objectives addressed in Corridor 6:

Objective Addressed	*To address issues of driver frustration relating to inconsistent road standard, with attention to reducing accident severity.*

STPR Interventions

6 Inverness to Perth

Intervention	10	A9 Dualling
Description		Upgrade existing A9 to dual carriageway throughout between Inverness and Perth with associated junction improvements.
Justification		This intervention would contribute significantly to the objective 'to improve journey times between Inverness and Perth, and onwards to the central belt', by increasing the speed limit along the majority of its length and removing the impact of heavy goods vehicles and coaches on private cars that currently occurs on the existing sections of single carriageway. The intervention would contribute to the 'issues of driver frustration relating to inconsistent road standard, with attention to reducing accident severity' by providing dual carriageway standard between Perth and Inverness which would significantly improve safety and reduce driver frustration on the full length of the route. This intervention would be deliverable under current best practice, however there are potential significant environmental impacts which would need to be investigated further and which may need to be mitigated during the planning and construction of this intervention.

Objectives addressed in this corridor:	
Objective Addressed	*To address issues of driver frustration relating to inconsistent road standard, with attention to reducing accident severity.*
Objective Addressed	*To reduce journey time and increase opportunities to travel between Inverness and Perth (and hence onwards to the central belt).*
Objective Addressed	*To improve the operational effectiveness of the A9 as it approaches Perth and Inverness.*
Objective Addressed	*To promote journey time reductions, particularly by public transport, between the central belt and Inverness primarily to allow business to achieve an effective working day when travelling between these centres.*
Objectives addressed in Edinburgh:	
Objective Addressed	*To promote journey time reductions, particularly by public transport, between the central belt and Aberdeen/Inverness primarily to allow business to achieve an effective working day when travelling between these centres.*
Objectives addressed in Glasgow:	
Objective Addressed	*To promote journey time reductions, particularly by public transport, between the central belt and Aberdeen/Inverness primarily to allow business to achieve an effective working day when travelling between these centres.*
Objectives addressed in Inverness:	
Objective Addressed	*To promote journey time reductions, particularly by public transport, between Inverness and the central belt primarily to allow business to achieve an effective working day when travelling between these centres.*

Objectives addressed in Perth:	
Objective Addressed	*To promote journey time reductions, particularly by public transport, between the central belt and Aberdeen/Inverness primarily to allow business to achieve an effective working day when travelling between these centres.*

Objectives addressed in Corridor 9:	
Objective Addressed	*To promote journey time reductions, particularly by public transport, between the central belt and Aberdeen/Inverness primarily to allow business to achieve an effective working day when travelling between these centres.*

Intervention	11	A9 Upgrading
Description		A9 Dual carriageway from Perth to Blair Atholl with associated improvements to the remainder of the route.
Justification		This intervention would contribute significantly to the objective 'to improve journey times between Inverness and Perth, and onwards to the central belt', by increasing the speed limit along much of its length and reducing the impact of heavy goods vehicles and coaches on private cars that currently occurs on the existing sections of single carriageway. Although this intervention would not fully address 'issues of driver frustration relating to inconsistent road standard, with attention to reducing accident severity', the new dual carriageway and 2+1 sections would significantly contribute to improving safety and reducing driver frustration. This intervention would be deliverable under current best practice, however there are potential environmental issues which may need to be mitigated during the planning and construction of this intervention.

Objectives addressed in this corridor:

Objective Addressed	*To promote journey time reductions, particularly by public transport, between the central belt and Inverness primarily to allow business to achieve an effective working day when travelling between these centres.*
Objective Addressed	*To improve the operational effectiveness of the A9 as it approaches Perth and Inverness.*
Objective Addressed	*To reduce journey time and increase opportunities to travel between Inverness and Perth (and hence onwards to the central belt).*
Objective Addressed	*To address issues of driver frustration relating to inconsistent road standard, with attention to reducing accident severity.*

Objectives addressed in Edinburgh:

Objective Addressed	*To promote journey time reductions, particularly by public transport, between the central belt and Aberdeen/Inverness primarily to allow business to achieve an effective working day when travelling between these centres.*

Objectives addressed in Glasgow:

Objective Addressed	*To promote journey time reductions, particularly by public transport, between the central belt and Aberdeen/Inverness primarily to allow business to achieve an effective working day when travelling between these centres.*

Objectives addressed in Inverness:

Objective Addressed	*To promote journey time reductions, particularly by public transport, between Inverness and the central belt primarily to allow business to achieve an effective working day when travelling between these centres.*

Objectives addressed in Perth:	
Objective Addressed	*To promote journey time reductions, particularly by public transport, between the central belt and Aberdeen/Inverness primarily to allow business to achieve an effective working day when travelling between these centres.*

Objectives addressed in Corridor 9:	
Objective Addressed	*To promote journey time reductions, particularly by public transport, between the central belt and Aberdeen/Inverness primarily to allow business to achieve an effective working day when travelling between these centres.*

Intervention	13	Rail Enhancements on the Highland Mainline between Perth and Inverness
Description		Improvements to the Highland Mainline to permit an increase in service frequency and line speed. Necessary improvements would include additional loops, dynamic loops or lengthening the double track sections, signalling improvements and/or more powerful rolling stock (which may be achieved through electrification).
Justification		This intervention would significantly contribute to the objective to' reduce journey time and increase opportunities to travel between Inverness and Perth (and hence onwards to the central belt)' and 'promoting journey time reductions, particularly by public transport, between the central belt and Inverness primarily to allow business to achieve an effective working day when travelling between these centre' through significant line improvements and provision of additional peak services that arrive in Glasgow, Edinburgh or Inverness before 10am and depart after 5pm. This intervention would be deliverable under current best practice, however there are potential environmental issues which may require mitigation during the planning and construction phases of this intervention.

Objectives addressed in this corridor:	
Objective Addressed	*To reduce journey time and increase opportunities to travel between Inverness and Perth (and hence onwards to the central belt).*
Objective Addressed	*To promote journey time reductions, particularly by public transport, between the central belt and Inverness primarily to allow business to achieve an effective working day when travelling between these centres.*
Objectives addressed in Edinburgh:	
Objective Addressed	*To promote journey time reductions, particularly by public transport, between the central belt and Aberdeen/Inverness primarily to allow business to achieve an effective working day when travelling between these centres.*
Objectives addressed in Glasgow:	
Objective Addressed	*To promote journey time reductions, particularly by public transport, between the central belt and Aberdeen/Inverness primarily to allow business to achieve an effective working day when travelling between these centres.*
Objectives addressed in Inverness:	
Objective Addressed	*To promote journey time reductions, particularly by public transport, between Inverness and the central belt primarily to allow business to achieve an effective working day when travelling between these centres.*
Objectives addressed in Perth:	
Objective Addressed	*To promote journey time reductions, particularly by public transport, between the central belt and Aberdeen/Inverness primarily to allow business to achieve an effective working day when travelling between these centres.*

Objectives addressed in Corridor 9:

Objective Addressed	*To promote journey time reductions, particularly by public transport, between the central belt and Aberdeen/Inverness primarily to allow business to achieve an effective working day when travelling between these centres.*

Intervention	146	Rail Freight Enhancements between Mossend, Grangemouth and Inverness
Description		An increased number of available paths for freight trains between Mossend, Grangemouth and Inverness via Perth, increased length of loops and removal of speed limits that are below 75mph for freight trains. Increased loading gauge to permit larger containers to be carried and bi-directional signalling to reduce the impact of engineering works.
Justification		This intervention would significantly contribute to the objective 'to address issues of driver frustration' by encouraging a transfer of freight from road to rail thereby reducing the number of goods vehicles on the A9. The improvements would make a significant impact on rail journey time for freight movement, which would make this mode of travel more attractive to hauliers. The subsequent reduction in the number of goods vehicles on the A9 would remove a portion of slow moving vehicles from the road leading to less driver frustration. This intervention would be implemented in line with current best practice, however there are potential environmental issues which may need to be mitigated during the construction phase of this intervention.

Objectives addressed in this corridor:

Objective Addressed	*To address issues of driver frustration relating to inconsistent road standard, with attention to reducing accident severity.*

Objectives addressed in Corridor 9:

Objective Addressed	*To reduce the severity of accidents to the national average.*

STPR Interventions

7 Glasgow to Oban / Fort William and Western Isles

Intervention	29	Online Trunk Road Improvements on the A82 south of Fort William, A83, A85 west of Tyndrum and A828
Description		Measures such as climbing lanes, sections of WS2+1 carriageway and additional lay-bys to permit safer overtaking.
Justification		This intervention would significantly contribute to the objective to 'reduce accident severity to the national average' and 'to provide improved road standards and overtaking opportunities' by improvements targeted at and adjacent to identified road accident clusters. Providing safer overtaking opportunities would have a significant impact on improving safety on the routes. This intervention would be deliverable in line with current best practice, however there are potential environmental issues which would need to be mitigated during the planning and construction phases.

Objectives addressed in this corridor:

Objective Addressed	*To provide improved road standards and overtaking opportunities.*
Objective Addressed	*To reduce accident severity to the national average.*

Intervention	30	Speed Enforcement Measures on the A82 between Glasgow and Fort William, the A83 between Tarbert and Kennacraig, the A85
Description		Speed Enforcement Measures on the A82, A83, A85, A828 and A830 at locations where vehicle speed is a contributing factor to accidents.
Justification		This intervention would significantly contribute to the objective 'to reduce accident severity to the national average' and is likely to make a significant impact by ensuring greater compliance with speed limits. There are a number of well developed and cost effective measures that can be applied where appropriate.

Objectives addressed in this corridor:

Objective Addressed	*To reduce accident severity to the national average.*

STPR Interventions

8 Aberdeen to North East Scotland

Intervention	170	Online Trunk Road Improvements on the A90 north of Aberdeen
Description		Realignment of the road, junction improvements, climbing lanes, sections of WS2+1 carriageway, hard strips for agricultural vehicles and the provision of additional lay-bys to permit safer overtaking.
Justification		This intervention would significantly contribute to the objective 'to promote a continuing reduction in accident rates and severity rates across the strategic transport network' by significantly improving the standard of road provision on the A90 north of Aberdeen. These measures would reduce the number and severity of accidents at specific locations. This intervention would be deliverable under current best practice, however there are potential environmental issues which may need to be mitigated during the construction phase of this intervention.

Objectives addressed in this corridor:

Objective Addressed	*To promote continuing reduction in accident rates and severity rates across the strategic transport network.*

STPR Interventions

9 Glasgow to Perth

Intervention	23	Upgrade of M80 Junction 1/M8 Junction 13
Description		Upgrading the merge between the M80 and M8 in Glasgow to improve the operation of the junction.
Justification		This intervention would significantly contribute towards the objective 'to improve the efficiency and reliability of the operation of the southern sections of the M80 on approach to Glasgow' and support the objective of 'promoting journey time reductions between the central belt and Aberdeen/Inverness' by significantly improving the operation of this junction. This intervention would be deliverable under current best practice.

Objectives addressed in this corridor:

Objective Addressed	*To promote journey time reductions, particularly by public transport, between the central belt and Aberdeen/Inverness primarily to allow business to achieve an effective working day when travelling between these centres.*
Objective Addressed	*To improve the efficiency and reliability of the operation of the southern sections of the M80 on approach to Glasgow, particularly for priority vehicles.*

Intervention	26	Lengthen Trains and Platforms between Glasgow and Dunblane/Alloa
Description		Redevelop Glasgow Queen Street and other stations between Glasgow and Perth to allow trains of up to 8 coaches to run on this route. Requires new rolling stock and platforms to be lengthened at Glasgow Queen Street, Bishopbriggs, Lenzie, Croy, Larbert, Bridge of Allan, Alloa and Dunblane. Additional car parking at stations.
Justification		This intervention would significantly contribute to the objective 'address current and forecast rail overcrowding into Glasgow' by increasing the number of coaches on services between Glasgow and Dunblane/Alloa and thereby providing additional seating capacity, without having to run any additional services. This intervention would be deliverable through the ScotRail franchise.

Objectives addressed in this corridor:

Objective Addressed	*To address current and forecast rail overcrowding into Glasgow.*

Intervention	42	M80/A80 Corridor Bus Priority Measures and Park-&-Ride Network
Description		Bus priority measures, including hard shoulder bus lanes or guided busways to serve Glasgow city centre, plus Park-&-Ride facilities accessible from the motorway.
Justification		This intervention would significantly contribute to the objectives of improving the efficiency and reliability of the southern sections of the M80, particularly by priority vehicles, through the introduction of bus priority measures. This intervention is expected to reduce journey time, particularly by public transport and increase the overall capacity of public transport in and out of Glasgow city centre, which could contribute to addressing the issue of rail overcrowding. The proposed Park-&-Ride facilities would improve access to these bus services for people living in a wide area to the north east of the city. Delivery of this interventions should be straightforward as Park-&-Ride facilities are currently operating successfully in several areas. The intervention will be dependent on the provision by third parties of adequate bus services from the Park-&-Ride facilities.

Objectives addressed in this corridor:

Objective Addressed	*To improve the efficiency and reliability of the operation of the southern sections of the M80 on approach to Glasgow, particularly for priority vehicles.*
Objective Addressed	*To address current and forecast rail overcrowding into Glasgow.*
Objective Addressed	*To promote journey time reductions, particularly by public transport, between the central belt and Aberdeen/Inverness primarily to allow business to achieve an effective working day when travelling between these centres.*

Objectives addressed in Glasgow:

Objective Addressed	*To increase the public transport access to and between areas of economic activity and regeneration with minimal need for interchange.*
Objective Addressed	*To promote journey time reductions, particularly by public transport, between the central belt and Aberdeen/Inverness primarily to allow business to achieve an effective working day when travelling between these centres.*

Intervention	128	Speed Enforcement Measures on the M80/M9/A9 Corridor between Glasgow and Perth
Description		Speed Enforcement Measures on the M80 and A80 between Glasgow and Stirling, and on the M9 and A9 between Stirling and Perth at locations where vehicle speed is a contributing factor to accidents.
Justification		The provision of speed enforcement measures on the M80/A80 and M9/A9 would contribute to the objective 'to reduce the severity of accidents to the national average'. The intervention is likely to make a significant impact by ensuring greater compliance with speed limits. There are a number of well developed and cost effective measures that can be applied where appropriate.

Objectives addressed in this corridor:

Objective Addressed	*To reduce the severity of accidents to the national average.*

Intervention	153	Grade Separation of Junctions on the A9 between Keir Roundabout and South of Perth
Description		Grade separation of all junctions on the A9 between Dunblane and Perth, including Keir Roundabout, however excluding Broxden Roundabout. This allows closure of all gaps in the central reservation.
Justification		This intervention significantly contributes to the objective of 'reducing the severity of accidents to the national average' by removing all accidents resulting from vehicles that currently cross the carriageway, which are commonly serious or fatal in nature. The Grade separation of Keir Roundabout will significantly reduce forecast delays on the A9, thereby reducing journey time between Aberdeen/Inverness and the central belt. This intervention would be implemented in line with current best practice, however there are potential environmental issues which may need to be mitigated during the construction phase of this intervention.

Objectives addressed in this corridor:

Objective Addressed	*To reduce the severity of accidents to the national average.*
Objective Addressed	*To promote journey time reductions, particularly by public transport, between the central belt and Aberdeen/Inverness primarily to allow business to achieve an effective working day when travelling between these centres.*

Objectives addressed in Aberdeen:

Objective Addressed	*To promote journey time reductions, particularly by public transport, between the Aberdeen and the central belt primarily to allow business to achieve an effective working day when travelling between these centres.*

Objectives addressed in Dundee:

Objective Addressed	*To promote journey time reductions, particularly by public transport, between Aberdeen and the central belt primarily to allow business to achieve an effective working day when travelling between these centres.*

Objectives addressed in Glasgow:

Objective Addressed	*To promote journey time reductions, particularly by public transport, between the central belt and Aberdeen/Inverness primarily to allow business to achieve an effective working day when travelling between these centres.*

Objectives addressed in Inverness:

Objective Addressed	*To promote journey time reductions, particularly by public transport, between Inverness and the central belt primarily to allow business to achieve an effective working day when travelling between these centres.*

Objectives addressed in Perth:

Objective Addressed	*To promote journey time reductions, particularly by public transport, between the central belt and Aberdeen/Inverness primarily to allow business to achieve an effective working day when travelling between these centres.*
Objectives addressed in Corridor 5:	
Objective Addressed	*To promote journey time reductions, particularly by public transport, between the central belt and Aberdeen primarily to allow business to achieve an effective working day when travelling between these centres.*
Objectives addressed in Corridor 6:	
Objective Addressed	*To promote journey time reductions, particularly by public transport, between the central belt and Inverness primarily to allow business to achieve an effective working day when travelling between these centres.*

Intervention	157	Intelligent Transport System Initiatives on the M80 and A80
Description		Intelligent Transport Systems, priority vehicle lanes, ramp metering, variable speed limits and hard shoulder running for priority vehicles on the M80 and A80 between Haggs and the M8 merge.
Justification		This intervention would significantly contribute to the objective of 'improving the efficiency and reliability of the operation of the southern sections of the M80 on Approach to Glasgow, particularly for priority vehicles' by making more efficient use of the available road space. Giving priority to buses and other priority vehicles would encourage people to car share or take the bus, thereby enabling the trunk road network to carry more people. Ramp metering and variable speed limits reduce congestion, improve journey time reliability and maximise capacity by ensuring that the flow of traffic onto the trunk road network is smooth. There area number of well developed and cost effective measures that can be applied where appropriate., however physical constraints may impact on the configuration of any hard shoulder running.

Objectives addressed in this corridor:

Objective Addressed	*To improve the efficiency and reliability of the operation of the southern sections of the M80 on approach to Glasgow, particularly for priority vehicles.*

STPR Interventions

10 Edinburgh to Stirling

Intervention	17	Lengthen Trains and Platforms Between Edinburgh and Dunblane
Description		Lengthen trains and platforms to provide more capacity per train between Edinburgh and Dunblane. Replace existing two coach trains with three coach trains (and pairs of two coach trains replaced with pairs of three coach trains).
Justification		This intervention would significantly contribute to the objective 'to address shortfalls in the provision of public transport to and from Edinburgh and to increase public transport modal share' by increasing the number of coaches on services between Dunblane and Edinburgh and thereby providing additional seating capacity, without having to run any additional services. This would improve public transport accessibility to Edinburgh and encourage a shift in mode from road to rail. This intervention would be deliverable through the ScotRail franchise.

Objectives addressed in this corridor:

Objective Addressed	*To address shortfalls in the provision of public transport to and from Edinburgh and increase public transport modal share.*

Objectives addressed in Edinburgh:

Objective Addressed	*To maintain the 60-minute commutable labour market area at the current level, with a particular focus on linking areas of economic activity.*

Intervention	18	Rail Service Frequency Enhancements between Edinburgh and Dunblane
Description		Capacity enhancements to provide four trains per hour between Edinburgh and Dunblane. This could include new stations at Bannockburn and Winchburgh, and capacity enhancements at locations such as Stirling to Larbert, Newbridge Junction and Haymarket to Edinburgh Waverley. Some services would terminate at Haymarket in Edinburgh and Alloa rather than Dunblane.
Justification		This intervention would significantly contribute to the objective 'to address shortfalls in the provision of public transport to and from Edinburgh and to increase public transport modal share' by providing a increase in public transport capacity into Edinburgh. The additional capacity together with the new stations is expected to encourage a shift in mode from road to rail. This intervention would be deliverable through the ScotRail franchise.

Objectives addressed in this corridor:

Objective Addressed	*To address shortfalls in the provision of public transport to and from Edinburgh and increase public transport modal share.*

Objectives addressed in Edinburgh:

Objective Addressed	*To maintain the 60-minute commutable labour market area at the current level, with a particular focus on linking areas of economic activity.*

Intervention	20	M9 Bus Priority Measures and Park-&-Ride Network
Description		Bus priority measures on the M9 corridor between Falkirk and Edinburgh (including the A8 between Newbridge and the City Centre) to support express bus services, and out-of-town Park-&-Ride sites.
Justification		This intervention would significantly contribute to the objective 'to address shortfalls in the provision of public transport to and from Edinburgh and increase public transport modal share' by providing bus priority measures and Park-&-Ride facilities that would significantly improve reliability, reduce bus journey times between Falkirk and Edinburgh and offer a more competitive alternative to the car. The intervention would improve access by public transport to Edinburgh and is expected to make a significant impact on modal share by encouraging a shift in mode from private car to bus. Delivery of this interventions should be straightforward as Park-&-Ride facilities are currently operating successfully in several areas. The intervention will be dependent on the provision by third parties of adequate bus services from the Park-&-Ride facilities.

Objectives addressed in this corridor:

Objective Addressed	*To address shortfalls in the provision of public transport to and from Edinburgh and increase public transport modal share.*

Objectives addressed in Edinburgh:

Objective Addressed	*To maintain the 60-minute commutable labour market area at the current level, with a particular focus on linking areas of economic activity.*

Intervention	21	Grangemouth Road Access Upgrades
Description		Upgrades to Junction 6 on the M9 and upgrades to the A801 between Grangemouth and Junction 4 of the M8.
Justification		This intervention would significantly contribute to the objectives 'to improve access to Grangemouth Port and freight hub' and 'promote efficient and effective transport links to support the development and implementation of the proposed national development at Grangemouth and Edinburgh Airport identified in the NPF2', through the provision of westbound slip roads onto the M9 close to Grangemouth which would significantly improve the direct link from Grangemouth to the M8.This intervention would be delivered in accordance with best practice.

Objectives addressed in this corridor:

Objective Addressed	*To promote efficient and effective transport links to support the development and implementation of the proposed national developments at Grangemouth and Edinburgh Airport identified in the NPF2.*
Objective Addressed	*To improve access to Grangemouth port and freight hub.*

Objectives addressed in Corridor 13:

Objective Addressed	*To promote efficient and effective transport links to support the development and implementation of the proposed national developments at Grangemouth and Edinburgh Airport identified in the NPF2.*

Intervention	22	Rail Access Improvements to Grangemouth
Description		Capacity enhancements at and around Grangemouth Junction including increased loading gauge to W12, a new east facing link from Grangemouth to Polmont and electrification between Coatbridge and Grangemouth.
Justification		This intervention would significantly contribute to the objectives 'to improve access to Grangemouth port and freight hub' and 'to promote efficient and effective transport links to support the development and implementation of the proposed national development at Grangemouth and Edinburgh Airport identified in the NPF2', through a range of improvements that would significantly improve journey time reliability and accessibility to the port. Electrification would allow freight trains to be operated on the West Coast Mainline by faster electric locomotives, which removes the need to change to diesel locomotives at Mossend or Coatbridge. Improvements to the loading gauge and a new link from Grangemouth to Polmont would allow the movement of larger containers and provide direct access to/from the east. Infrastructure would also enable passenger services to be introduced to Grangemouth by extending the services from Falkirk Grahamston. This intervention would be delivered in accordance with best practice.

Objectives addressed in this corridor:

Objective Addressed	*To promote efficient and effective transport links to support the development and implementation of the proposed national developments at Grangemouth and Edinburgh Airport identified in the NPF2.*
Objective Addressed	*To improve access to Grangemouth port and freight hub.*

Objectives addressed in Corridor 13:

Objective Addressed	*To promote efficient and effective transport links to support the development and implementation of the proposed national developments at Grangemouth and Edinburgh Airport identified in the NPF2.*

Objectives addressed in Corridor 18:

Objective Addressed	*To contribute to emissions reduction by facilitating an increase in the proportion of freight passing through the corridor that is carried by rail.*

STPR Interventions

12 Edinburgh to Perth

Intervention	35	Rail Service Enhancements between Perth and Edinburgh
Description		Journey time improvements through infrastructure enhancements and the introduction of express services.
Justification		This intervention would significantly contribute to the objective 'to reduce Edinburgh to Perth public transport journey times and increase opportunities to travel by public transport' and 'to promote journey time reductions between the central belt and Aberdeen/Inverness primarily to allow business to achieve an effective working day' by providing a significantly faster rail connection between the two centres. Line improvements and fewer stops on express services would significantly reduce rail journey time and contribute to allowing business journeys to take place within one day. This intervention would be deliverable under current best practice through the ScotRail franchise.

Objectives addressed in this corridor:	
Objective Addressed	*To promote journey time reductions between the central belt and Aberdeen/Inverness primarily to allow business to achieve an effective working day when travelling between these centres.*
Objective Addressed	*To reduce Edinburgh to Perth public transport journey times and increase opportunities to travel by public transport.*
Objectives addressed in Edinburgh:	
Objective Addressed	*To promote journey time reductions, particularly by public transport, between the central belt and Aberdeen/Inverness primarily to allow business to achieve an effective working day when travelling between these centres.*
Objective Addressed	*To maintain the 60-minute commutable labour market area at the current level, with a particular focus on linking areas of economic activity.*
Objectives addressed in Perth:	
Objective Addressed	*To promote journey time reductions, particularly by public transport, between the central belt and Aberdeen/Inverness primarily to allow business to achieve an effective working day when travelling between these centres.*

Intervention	36	New Rail Line between Perth and Inverkeithing
Description		A direct rail link between Perth and Inverkeithing via Halbeath, following a similar alignment of the M90. This would require new track, signalling and rolling stock.
Justification		This intervention would significantly contribute to the objective 'to reduce Edinburgh to Perth public transport journey times and increase opportunities to travel by public transport' and 'to promote journey time reductions between the central belt and Aberdeen/Inverness primarily to allow business to achieve an effective working day' by providing a significantly faster rail connection between the two centres. Line improvements, faster trains and a significantly shorter route would greatly reduce rail journey time and contribute to allowing business journeys to take place within one day. This intervention would be deliverable under current best practice, with operation through the ScotRail franchise.

Objectives addressed in this corridor:

Objective Addressed	*To promote journey time reductions between the central belt and Aberdeen/Inverness primarily to allow business to achieve an effective working day when travelling between these centres.*
Objective Addressed	*To reduce Edinburgh to Perth public transport journey times and increase opportunities to travel by public transport.*

Objectives addressed in Edinburgh:

Objective Addressed	*To promote journey time reductions, particularly by public transport, between the central belt and Aberdeen/Inverness primarily to allow business to achieve an effective working day when travelling between these centres.*
Objective Addressed	*To maintain the 60-minute commutable labour market area at the current level, with a particular focus on linking areas of economic activity.*

Objectives addressed in Perth:

Objective Addressed	*To promote journey time reductions, particularly by public transport, between the central belt and Aberdeen/Inverness primarily to allow business to achieve an effective working day when travelling between these centres.*

Intervention	154	Intelligent Transport System Initiatives on the M90 and A90
Description		Intelligent Transport Systems, priority vehicle lanes, ramp metering, variable speed limits and hard shoulder running for priority vehicles on the M90 and A90 between Perth and Edinburgh.
Justification		This intervention would significantly contribute to the objective 'to improve the efficiency of the M90/A90 during periods of peak demand' by making more efficient use of the available road space. Giving priority to buses and other priority vehicles would encourage people to car share or take the bus, thereby enabling the trunk road network to carry more people. Ramp metering and variable speed limits reduce congestion, improve journey time reliability and maximise capacity by ensuring that the flow of traffic onto the trunk road network is smooth. There area number of well developed and cost effective measures that can be applied where appropriate, however physical constraints may impact on the configuration of any hard shoulder running.

Objectives addressed in this corridor:	
Objective Addressed	*To reduce Edinburgh to Perth public transport journey times and increase opportunities to travel by public transport.*
Objective Addressed	*To promote efficient and effective transport links to support the development and implementation of the proposed national developments at Rosyth, Forth Crossing and Edinburgh Airport identified in the NPF2.*
Objective Addressed	*To improve the efficiency of the M90/A90 during periods of peak demand with a focus on reducing the conflict between longer distance and local traffic.*
Objectives addressed in Edinburgh:	
Objective Addressed	*To maintain the 60-minute commutable labour market area at the current level, with a particular focus on linking areas of economic activity.*
Objectives addressed in Corridor 14:	
Objective Addressed	*To improve the efficiency of the M90/A90 during periods of peak demand with a focus on reducing the conflict between longer distance and local traffic.*
Objective Addressed	*To reduce public transport journey time between Edinburgh and Dundee.*
Objective Addressed	*To promote efficient and effective transport links to support the development and implementation of the proposed national developments at Rosyth, Forth Crossing and Edinburgh Airport identified in the NPF2.*

Intervention	163	Rail Freight connections to the Port of Rosyth
Description		Construction of a new rail link and associated infrastructure enhancements from the Dunfermline to Longannet line to the Port of Rosyth or Improvements to the Inverkeithing South Junction and Inverkeithing Central Junction and passenger trains on the Fife Circle along with further improvements to the rail branch line between Inverkeithing South Junction and the Port of Rosyth.
Justification		This intervention would significantly contribute to the objective to 'promote efficient and effective transport links to support the development and implementation of the proposed national developments at Rosyth' by providing a more direct link from Rosyth to the West Coast Mainline which would reduce freight journey times and allow freight to avoid the busy Inverkeithing Central Junction where a large number of passenger trains pass. The less expensive alternative of improving Inverkeithing Central Junction would provide more efficient access and reduce freight journey times. This intervention would be implemented in line with current best practice, however there are potential environmental issues which may need to be mitigated during the construction phase of this intervention.

Objectives addressed in this corridor:

Objective Addressed	*To promote efficient and effective transport links to support the development and implementation of the proposed national developments at Rosyth, Forth Crossing and Edinburgh Airport identified in the NPF2.*

Objectives addressed in Corridor 14:

Objective Addressed	*To promote efficient and effective transport links to support the development and implementation of the proposed national developments at Rosyth, Forth Crossing and Edinburgh Airport identified in the NPF2.*

STPR Interventions

13 Edinburgh to Glasgow

Intervention	32	New Light Rapid Transit Line between Edinburgh and Livingston
Description		Extension of Edinburgh Tram or alternative light rapid transit system from Gogar to Livingston, with a loop round Livingston serving both railway stations.
Justification		This intervention would significantly contribute to the objective 'to increase public transport capacity and frequency between Livingston and Edinburgh' by introducing a new mode of transportation between the two areas, which would significantly increase public transport capacity and opportunities to travel on frequent services. This intervention would be deliverable under current best practice, however there are potential promotional issues and environmental issues which may require mitigation during the planning and construction phases of this intervention.

Objectives addressed in this corridor:

Objective Addressed	*To increase public transport capacity and frequency between Livingston and Edinburgh.*

Objectives addressed in Edinburgh:

Objective Addressed	*To maintain the 60-minute commutable labour market area at the current level, with a particular focus on linking areas of economic activity.*
Objective Addressed	*To enhance public transport interchange opportunities, where feasible to do so.*

Intervention	33	Rail Service Frequency Enhancements between Edinburgh and Livingston South
Description		Increased number of services between Livingston South and Edinburgh (with the option to extend some or all services across Edinburgh to Newcraighall or North Berwick), with associated capacity enhancements and additional rolling stock. This may require a new bay platform on the south side of Haymarket station to allow services to terminate before Waverley.
Justification		This intervention would significantly contribute to the objective 'to increase public transport capacity and frequency between Livingston and Edinburgh' by increasing the number of trains, and therefore the available number of seats and services between the two centres. This intervention would be deliverable under current best practice through the ScotRail franchise.

Objectives addressed in this corridor:

Objective Addressed	*To increase public transport capacity and frequency between Livingston and Edinburgh.*

Objectives addressed in Edinburgh:

Objective Addressed	*To enhance public transport interchange opportunities, where feasible to do so.*
Objective Addressed	*To maintain the 60-minute commutable labour market area at the current level, with a particular focus on linking areas of economic activity.*

Intervention	34	M8 and A71 Bus Priority and Park-&-Ride Network between Edinburgh, Livingston and Bathgate
Description		Bus priority measures on the Edinburgh City Bypass, M8/A8 and A71 corridors between Livingston and Edinburgh, including bus based Park-&-Ride.
Justification		This intervention would significantly contribute to the objectives 'to increase public transport capacity and frequency between Livingston and Edinburgh' and 'to make best use of the available road space and better manage peak demand', by providing bus priority measures and Park-&-Ride facilities. These measures would make best use of available road space by enhancing capacity while improving journey time and reliability by public transport between the two centres. Furthermore, it is expected that the improvements would encourage a shift in mode from private car to bus, which would reduce the number of journeys by car thereby contributing to the management of demand during peak periods. Delivery of this interventions should be straightforward as Park-&-Ride facilities are currently operating successfully in several areas. The intervention will be dependent on the provision by third parties of adequate bus services from the Park-&-Ride facilities.

Objectives addressed in this corridor:

Objective Addressed	*To increase public transport capacity and frequency between Livingston and Edinburgh.*
Objective Addressed	*To make best use of the available road space and better manage peak demand.*

Objectives addressed in Edinburgh:

Objective Addressed	*To maintain the 60-minute commutable labour market area at the current level, with a particular focus on linking areas of economic activity.*

Intervention	40	M8 Bus Priority Measures and Park-&-Ride Network between Glasgow City Centre and Areas to the East
Description		Bus priority measures, including hard shoulder running, bus lanes or guided busways to serve Glasgow city centre, and Park-&-Ride facilities accessible from the motorway.
Justification		This intervention would significantly contribute to the objectives 'to make best use of the available road space and better manage peak demand', by providing bus priority measures and Park-&-Ride facilities. These measures would make best use of available road space by enhancing capacity while improving journey time and reliability by public transport for people living in a wide area to the east of the city (including those travelling from Edinburgh and east central Scotland). Furthermore, it is expected that the improvements would encourage a shift in mode from private car to bus, which would reduce the number of journeys by car thereby contributing to the management of demand during peak periods. Delivery of this interventions should be straightforward as Park-&-Ride facilities are currently operating successfully in several areas. The intervention will be dependent on the provision by third parties of adequate bus services from the Park-&-Ride facilities.

Objectives addressed in this corridor:

Objective Addressed	*To make best use of the available road space and better manage peak demand.*

Objectives addressed in Glasgow:

Objective Addressed	*To improve the efficiency of the M8 motorway during periods of peak demand with a focus on reducing the conflict between longer distance and local traffic, increasing the people carrying capacity and freight carrying capacity of existing road, and demand management.*
Objective Addressed	*To increase the public transport access to and between areas of economic activity and regeneration with minimal need for interchange.*
Objective Addressed	*To promote journey time reductions, particularly by public transport, between the central belt and Aberdeen/Inverness primarily to allow business to achieve an effective working day when travelling between these centres.*

Intervention	100	Electrification of Edinburgh to Glasgow via Shotts
Description		Enhanced frequency of services on the Edinburgh to Glasgow via Shotts line through revision of the stopping pattern and electrification of the remainder of the route, as well as other infrastructure enhancements along the route.
Justification		This intervention would significantly contribute to the objectives to increase public transport capacity, frequency and to provide journey time reductions by electrifying the Edinburgh to Glasgow via Shotts line as this will provide a greater number of reliable services, an increase in the number of seats and a reduction in travel time along the route. The removal of diesel trains is expected 'to contribute to both a reduction in emissions per person kilometre and a reduction in overall emissions'. This intervention would be implemented in line with current best practice.

Objectives addressed in this corridor:	
Objective Addressed	*To increase public transport capacity and reduce journey time between Edinburgh and Glasgow.*
Objective Addressed	*To contribute to both a reduction in emissions per person kilometre and a reduction in overall emissions.*
Objective Addressed	*To increase public transport capacity and frequency between Livingston and Edinburgh.*
Objectives addressed in Edinburgh:	
Objective Addressed	*To maintain the 60-minute commutable labour market area at the current level, with a particular focus on linking areas of economic activity.*

Intervention	102	Extensive Rail Service and Infrastructure Enhancements between Edinburgh and Glasgow via Falkirk High
Description		An enhanced service on the Edinburgh to Glasgow via Falkirk High line. Speed increased through a programme of electrification and major infrastructure enhancements.
Justification		This intervention would significantly contribute to the objectives 'to increase public transport capacity and reduce journey time between Edinburgh and Glasgow' and 'contribute to both a reduction in emissions per person kilometre and a reduction in overall emissions' by providing a faster electrified service between Glasgow and Edinburgh via Falkirk High. This intervention would include a significant increase of 900 seats per hour on 6 services resulting in a step change in capacity and frequency. Reduced journey time and improved overall performance of the service would occur through increased line speed to 125mph, a programme of electrification and major infrastructure enhancements. Electrification of the lines would contribute towards reduced emissions within the corridor between Edinburgh and Glasgow. This intervention would be deliverable under current best practice through the ScotRail franchise.

Objectives addressed in this corridor:	
Objective Addressed	*To contribute to both a reduction in emissions per person kilometre and a reduction in overall emissions.*
Objective Addressed	*To increase public transport capacity and reduce journey time between Edinburgh and Glasgow.*
Objectives addressed in Edinburgh:	
Objective Addressed	*To maintain the 60-minute commutable labour market area at the current level, with a particular focus on linking areas of economic activity.*
Objectives addressed in Glasgow:	
Objective Addressed	*To address rail capacity and connectivity issues in central Glasgow.*

Intervention	103	Upgraded Rail Line between Edinburgh and Glasgow via Carstairs
Description		An enhanced service on a high speed link between Edinburgh Waverley and Glasgow Central through significant infrastructure enhancements to the existing route via Carstairs as well as major new railway construction.
Justification		This intervention would significantly contribute to the objectives 'to increase public transport capacity and reduce journey time between Edinburgh and Glasgow' and 'contribute to both a reduction in emissions per person kilometre and a reduction in overall emissions' by providing enhanced services on an upgraded line between Glasgow and Edinburgh via Carstairs. This intervention would include a significant increase of 900 to 2,200 seats per hour, on 6 services resulting in a step change in capacity and frequency. Improved overall performance of the service would reduce travel time between the cities to between 35 and 40 minutes. The increased provision of electrified services would contribute towards reduced emissions within the corridor between Edinburgh and Glasgow. This intervention would be deliverable under current best practice through the ScotRail franchise, however there are potential environmental issues which may require mitigation during the planning and construction phases of this intervention.

Objectives addressed in this corridor:	
Objective Addressed	*To contribute to both a reduction in emissions per person kilometre and a reduction in overall emissions.*
Objective Addressed	*To increase public transport capacity and reduce journey time between Edinburgh and Glasgow.*
Objectives addressed in Edinburgh:	
Objective Addressed	*To maintain the 60-minute commutable labour market area at the current level, with a particular focus on linking areas of economic activity.*
Objectives addressed in Glasgow:	
Objective Addressed	*To address rail capacity and connectivity issues in central Glasgow.*

Intervention	104	New High Speed Rail Line between Edinburgh and Glasgow
Description		A new dedicated high-speed route between Edinburgh and Glasgow offering a major step change in journey time, service frequency and performance through major construction works. For the purposes of testing, it has been assumed that this route is high-speed conventional rail, but this could equally be any high-speed technology such as Maglev.
Justification		This intervention would significantly contribute to the objective 'to increase public transport capacity and reduce journey time between Edinburgh and Glasgow' by offering a major step change in journey time, service frequency and performance through major construction works. The enhanced service would provide a journey time of 30 minutes between the two cities. This intervention would be deliverable under current best practice, however there are potential environmental issues which may require mitigation during the planning and construction phases of this intervention.

Objectives addressed in this corridor:

Objective Addressed	*To increase public transport capacity and reduce journey time between Edinburgh and Glasgow.*

Objectives addressed in Edinburgh:

Objective Addressed	*To maintain the 60-minute commutable labour market area at the current level, with a particular focus on linking areas of economic activity.*

Objectives addressed in Glasgow:

Objective Addressed	*To address rail capacity and connectivity issues in central Glasgow.*

Intervention	105	Rail Service Frequency Enhancements between Edinburgh and Glasgow via Shotts and Carstairs
Description		This intervention would provide improved journey times, two 'semi-fast' Edinburgh to Glasgow trains per hour, additional seating capacity on the Edinburgh to Glasgow via Carstairs and Shotts route as well as better connections at Glasgow Central Station.
Justification		This intervention would significantly contribute to the objectives 'to increase public transport capacity and frequency between Livingston and Edinburgh' and 'to increase public transport capacity and reduce journey time between Edinburgh and Glasgow' by introducing more services between Edinburgh and Glasgow via Shotts or Carstairs and providing a significant increase to seating capacity between these locations. This intervention would be deliverable under current best practice through the ScotRail franchise.

Objectives addressed in this corridor:	
Objective Addressed	*To increase public transport capacity and reduce journey time between Edinburgh and Glasgow.*
Objective Addressed	*To increase public transport capacity and frequency between Livingston and Edinburgh.*
Objectives addressed in Edinburgh:	
Objective Addressed	*To enhance public transport interchange opportunities, where feasible to do so.*
Objective Addressed	*To maintain the 60-minute commutable labour market area at the current level, with a particular focus on linking areas of economic activity.*
Objectives addressed in Glasgow:	
Objective Addressed	*To address rail capacity and connectivity issues in central Glasgow.*

Intervention	134	Improved Road Links to Edinburgh Airport
Description		New road connection from the M8 between Junctions 1 and 2 to Edinburgh Airport.
Justification		This intervention would significantly contribute to the objective 'to promote efficient and effective transport links to support the development and implementation of the proposed national developments at Grangemouth and Edinburgh Airport identified in the NPF2' by providing a direct link from Edinburgh Airport to the Scottish motorway network. This would improve links to the airport by avoiding the existing A8 between Gogar Roundabout and Newbridge Roundabout thus providing capacity to accommodate the planned growth of passengers using the airport. This intervention would be implemented in line with current best practice.

Objectives addressed in this corridor:

Objective Addressed	*To promote efficient and effective transport links to support the development and implementation of the proposed national developments at Grangemouth and Edinburgh Airport identified in the NPF2.*

Objectives addressed in Edinburgh:

Objective Addressed	*To promote efficient and effective transport links to support the development and implementation of the proposed national development at Edinburgh Airport identified in the NPF2.*

Objectives addressed in Corridor 10:

Objective Addressed	*To promote efficient and effective transport links to support the development and implementation of the proposed national developments at Grangemouth and Edinburgh Airport identified in the NPF2.*

Objectives addressed in Corridor 12:

Objective Addressed	*To promote efficient and effective transport links to support the development and implementation of the proposed national developments at Rosyth, Forth Crossing and Edinburgh Airport identified in the NPF2.*

Objectives addressed in Corridor 14:

Objective Addressed	*To promote efficient and effective transport links to support the development and implementation of the proposed national developments at Rosyth, Forth Crossing and Edinburgh Airport identified in the NPF2.*

Intervention	137	Rail Service Frequency Enhancements between Edinburgh and Bathgate
Description		Increased service provision upon completion of the Airdrie to Bathgate Railway. These could either run across Edinburgh to Shawfair or North Berwick, providing cross-city connections, or terminate at Haymarket.
Justification		This intervention would significantly contribute to the objective 'to increase public transport capacity and frequency between Livingston and Edinburgh' by providing an increased number of services from Livingston and Bathgate to two of Edinburgh's areas of economic activity, West Edinburgh and South East Edinburgh. This intervention would be deliverable under current best practice through the ScotRail franchise.

Objectives addressed in this corridor:

Objective Addressed	*To increase public transport capacity and frequency between Livingston and Edinburgh.*

Objectives addressed in Edinburgh:

Objective Addressed	*To enhance public transport interchange opportunities, where feasible to do so.*
Objective Addressed	*To maintain the 60-minute commutable labour market area at the current level, with a particular focus on linking areas of economic activity.*

Intervention	140	Intelligent Transport System Initiatives on the M8 between Glasgow and Harthill
Description		Intelligent Transport Systems, priority vehicle lanes, ramp metering, variable speed limits and hard shoulder running for priority vehicles on the M8 between the Kingston Bridge and Harthill Services.
Justification		This intervention would significantly contribute to the objective 'to make better use of the available road space and better managing peak demand' and 'to contribute to both a reduction in emissions per person kilometre and a reduction in overall emissions' by giving priority to targeted vehicle classes and reducing congestion. Giving priority to buses and other priority vehicles would encourage people to car share or take the bus, thereby enabling the trunk road network to carry more people. Ramp metering and variable speed limits reduce congestion, improve journey time reliability and maximise capacity by ensuring that the flow of traffic onto the trunk road network is smooth. There area number of well developed and cost effective measures that can be applied where appropriate, however physical constraints may impact on the configuration of any hard shoulder running.

Objectives addressed in this corridor:

Objective Addressed	*To contribute to both a reduction in emissions per person kilometre and a reduction in overall emissions.*
Objective Addressed	*To make best use of the available road space and better manage peak demand.*

Objectives addressed in Glasgow:

Objective Addressed	*To improve the efficiency of the M8 motorway during periods of peak demand with a focus on reducing the conflict between longer distance and local traffic, increasing the people carrying capacity and freight carrying capacity of existing road, and demand management.*

Intervention	141	Intelligent Transport System Initiatives on the M8 between Edinburgh and Harthill
Description		Intelligent Transport Systems, priority vehicle lanes, ramp metering, variable speed limits and hard shoulder running for priority vehicles on the M8 between Harthill Services and Junction 1.
Justification		This intervention would significantly contribute to the objective 'to make better use of the available road space and better managing peak demand' and 'to contribute to both a reduction in emissions per person kilometre and a reduction in overall emissions' by giving priority to targeted vehicle classes and reducing congestion. Giving priority to buses and other priority vehicles would encourage people to car share or take the bus, thereby enabling the trunk road network to carry more people. Ramp metering and variable speed limits reduce congestion, improve journey time reliability and maximise capacity by ensuring that the flow of traffic onto the trunk road network is smooth. There area number of well developed and cost effective measures that can be applied where appropriate, however physical constraints may impact on the configuration of any hard shoulder running.

Objectives addressed in this corridor:	
Objective Addressed	*To contribute to both a reduction in emissions per person kilometre and a reduction in overall emissions.*
Objective Addressed	*To make best use of the available road space and better manage peak demand.*
Objectives addressed in Edinburgh:	
Objective Addressed	*To promote efficient and effective transport links to support the development and implementation of the proposed national development at Edinburgh Airport identified in the NPF2.*
Objective Addressed	*To maintain the 60-minute commutable labour market area at the current level, with a particular focus on linking areas of economic activity.*

Intervention	172	New connection between the M74 and M8
Description		New dual-carriageway link road between the M74 at Junction 12 to the M8 at Junction 4.
Justification		This intervention would significantly contribute to objectives 'to promote efficient and effective transport links to support the development and implementation of the proposed national developments at Grangemouth and Edinburgh Airport identified in the NPF2' by reducing journey time between the M74 and the east of Scotland and reducing congestion on the M8 motorway. The intervention would also ease congestion on the M8 so would ' contribute to both a reduction in emissions per person kilometre and a reduction in overall emissions' as well as contributing to a reduction in 'journey times between Edinburgh and Glasgow'. This intervention is deliverable under existing best practice, however there are potential environmental issues which may need to be mitigated during the construction phase of this intervention.

Objectives addressed in this corridor:

Objective Addressed	*To contribute to both a reduction in emissions per person kilometre and a reduction in overall emissions.*
Objective Addressed	*To promote efficient and effective transport links to support the development and implementation of the proposed national developments at Grangemouth and Edinburgh Airport identified in the NPF2.*
Objective Addressed	*To increase public transport capacity and reduce journey time between Edinburgh and Glasgow.*

Objectives addressed in Corridor 18:

Objective Addressed	*To promote continuing reduction in accident rates and severity rates across the strategic transport network.*

STPR Interventions

14 Edinburgh to Dundee

Intervention	69	Cross Forth Ferry Facilities
Description		Provision of facilities at Newhaven (for Leith) and at Burntisland and Kirkcaldy in Fife for a fast ferry or hovercraft service across the Firth of Forth.
Justification		This intervention would significantly contribute to the objective of 'increasing public transport capacity and frequency between Fife and Edinburgh', by facilitating the operation of ferry services across the Firth of Forth. This intervention would also provide new interchange opportunities as the ferry services would allow commuters to continue journeys on bus and tram services at Newhaven. Within Scotland there are currently already many ferry services operating within the transport network. This service would be delivered by a commercial operator.

Objectives addressed in this corridor:

Objective Addressed	*To increase public transport capacity and frequency between Fife and Edinburgh.*

Objectives addressed in Edinburgh:

Objective Addressed	*To enhance public transport interchange opportunities, where feasible to do so.*
Objective Addressed	*To increase public transport capacity and frequency between Fife and Edinburgh.*
Objective Addressed	*To maintain the 60-minute commutable labour market area at the current level, with a particular focus on linking areas of economic activity.*

Intervention	93	Rail Service Enhancements Between Edinburgh and Dundee
Description		Enhanced service provision and both line speed and infrastructure improvements. More powerful rolling stock may also be required.
Justification		This intervention would significantly contribute to the objectives 'to reduce public transport journey time between Edinburgh and Dundee' and 'to promote journey time reductions between the central belt and Aberdeen/Inverness primarily to allow businesses to achieve an effective working day when travelling between these centres' through the provision of an enhanced rail service between the two cities. Journey time reduction would be obtained through line speed improvements and more powerful rolling stock. Increased capacity and additional loops would augment existing services and reduce longer distance journey times between the central belt and Aberdeen/Inverness. This intervention would be implemented in line with current best practice.

Objectives addressed in this corridor:	
Objective Addressed	*To reduce public transport journey time between Edinburgh and Dundee.*
Objective Addressed	*To promote journey time reductions between the central belt and Aberdeen/Inverness primarily to allow business to achieve an effective working day when travelling between these centres.*
Objectives addressed in Dundee:	
Objective Addressed	*To promote journey time reductions, particularly by public transport, between Aberdeen and the central belt primarily to allow business to achieve an effective working day when travelling between these centres.*
Objectives addressed in Edinburgh:	
Objective Addressed	*To promote journey time reductions, particularly by public transport, between the central belt and Aberdeen/Inverness primarily to allow business to achieve an effective working day when travelling between these centres.*
Objective Addressed	*To maintain the 60-minute commutable labour market area at the current level, with a particular focus on linking areas of economic activity.*

Intervention	95	Light Rapid Transit connections between Fife and Edinburgh
Description		Extension of Edinburgh Tram or alternative light rapid transit system from Edinburgh to Fife, using the Replacement Forth Crossing. In Fife, this could serve Dunfermline, Cowdenbeath, Glenrothes, Leven, Kirkcaldy, Burntisland and Dalgety Bay with potential connections to West Lothian.
Justification		This intervention would significantly contribute to the objectives 'to increase public transport capacity and frequency between fife and Edinburgh' and 'to promote efficient and effective transport links to support the development and implementation of the proposed national developments at Rosyth, Forth Crossing and Edinburgh Airport identified in the NPF2' by providing a new public transport link across the Firth of Forth. The new service would provide a step change in public transport capacity between Fife and Edinburgh and could serve Edinburgh Airport, providing a significant improvement in access to the site from Fife. Furthermore, by connecting with heavy rail services around Fife, it would 'enhance interchange opportunities' through the operation of additional public transport services and provide new ones which do not presently exist. This intervention would be deliverable under current best practice, however there are potential environmental issues which may require mitigation during the planning and construction phases of this intervention.

Objectives addressed in this corridor:	
Objective Addressed	*To promote efficient and effective transport links to support the development and implementation of the proposed national developments at Rosyth, Forth Crossing and Edinburgh Airport identified in the NPF2.*
Objective Addressed	*To increase public transport capacity and frequency between Fife and Edinburgh.*
Objectives addressed in Edinburgh:	
Objective Addressed	*To maintain the 60-minute commutable labour market area at the current level, with a particular focus on linking areas of economic activity.*
Objective Addressed	*To enhance public transport interchange opportunities, where feasible to do so.*
Objective Addressed	*To increase public transport capacity and frequency between Fife and Edinburgh.*
Objectives addressed in Corridor 12:	
Objective Addressed	*To promote efficient and effective transport links to support the development and implementation of the proposed national developments at Rosyth, Forth Crossing and Edinburgh Airport identified in the NPF2.*

Intervention	96	Fife Bus Priority Measures and Park-&-Ride Network
Description		Bus priority measures on the A92, M90 and A90 between Perth, Dundee, Dunfermline and Edinburgh to support express bus services, with Park-&-Ride facilities at Dunfermline and Rosyth, plus extension of the existing facilities at Inverkeithing. Includes measures such as a bus lane on the M90 and A92 and associated junction improvements.
Justification		This intervention would significantly contribute to the objectives 'to increase public transport capacity and frequency between Fife and Edinburgh', 'Dundee and Edinburgh', and 'to improve the efficiency of the M90/A90 during periods of peak demand' by providing priority bus measures and Park-&-Ride facilities. The intervention would significantly improve public transport connections and make efficient use of the M90/A90 and A92 between Fife, Dundee and Edinburgh. This intervention would also provide a wider impact as the measures would also improve journey times for longer distance coach journeys between Edinburgh and both Inverness and Aberdeen. Delivery of this interventions should be straightforward as Park-&-Ride facilities are currently operating successfully in several areas. The intervention will be dependent on the provision by third parties of adequate bus services from the Park-&-Ride facilities.

Objectives addressed in this corridor:	
Objective Addressed	*To increase public transport capacity and frequency between Fife and Edinburgh.*
Objective Addressed	*To reduce public transport journey time between Edinburgh and Dundee.*
Objective Addressed	*To promote journey time reductions between the central belt and Aberdeen/Inverness primarily to allow business to achieve an effective working day when travelling between these centres.*
Objective Addressed	*To improve the efficiency of the M90/A90 during periods of peak demand with a focus on reducing the conflict between longer distance and local traffic.*
Objectives addressed in Dundee:	
Objective Addressed	*To promote journey time reductions, particularly by public transport, between Aberdeen and the central belt primarily to allow business to achieve an effective working day when travelling between these centres.*
Objectives addressed in Edinburgh:	
Objective Addressed	*To increase public transport capacity and frequency between Fife and Edinburgh.*
Objective Addressed	*To maintain the 60-minute commutable labour market area at the current level, with a particular focus on linking areas of economic activity.*
Objectives addressed in Corridor 12:	

Objective Addressed	*To reduce Edinburgh to Perth public transport journey times and increase opportunities to travel by public transport.*
Objective Addressed	*To promote journey time reductions between the central belt and Aberdeen/Inverness primarily to allow business to achieve an effective working day when travelling between these centres.*
Objective Addressed	*To improve the efficiency of the M90/A90 during periods of peak demand with a focus on reducing the conflict between longer distance and local traffic.*

Intervention	97	Rail Service Frequency Enhancements between Edinburgh and Fife
Description		Enhanced rail service on the Fife Circle and route to Dundee incorporating semi-fast services via Kirkcaldy and all stops and semi-fast services via Dunfermline. This would require capacity enhancements between Edinburgh and Inverkeithing and may require further capacity enhancements and passing loops on the Fife Circle. Additional capacity at Edinburgh Waverley would be required, or alternatively more efficient use of Haymarket would have to be developed.
Justification		This intervention would significantly contribute to the objective 'to increase public transport capacity and frequency between Fife and Edinburgh' by providing service enhancements and line improvements. Faster and more frequent services around the Fife Circle to Edinburgh would significantly improve travel by public transport and interchange opportunities by reducing the average wait time when changing to or from these services. This intervention would be deliverable under current best practice, however there are potential environmental issues which may require mitigation during the planning and construction phases of this intervention.

Objectives addressed in this corridor:	
Objective Addressed	*To increase public transport capacity and frequency between Fife and Edinburgh.*
Objectives addressed in Edinburgh:	
Objective Addressed	*To increase public transport capacity and frequency between Fife and Edinburgh.*
Objective Addressed	*To enhance public transport interchange opportunities, where feasible to do so.*
Objective Addressed	*To maintain the 60-minute commutable labour market area at the current level, with a particular focus on linking areas of economic activity.*

Intervention	108	New Rail Connections in Fife
Description		New passenger (rail) lines to serve St Andrews, Levenmouth, and Glenrothes town centre, including new track, signalling, rolling stock and construction of stations.
Justification		This intervention would significantly contribute to the objective 'to increase public transport capacity and frequency between Fife and Edinburgh' by providing new services to communities not currently served by rail. The provision of new lines and stations would provide a step change in the capacity of public transport services between Fife and Edinburgh. This intervention would be deliverable under current best practice through the ScotRail franchise, however there are potential environmental issues which may require mitigation during the planning and construction phases of this intervention.

Objectives addressed in this corridor:

Objective Addressed	*To increase public transport capacity and frequency between Fife and Edinburgh.*

Objectives addressed in Edinburgh:

Objective Addressed	*To enhance public transport interchange opportunities, where feasible to do so.*
Objective Addressed	*To maintain the 60-minute commutable labour market area at the current level, with a particular focus on linking areas of economic activity.*
Objective Addressed	*To increase public transport capacity and frequency between Fife and Edinburgh.*

Intervention	180	Online Trunk Road Improvements on the A92
Description		Measures to increase safe overtaking opportunities and reduce journey time variability on the A92, including the introduction of climbing lanes, sections of WS2+1 carriageway, hard strips for agricultural vehicles, junction improvements and the provision of additional lay-bys to permit safer overtaking.
Justification		This intervention would contribute to the objective of 'promoting continuing reduction in accident rates and severity rates across the strategic transport network' by improvements targeted at providing a consistent carriageway standard and junction improvements adjacent to identified road accident clusters. Safer overtaking opportunities would also have a significant impact on improving overall safety on the route. This intervention would be deliverable in line with current best practice, however there are potential environmental issues which would need to be mitigated during the planning and construction phases.

Objectives addressed in this corridor:

Objective Addressed	*To promote continuing reduction in accident rates and severity rates across the strategic transport network.*

STPR Interventions

15 Glasgow to Stranraer and South West

Intervention	91	Rail Service Frequency Enhancement between Glasgow and Kilmarnock
Description		Measures to double the number of trains between Glasgow and Kilmarnock. This would require infrastructure improvements including doubling of the line between Kilmarnock and Barrhead, capacity enhancements between Busby Junction and Glasgow Central and additional rolling stock.
Justification		This intervention would significantly contribute to the objective 'to increase rail capacity between Ayrshire and Glasgow including the Kilmarnock line' by doubling the number of services between Kilmarnock and Glasgow Central. This increase in capacity would provide a step change in public transport provision on this route into Glasgow and therefore would encourage a shift from car to public transport for trips to and from Glasgow city centre. This intervention would be deliverable under current best practice through the ScotRail franchise, however there are potential environmental issues which may require mitigation during the planning and construction phases of this intervention.

Objectives addressed in this corridor:

Objective Addressed	*To increase rail capacity between Ayrshire and Glasgow including the Kilmarnock line.*

Objectives addressed in Glasgow:

Objective Addressed	*To address rail capacity and connectivity issues in central Glasgow.*

Intervention	92	Rail Service Frequency Enhancement between Glasgow and the Ayrshire Coast
Description		Double the number of trains between Glasgow and Ayr, Glasgow and Ardrossan, and between Glasgow and Largs. This would require track layout changes north of Ardrossan, signalling upgrades between Kilwinning and Paisley, the provision of four tracks between Paisley and Glasgow Central or reopening of the railway line from Elderslie to Paisley Canal, platform capacity increases at Glasgow Central and additional rolling stock.
Justification		This intervention would significantly contribute to the objective 'to increase rail capacity between Ayrshire and Glasgow including the Kilmarnock line' by doubling the number of services between the Ayrshire Coast (Ayr, Ardrossan and Largs) and Glasgow Central. This increase in capacity would provide a step change in public transport provision on this route into Glasgow city centre and to Glasgow Airport. This intervention would be deliverable under current best practice through the ScotRail franchise, however there are potential environmental issues which may require mitigation during the planning and construction phases of this intervention.

Objectives addressed in this corridor:

Objective Addressed	*To increase rail capacity between Ayrshire and Glasgow including the Kilmarnock line.*

Objectives addressed in Glasgow:

Objective Addressed	*To promote efficient and effective transport links to support the development and implementation of the proposed national development at Glasgow Airport identified in the NPF2.*
Objective Addressed	*To address rail capacity and connectivity issues in central Glasgow.*

Intervention	112	Lengthen Trains and Platforms between Glasgow and the Ayrshire Coast
Description		Lengthen trains and platforms between Glasgow and Ayr, Ardrossan and Largs.
Justification		This intervention would significantly contribute to the objective 'to increase rail capacity between Ayrshire and Glasgow including the Kilmarnock line' by increasing the length of trains on services between the Ayrshire Coast (Ayr, Ardrossan and Largs) and Glasgow Central. This increase in capacity, and required lengthening of platforms, would provide a step change in public transport provision on this route into Glasgow city centre and to Glasgow Airport. This intervention would be deliverable under current best practice through the ScotRail franchise, however there are potential environmental issues which may require mitigation during the planning and construction phases of this intervention.

Objectives addressed in this corridor:

Objective Addressed	*To increase rail capacity between Ayrshire and Glasgow including the Kilmarnock line.*

Objectives addressed in Glasgow:

Objective Addressed	*To address rail capacity and connectivity issues in central Glasgow.*
Objective Addressed	*To promote efficient and effective transport links to support the development and implementation of the proposed national development at Glasgow Airport identified in the NPF2.*

Intervention	113	Lengthen Trains and Platforms between Glasgow and Kilmarnock
Description		Lengthen trains between Glasgow and Kilmarnock from two and four coach trains to three and six coach trains. This would also require platform lengthening across the route, capacity enhancements between Busby Junction and Glasgow Central and additional rolling stock.
Justification		This intervention would significantly contribute to the objective 'to increase rail capacity between Ayrshire and Glasgow including the Kilmarnock line' by increasing the length of trains on services between Glasgow Central and Kilmarnock. This increase in capacity, and required lengthening of platforms, would provide a step change in public transport provision on this route into Glasgow city centre and to Glasgow Airport. This intervention would be deliverable under current best practice through the ScotRail franchise, however there are potential environmental issues which may require mitigation during the planning and construction phases of this intervention.

Objectives addressed in this corridor:

Objective Addressed	*To increase rail capacity between Ayrshire and Glasgow including the Kilmarnock line.*

Objectives addressed in Glasgow:

Objective Addressed	*To address rail capacity and connectivity issues in central Glasgow.*
Objective Addressed	*To promote efficient and effective transport links to support the development and implementation of the proposed national development at Glasgow Airport identified in the NPF2.*

Intervention	158	Selective Upgrades to the A77
Description		Upgrade the A77 from single to dual carriageway between Whittlets Roundabout and Bankfield. Grade separation of Dutchhouse, Whittlets and Holmston Roundabouts and bypasses around Maybole and Girvan. Measures on the A77 south of Ayr aimed at providing safe overtaking opportunities, such as realignment, widening of carriageway and also junction improvements at specific locations.
Justification		This intervention would significantly contribute to the objectives to 'reduce the conflict between long distance and local traffic with a focus on identified key constraint points' and 'to ensure efficient and effective freight access to the port facilities at Loch Ryan' by ensuring that local traffic that is travelling across or onto the A77 can do so without delaying traffic already travelling along the A77 and by removing long distance traffic from Maybole and Girvan town centres. The measures would also result in reduced journey times and improved reliability for passenger and freight traffic to and from the Loch Ryan ports and enhance safety along the route. This intervention would be deliverable under current best practice, however there are potential environmental issues which would need to be mitigated during the planning and construction of this intervention.

Objectives addressed in this corridor:

Objective Addressed	*To promote continuing reduction in accident rates and severity rates across the strategic transport network.*
Objective Addressed	*To reduce the conflict between longer distance and local traffic with a focus on identified key constraint points.*
Objective Addressed	*To ensure efficient and effective freight access to the port facilities at Loch Ryan.*

Intervention	159	Selective Upgrades to the A737
Description		Bypasses on the A737 around Dalry and Kilwinning.
Justification		This intervention would significantly contribute to the objective 'to reduce the conflict between long distance and local traffic with a focus on identified key constraint points' by removing long distance traffic away from Dalry and Kilwinning and onto new bypass routes around the towns, relieving two points of constraint on the A737. This intervention would be deliverable under current best practice, however there are potential environmental issues which would need to be mitigated during the planning and construction of this intervention.

Objectives addressed in this corridor:

Objective Addressed	*To reduce the conflict between longer distance and local traffic with a focus on identified key constraint points.*
Objective Addressed	*To promote continuing reduction in accident rates and severity rates across the strategic transport network.*

Intervention	165	Double-deck Trains between Glasgow and the Ayrshire Coast
Description		Upgrading of rail infrastructure to support double-deck trains operating between Glasgow and the Ayrshire Coast.
Justification		This intervention would significantly contribute to the objective 'to increase rail capacity between Ayrshire and Glasgow including the Kilmarnock line' by providing a step change in the number of seats available on rail services on this route into Glasgow. The measures would also provide a more effective public transport link to Glasgow Airport by reducing overcrowding on services between Ayrshire and the airport. This intervention would be deliverable under current best practice, however there are potential operational and environmental issues which may require mitigation during the planning and construction phases of this intervention.

Objectives addressed in this corridor:

Objective Addressed	*To increase rail capacity between Ayrshire and Glasgow including the Kilmarnock line.*

Objectives addressed in Glasgow:

Objective Addressed	*To promote efficient and effective transport links to support the development and implementation of the proposed national development at Glasgow Airport identified in the NPF2.*
Objective Addressed	*To address rail capacity and connectivity issues in central Glasgow.*

Intervention	166	Double-deck Trains between Glasgow and Kilmarnock
Description		Upgrading of rail infrastructure to support double-deck trains operating between Glasgow and Kilmarnock.
Justification		This intervention would significantly contribute to the objective 'to increase rail capacity between Ayrshire and Glasgow including the Kilmarnock line' by providing a step change in the number of seats available on rail services on this route into Glasgow. This intervention would be deliverable under current best practice, however there are potential operational and environmental issues which may require mitigation during the planning and construction phases of this intervention.

Objectives addressed in this corridor:

Objective Addressed	*To increase rail capacity between Ayrshire and Glasgow including the Kilmarnock line.*

Objectives addressed in Glasgow:

Objective Addressed	*To address rail capacity and connectivity issues in central Glasgow.*

Intervention	173	Extension of Glasgow Southern Orbital from East Kilbride to M73/M74
Description		New dual-carriageway link road between the M74 at Junction 4 and the A726 Glasgow Southern Orbital at Philipshill.
Justification		This intervention would significantly contribute to the objective 'to reduce conflict between long distance and local traffic with a focus on identifying key constraint points' by providing an alternative route for passenger and freight traffic between east and central Scotland and Ayrshire. The new link would remove long distance traffic from East Kilbride, thereby reducing the impact of this constraint on strategic trips travelling to and from the ports in Loch Ryan and at Hunterston. This intervention would be implemented in line with current best practice, however there are potential environmental issues which may need to be mitigated during the construction phase of this intervention.

Objectives addressed in this corridor:

Objective Addressed	*To ensure efficient and effective freight access to the port facilities at Loch Ryan.*
Objective Addressed	*To reduce the conflict between longer distance and local traffic with a focus on identified key constraint points.*

STPR Interventions

16 Stranraer to North West England and beyond

Intervention	171	Online Trunk Road Improvements on the A75
Description		Increased safe overtaking opportunities on the A75, including measures such as the introduction of climbing lanes, sections of WS2+1 carriageway, hard strips for agricultural vehicles and the provision of additional lay-bys to permit safer overtaking.
Justification		This intervention would significantly contribute to the objective 'to promote continual reduction in accident rates and severity rates across the strategic transport network' by improving the standard of road provision to allow safer overtaking opportunities. The measures would have a significant impact on reducing accidents and accident severity along the A75. There is unlikely to be any deliverability issues with this intervention as it would be implemented in line with current best practice.

Objectives addressed in this corridor:

Objective Addressed	*To ensure efficient and effective freight access to the port facilities at Loch Ryan.*
Objective Addressed	*To promote continuing reduction in accident rates and severity rates across the strategic transport network.*

Intervention	174	Roll-On Roll-Off Rail Freight Enhancements between Stranraer, Kilmarnock and the Border
Description		Significant infrastructure upgrade of the rail route between Stranraer, Kilmarnock and the Border to allow roll-on/roll-off freight trains to operate. Measures would including gauge improvements, increased route availability, signalling improvements and electrification to allow services to be operated by electric locomotives. New facilities would be provided in Stranraer, Kilmarnock and near the Border to allow goods vehicles to drive on and off trains and also new trains to carry goods vehicles.
Justification		This intervention would significantly contribute to the objective 'to ensure efficient and effective freight access to the port facilities at Loch Ryan' by allowing freight to be transferred from road to rail, avoiding the A77 south of Ayr and the A75. This would reduce the conflict between long distance and local traffic by removing some long distance freight traffic from the A77. This intervention would be implemented in line with current best practice, however there are potential environmental issues which may need to be mitigated during the construction phase of this intervention. This intervention would interact with any similar proposals developed by the Department for Transport on the West Coast Mainline South of Carlisle.

Objectives addressed in this corridor:

Objective Addressed	*To ensure efficient and effective freight access to the port facilities at Loch Ryan.*

Objectives addressed in Corridor 15:

Objective Addressed	*To ensure efficient and effective freight access to the port facilities at Loch Ryan.*
Objective Addressed	*To reduce the conflict between longer distance and local traffic with a focus on identified key constraint points.*

Intervention	176	Intelligent Transport System Initiatives on the A75
Description		Intelligent Transport Systems (ITS) and variable message signs on the A75 between the Border and Stranraer.
Justification		This intervention would significantly contribute to the objective 'to ensure efficient and effective freight access to the port facilities at Loch Ryan' by providing information for drivers, allowing them to make better informed decisions about their journey. The A75 is part of the Trans-European Network, and the measures could interact with ITS run by the Highway Agency on the M6 south of the Border. There area number of well developed and cost effective measures that can be applied where appropriate.

Objectives addressed in this corridor:

Objective Addressed	*To ensure efficient and effective freight access to the port facilities at Loch Ryan.*

STPR Interventions

17 Glasgow to Inverclyde and Islands

Intervention	39	M8 Bus Priority Measures and Park-&-Ride Network between Glasgow City Centre, Glasgow Airport and Areas to the West
Description		Bus priority measures, including hard shoulder bus lanes or guided busways, to serve Hillington, Glasgow Airport and Glasgow city centre, plus Park-&-Ride facilities accessible from the motorway.
Justification		This intervention would significantly contribute to the objectives 'to increase capacity and reduce journey time, particularly by public transport between Glasgow and Inverclyde' and 'to promote efficient and effective transport links to support the development and implementation of the proposed national development at Glasgow Airport as identified in NPF2' by improving the efficiency and reliability of the western sections of the M8, through the introduction of bus priority measures and Park-&-Ride facilities. These measures will enhance public transport by reducing journey time and improving journey time reliability, particularly to and from Glasgow city centre and the Airport. The proposed Park-&-Ride facilities would improve access to enhanced bus services for people living in a wide area to the west of the city. Delivery of this interventions should be straightforward as Park-&-Ride facilities are currently operating successfully in several areas. The intervention will be dependent on the provision by third parties of adequate bus services from the Park-&-Ride facilities.

Objectives addressed in this corridor:

Objective Addressed	*To increase capacity and reduce journey times by public transport between Glasgow and Inverclyde.*
Objective Addressed	*To promote efficient and effective transport links to support the development and implementation of the proposed national development at Glasgow Airport identified in the NPF2.*

Objectives addressed in Glasgow:

Objective Addressed	*To promote efficient and effective transport links to support the development and implementation of the proposed national development at Glasgow Airport identified in the NPF2.*
Objective Addressed	*To improve the efficiency of the M8 motorway during periods of peak demand with a focus on reducing the conflict between longer distance and local traffic, increasing the people carrying capacity and freight carrying capacity of existing road, and demand management.*
Objective Addressed	*To increase the public transport access to and between areas of economic activity and regeneration with minimal need for interchange.*
Objective Addressed	*To promote journey time reductions, particularly by public transport, between the central belt and Aberdeen/Inverness primarily to allow business to achieve an effective working day when travelling between these centres.*

Intervention	87	Lengthen Trains and Platforms and Reduce Journey Times between Glasgow and Inverclyde
Description		Increase train lengths on railway services between Glasgow, Gourock and Wemyss Bay. Increase track speeds or revise stopping patterns to reduce journey times. Further enhancements to allow journey time improvements to be made. Increase capacity at station car parks. Additional rolling stock would be required.
Justification		This intervention would significantly contribute to the objective 'to increase capacity and reduce journey times by public transport between Glasgow and Inverclyde by increasing the number of coaches on services between Glasgow and Inverclyde, thereby providing additional seating capacity, without having to run any additional services. This would improve rail capacity and connectivity in Glasgow and encourage a shift in mode from road to rail. This intervention would be deliverable through the ScotRail franchise.

Objectives addressed in this corridor:

Objective Addressed	*To increase capacity and reduce journey times by public transport between Glasgow and Inverclyde.*

Objectives addressed in Glasgow:

Objective Addressed	*To promote efficient and effective transport links to support the development and implementation of the proposed national development at Glasgow Airport identified in the NPF2.*
Objective Addressed	*To address rail capacity and connectivity issues in central Glasgow.*

Intervention	88	Rail Service Frequency Enhancements and Reduce Journey Times between Glasgow and Inverclyde
Description		Increase capacity between Glasgow Central and Gourock and Wemyss Bay to permit service frequencies to be doubled. Further enhancements to allow journey time improvements to be made. Increase capacity at station car parks. Additional rolling stock would be required.
Justification		This intervention would significantly contribute to the objective 'to increase capacity and reduce journey times by public transport between Glasgow and Inverclyde' by doubling the number of services between the two locations. The additional capacity provided is expected improve rail capacity and connectivity in Glasgow and encourage a shift in mode from road to rail. This intervention would be deliverable through the ScotRail franchise.

Objectives addressed in this corridor:

Objective Addressed	*To increase capacity and reduce journey times by public transport between Glasgow and Inverclyde.*

Objectives addressed in Glasgow:

Objective Addressed	*To promote efficient and effective transport links to support the development and implementation of the proposed national development at Glasgow Airport identified in the NPF2.*
Objective Addressed	*To address rail capacity and connectivity issues in central Glasgow.*

Intervention	89	Speed Enforcement Measures on the M8 and A8 between Glasgow and Inverclyde
Description		Speed Enforcement Measures on the M8 and A8 between Glasgow and Inverclyde at locations where vehicle speed is a contributing factor to accidents.
Justification		This intervention would signifiicantly contribute towards the objective 'to reduce accident rate to the national road type average on the M8 and the A8', by ensuring greater compliance with speed limits. The measures are expected to make a significant impact on accident rates. There are a number of well developed and cost effective measures that can be applied where appropriate.

Objectives addressed in this corridor:

Objective Addressed	*To reduce the accident rate to the national road type average on the M8 and A8.*

Intervention	90	New Bypass Around Greenock
Description		A new bypass around Greenock and Port Glasgow.
Justification		This intervention would significantly contribute to the objectives 'to reduce accident rates to the national road type average on the M8 and the A8' and 'to facilitate freight access to Greenock port', by providing a bypass that would improve freight access to the port by road. Journey times would also be reduced by avoiding currently congested areas in Greenock. Additionally, it would improve the accident rate on the A8 by removing long distance traffic from the local road network through Greenock. This intervention would be implemented in line with current best practice, however there are potential environmental issues which may need to be mitigated during the construction phase of this intervention.

Objectives addressed in this corridor:

Objective Addressed	*To reduce the accident rate to the national road type average on the M8 and A8.*
Objective Addressed	*To facilitate freight access to Greenock port.*

Intervention	111	Reopen Rail Freight Connection to Greenock Port
Description		Reopen the closed branch line between Container base Junction (on the Wemyss Bay branch) and Greenock Container Base. Additional capacity requirements between Paisley and Shields Junction is dependent on the volume of rail freight that would use the container base.
Justification		This intervention would significantly contribute to the objective 'to facilitate freight access to Greenock Port' by providing direct rail freight access into Greenock Port from the national rail network, allowing the freight to be transferred direct to rail without having to transfer to a loading terminal by road. The reopening of the Greenock Container Base Branch could have a significant impact on reducing freight congestion to and from Greenock Port. This intervention would be implemented in line with current best practice, however there are potential environmental issues which may need to be mitigated during the construction phase of this intervention.

Objectives addressed in this corridor:

Objective Addressed	*To facilitate freight access to Greenock port.*

Intervention	127	New Rail Line between Kilmacolm and Paisley Canal
Description		Reopening of the line from Kilmacolm to Paisley Canal via Bridge of Weir and Linwood. Double track the existing Paisley Canal branch, electrify and increase service frequency to four trains per hour. Option to extend line towards Port Glasgow and Greenock. Additional capacity improvements may be required at Shields Junction.
Justification		This intervention would significantly contribute to the objective 'to increase capacity and reduce journey times by public transport between Glasgow and Inverclyde' by providing significant rail improvements between Glasgow and Inverclyde, including the construction of a new rail link serving communities in Inverclyde, many of which do not currently have a rail service. This line would also connect to the rail line between Paisley Gilmour Street and Kilwinning, allowing additional services between Glasgow and the Ayrshire coast by providing a new link, avoiding the heavily congested line between Glasgow and Paisley Gilmour Street. This intervention would be deliverable as it would be implemented in line with current best practice, however there are potential environmental issues which may need to be mitigated during the construction phase of this intervention.

Objectives addressed in this corridor:

Objective Addressed	*To increase capacity and reduce journey times by public transport between Glasgow and Inverclyde.*

Objectives addressed in Corridor 15:

Objective Addressed	*To increase rail capacity between Ayrshire and Glasgow including the Kilmarnock line.*

Intervention	132	Grade Separation of Junctions on the A8 between Langbank and Greenock
Description		Grade separation of junctions on the A8 through Inverclyde.
Justification		This intervention would significantly contribute to the objectives 'to improve the efficiency of the A8/M8 during periods of peak demand with a focus on reducing the conflict between long distance and local traffic', 'to reduce the accident rate to the national road type average on the M8 and A8' and 'to facilitate freight to the Greenock port' by grade separating junctions on the A8 between Langbank and Greenock. This intervention would significantly improve the efficiency of the A8 by reducing the impact of local traffic joining the main carriageway, which would provide safety benefits along the route and improve access between Greenock Port and the trunk road network. This intervention would be implemented in line with current best practice, however there are potential environmental issues which may need to be mitigated during the construction phase of this intervention.

Objectives addressed in this corridor:

Objective Addressed	*To reduce the accident rate to the national road type average on the M8 and A8.*
Objective Addressed	*To facilitate freight access to Greenock port.*
Objective Addressed	*To improve the efficiency of the A8/M8 during periods of peak demand with a focus on reducing the conflict between longer distance and local traffic.*

Intervention	135	New Rail Line between Wemyss Bay and Largs
Description		Construction of a new direct rail link between Wemyss Bay and Largs. This new connection would permit two trains per hour to run from Glasgow to Largs and Ardrossan via Wemyss Bay,
Justification		This intervention would significantly contribute to the objective 'to increase capacity and reduce journey times by public transport between Glasgow and Inverclyde' by constructing a new rail line between Wemyss Bay and Largs that would provide a shorter route for services between Largs and Glasgow, reducing the journey time between the two locations. This intervention would be implemented in line with current best practice, however there are potential environmental issues which may need to be mitigated during the construction phase of this intervention.

Objectives addressed in this corridor:

Objective Addressed	*To increase capacity and reduce journey times by public transport between Glasgow and Inverclyde.*

Objectives addressed in Corridor 15:

Objective Addressed	*To increase rail capacity between Ayrshire and Glasgow including the Kilmarnock line.*

Intervention	139	Intelligent Transport System Initiatives on the M8 between Glasgow and Inverclyde
Description		Intelligent Transport Systems, priority vehicle lanes, ramp metering, variable speed limits and hard shoulder running for priority vehicles on the M8 between Junction 31 and the Kingston Bridge.
Justification		This intervention would significantly contribute to the objectives 'to promote efficient and effective transport links to support the development and implementation of the proposed national development at Glasgow Airport identified in the NPF2', and 'to improve the A8/M8 during period of peak demand with a focus on reducing the conflict between long distance and local traffic' by giving priority to targeted vehicle classes and helping to ensure smooth traffic flows. Giving priority to buses and other priority vehicles means that the motorway can carry more people and goods and encourages people to car share or take the bus, both of which make more efficient use of available road space. There area number of well developed and cost effective measures that can be applied where appropriate.

Objectives addressed in this corridor:

Objective Addressed	*To promote efficient and effective transport links to support the development and implementation of the proposed national development at Glasgow Airport identified in the NPF2.*
Objective Addressed	*To improve the efficiency of the A8/M8 during periods of peak demand with a focus on reducing the conflict between longer distance and local traffic.*

Objectives addressed in Glasgow:

Objective Addressed	*To improve the efficiency of the M8 motorway during periods of peak demand with a focus on reducing the conflict between longer distance and local traffic, increasing the people carrying capacity and freight carrying capacity of existing road, and demand management.*
Objective Addressed	*To promote efficient and effective transport links to support the development and implementation of the proposed national development at Glasgow Airport identified in the NPF2.*

STPR Interventions

18 Glasgow to North West England and beyond

Intervention	85	Intelligent Transport System Initiatives on the M74
Description		Intelligent Transport Systems, priority vehicle lanes, ramp metering, variable speed limits and hard shoulder running for priority vehicles on the M74 between Hamilton and Glasgow.
Justification		This intervention would significantly contribute to the objective 'to make better use of the available road space and better managing peak demand' by giving priority to targeted vehicle classes and helping to ensure smooth traffic flows. Giving priority to buses and priority vehicles means that the motorway can carry more people and goods and encourages people to car share or take the bus, both of which make more efficient use of available road space. Furthermore reduction of congestion and delays will help to meet the objective 'to contribute to both a reduction in emissions per person kilometre and a reduction in overall emissions'. There are a number of well developed and cost effective measures that can be applied where appropriate.

Objectives addressed in this corridor:

Objective Addressed	*To make best use of the available road space and better manage peak demand taking into account the need to contribute to emissions reduction.*

Intervention	86	Enhancements to Rail Freight Infrastructure between Glasgow and the Border via West Coast Main Line
Description		Increase terminal capacity at Coatbridge and Mossend, increase the number of available paths for freight trains on the West Coast Mainline, increase the length of loops, removal of speed limits that are below 75mph for freight trains and increase the loading gauge on the West Coast Mainline to permit larger containers to be carried.
Justification		This intervention would significantly contribute to the objective 'to contribute to emissions reduction by facilitating the increase in the proportion of freight passing through the corridor that is carried by rail'. Increasing the number of available paths on the West Coast Mainline would allow more freight trains to run and at more flexible times. Increasing the length of loops would allow longer freight trains to run as their length is limited by where they have to stop and allow faster passenger trains to pass. Increasing the loading gauge across the route would allow larger containers to be carried. This intervention would significantly increase the attractiveness of rail freight to hauliers and help increase the proportion of freight carried by rail. This intervention could interact with any similar proposals developed by the Department for Transport on the West Coast Mainline South of Carlisle. This intervention would be deliverable under current best practice, however there are potential environmental issues due to size and scale of this intervention which would almost certainly require mitigation during the planning and construction phases of this intervention.

Objectives addressed in this corridor:

Objective Addressed	*To contribute to emissions reduction by facilitating an increase in the proportion of freight passing through the corridor that is carried by rail.*

Intervention	130	Enhancements to Rail Freight Infrastructure between Glasgow and the Border via Dumfries
Description		Increase the number of available paths for freight trains on the Glasgow & South Western line from Glasgow to Carlisle via Dumfries. Infrastructure enhancements could include lengthening of loops, removal of speed limits that are below 75mph and increasing the loading gauge on the route.
Justification		This intervention would significantly contribute to reductions in emissions 'by facilitating an increase in the proportion of freight passing through the corridor that is carried by rail' by significantly improving the route to allow more freight trains to run and at more flexible times. Increasing the length of loops and gauge improvements would allow longer freight trains to run that can carry larger containers. This intervention would increase the attractiveness of rail freight to hauliers and help increase the proportion of freight carried by rail, which in turn would lead to a decrease in freight movement by road, thereby contributing to reductions in emissions. This intervention could interact with any similar proposals developed by the Department for Transport on the West Coast Mainline South of Carlisle. This intervention would be deliverable under current best practice, however due to the size and scale there are potential environmental issues which may need to be mitigated during the construction phase of this intervention.

Objectives addressed in this corridor:

Objective Addressed	*To contribute to emissions reduction by facilitating an increase in the proportion of freight passing through the corridor that is carried by rail.*

Intervention	131	New Motorway Link between the M73 and Coatbridge
Description		M73 Gartcosh link road to Coatbridge Freightliner terminal (Gartsherrie).
Justification		This intervention would significantly contribute to the objective 'to contribute to emissions reduction by facilitating an increase in the proportion of freight passing through the corridor that is carried by rail', by providing a new link road from the M73 to Coatbridge Freightliner terminal. This would significantly reduce delays and distance travelled by goods vehicles thereby contributing to reductions in emissions. This intervention would be deliverable under current best practice, however there are potential environmental issues which may need to be mitigated during the construction phase of this intervention.

Objectives addressed in this corridor:

Objective Addressed	*To contribute to emissions reduction by facilitating an increase in the proportion of freight passing through the corridor that is carried by rail.*

Intervention	150	Roll-On Roll-Off Rail Freight Enhancements between Glasgow and the Border via Lockerbie/Dumfries
Description		A full upgrade of the route between the central belt and the Border via Lockerbie/Dumfries including roll-on/roll-off facilitates for freight trains to operate. Extensive works to increase the loading gauge, increase the route availability and allow for an increase in the number of trains operating. Signalling improvements to allow for bi-directional running and 24 hour access to the route, new trains to carry goods vehicles and electrification to allow services to be operated by electric locomotives.
Justification		This intervention would significantly contribute to the objective 'to contribute to emissions reduction by facilitating an increase in the proportion of freight passing through the corridor that is carried by rail' by providing new facilities that would encourage a transfer of freight movement from road to rail, thereby contributing to a reduction in emissions produced by goods vehicles. The intervention includes a roll-on/roll-off service for heavy goods vehicles which would speed-up interchange at either end of the rail journey. This intervention could interact with any similar proposals developed by the Department for Transport on the West Coast Mainline South of Carlisle. This intervention would be deliverable under current best practice, however there are potential operational and environmental issues which may need to be mitigated during the construction phase of this intervention.

Objectives addressed in this corridor:

Objective Addressed	*To contribute to emissions reduction by facilitating an increase in the proportion of freight passing through the corridor that is carried by rail.*

Intervention	168	Priority Vehicle Lane on the M74 between Hamilton and Glasgow
Description		Widen the M74 motorway between Hamilton and Glasgow to provide an additional lane dedicated to priority vehicles.
Justification		This intervention would significantly contribute to the objective of 'improving the efficiency and reliability of the operation of the southern sections of the M74 on approach to Glasgow, particularly for priority vehicles' by making more efficient use of the available road space. Giving priority to buses and other priority vehicles would encourage people to car share or take the bus, thereby enabling the trunk road network to carry more people. The measures would significantly improve journey time reliability and maximise capacity by providing a dedicated lane for priority vehicles, including goods vehicles if permitted. This intervention would be deliverable under current best practice, however physical constraints may impact on the configuration of any hard shoulder running.

Objectives addressed in this corridor:

Objective Addressed	*To make best use of the available road space and better manage peak demand taking into account the need to contribute to emissions reduction.*

Intervention	181	Online Trunk Road Improvements on the A76
Description		Measures to increase safe overtaking opportunities and reduce journey time variability on the A76 including the introduction of climbing lanes, sections of WS2+1 carriageway, hard strips for agricultural vehicles and the provision of additional lay-bys to permit safer overtaking.
Justification		This intervention would significantly contribute to the objective 'to promote continuing reduction in accident rates and severity rates across the strategic transport network' by improving the standard of road provision and safer overtaking opportunities, which will reduce accident numbers and severity. This intervention would be deliverable in line with current best practice, however there are potential environmental issues which may need to be mitigated during the construction phase of this intervention.

Objectives addressed in this corridor:

Objective Addressed	*To promote continuing reduction in accident rates and severity rates across the strategic transport network.*

STPR Interventions

19 Edinburgh to North West England and beyond

Intervention	169	Online Trunk Road Improvements on the A68, A7 and A702
Description		Measures to increase safe overtaking opportunities and reduce journey time variability on the A68, A7 and A702. Including measures such as the introduction of climbing lanes, sections of WS2+1 carriageway, hard strips for agricultural vehicles and the provision of additional lay-bys to permit safer overtaking.
Justification		This intervention would significantly contribute to the objective 'to promote continuing reduction in accident rates and severity rates across the strategic transport network' by improving the standard of road provision and safer overtaking opportunities, which would reduce accident numbers and severity. This intervention as it would be deliverable in line with current best practice. However there are potential environmental issues which may need to be mitigated during the construction phase of this intervention.

Objectives addressed in this corridor:

Objective Addressed	*To promote continuing reduction in accident rates and severity rates across the strategic transport network.*

Objectives addressed in Corridor 13:

Objective Addressed	*To contribute to both a reduction in emissions per person kilometre and a reduction in overall emissions.*
Objective Addressed	*To make best use of the available road space and better manage peak demand.*

Objectives addressed in Corridor 17:

Objective Addressed	*To improve the efficiency of the A8/M8 during periods of peak demand with a focus on reducing the conflict between longer distance and local traffic.*
Objective Addressed	*To reduce the accident rate to the national road type average on the M8 and A8.*

STPR Interventions

20 Edinburgh to North East England and beyond

Intervention	80	New Light Rapid Transit Line between Edinburgh and Haddington
Description		Extension of Edinburgh Tram or alternative light rapid transit system from Edinburgh to Haddington via Portobello, Musselburgh and Tranent. Construction of light rail infrastructure, additional rolling stock and station enhancements,
Justification		This intervention would significantly contribute to the objective 'to increase the attractiveness and capacity of public transport into Edinburgh to reduce crowding and forecast road congestion' by providing a new high quality public transport link into the city. The Light Rapid Transit (LRT) line would provide a step change in the number of public transport services and seating capacity within Edinburgh. There would be some risks associated with the delivery of this intervention due to the likelihood for some sections of on-street running, however through the experience currently being gained in the delivery of the Edinburgh Tram it is expected that this intervention could be delivered effectively.

Objectives addressed in this corridor:

Objective Addressed	*To increase the attractiveness and capacity of public transport into Edinburgh to reduce crowding and forecast road congestion.*

Objectives addressed in Edinburgh:

Objective Addressed	*To maintain the 60-minute commutable labour market area at the current level, with a particular focus on linking areas of economic activity.*
Objective Addressed	*To enhance public transport interchange opportunities, where feasible to do so.*

Intervention	82	Rail Service Enhancements between Edinburgh and Dunbar
Description		Local rail service between Dunbar and Edinburgh Park or South Gyle (and beyond to Glasgow, Stirling or Fife), with stations at East Linton and Musselburgh Parkway. Additional rolling stock, line speed improvements and new stations to be constructed. Dunbar station to be remodelled to increase capacity and additional works at the east of end of Waverley to allow more trains to run.
Justification		This intervention would significantly contribute to the objective 'to increase the attractiveness and capacity of public transport into Edinburgh to reduce crowding and forecast road congestion' by providing a more frequent rail service from Dunbar. The new services would provide a step change in seating capacity on public transport services towards Edinburgh and would also link Dunbar to the economic growth areas to the west of the city centre. This intervention would be deliverable under current best practice through the ScotRail franchise.

Objectives addressed in this corridor:

Objective Addressed	*To increase the attractiveness and capacity of public transport into Edinburgh to reduce crowding and forecast road congestion.*

Objectives addressed in Edinburgh:

Objective Addressed	*To enhance public transport interchange opportunities, where feasible to do so.*
Objective Addressed	*To maintain the 60-minute commutable labour market area at the current level, with a particular focus on linking areas of economic activity.*

Intervention	83	New Rail Line from the East Coast Mainline between Longniddry and Haddington
Description		Reopened branch line from Longniddry to Haddington, with a service to west of Edinburgh (e.g., Edinburgh Park or South Gyle and beyond to Livingston, Glasgow, Stirling or Fife). Capacity enhancements at the east end of Waverley. To the west of Waverley, these services could be extensions of existing services.
Justification		This intervention would significantly contribute to the objective 'to increase the attractiveness and capacity of public transport into Edinburgh to reduce crowding and forecast road congestion' by providing a new high quality public transport link into the city which would have improved journey times compared with existing bus services. This intervention would be deliverable under current best practice, however there are potential environmental issues which may require mitigation during the planning and construction phases of this intervention.

Objectives addressed in this corridor:

Objective Addressed	*To increase the attractiveness and capacity of public transport into Edinburgh to reduce crowding and forecast road congestion.*

Objectives addressed in Edinburgh:

Objective Addressed	*To maintain the 60-minute commutable labour market area at the current level, with a particular focus on linking areas of economic activity.*
Objective Addressed	*To enhance public transport interchange opportunities, where feasible to do so.*

Intervention	119	New Light Rapid Transit Line from Edinburgh to Dalkeith and Penicuik
Description		Extension of Edinburgh Tram or alternative light rapid transit system from Edinburgh city centre to the Edinburgh Royal Infirmary, Shawfair and Dalkeith, with a branch to Loanhead and Penicuik. Construction of light rapid transit infrastructure, rolling stock, stations and car parking.
Justification		This intervention would significantly contribute to the objective 'to increase the attractiveness and capacity of public transport into Edinburgh to reduce crowding and forecast road congestion' by providing a new public transport link between Edinburgh city centre and the economic growth area in South East Edinburgh . The new system would provide a step change in seating capacity on public transport and significantly improve connections between these two areas of economic activity to a number of towns south and south east of Edinburgh. The light rapid transit system would be able to connect with rail services between Edinburgh and Tweedbank which would 'enhance public transport interchange'. This intervention would be deliverable in line with current best practice.

Objectives addressed in this corridor:

Objective Addressed	*To increase the attractiveness and capacity of public transport into Edinburgh to reduce crowding and forecast road congestion.*

Objectives addressed in Edinburgh:

Objective Addressed	*To enhance public transport interchange opportunities, where feasible to do so.*
Objective Addressed	*To maintain the 60-minute commutable labour market area at the current level, with a particular focus on linking areas of economic activity.*

Intervention	120	New Rail Line from the Borders Rail Link at Eskbank to Penicuik
Description		Heavy rail branch line from the Borders Rail Link at Eskbank to Penicuik, using the existing alignment past Rosewell and Auchendinny where possible.
Justification		This intervention would significantly contribute to the objective 'to increase the attractiveness and capacity of public transport into Edinburgh to reduce crowding and forecast road congestion' by providing a new public transport link between Edinburgh city centre and the economic growth area in the South East Edinburgh. The new link would also significantly improve connections between these two areas of economic activity and a number of towns south and south east of Edinburgh. This intervention would be deliverable in line with current best practice, however there are potential environmental issues which may need to be mitigated during the construction phase of this intervention.

Objectives addressed in this corridor:

Objective Addressed	*To increase the attractiveness and capacity of public transport into Edinburgh to reduce crowding and forecast road congestion.*

Objectives addressed in Edinburgh:

Objective Addressed	*To enhance public transport interchange opportunities, where feasible to do so.*
Objective Addressed	*To maintain the 60-minute commutable labour market area at the current level, with a particular focus on linking areas of economic activity.*

Intervention	177	Online Trunk Road Improvements on the A1
Description		An intervention to increase safe overtaking opportunities and reduce journey time variability on the A1. This would include measures such as the introduction of climbing lanes, sections of WS2+1 carriageway, hard strips for agricultural vehicles and the provision of additional lay-bys to permit safer overtaking.
Justification		This intervention would significantly contribute to the objective 'to promote continuing reductions in accident and severity rates across the strategic transport network' and could make a significant impact by improving the standard of road provision by increasing the opportunities for safe overtaking and reducing the conflict between private vehicles and agricultural vehicles. The improved standard for road would also reduce journey times and improve journey time reliability on the A1. There is unlikely to be any deliverability issues with this intervention as it would be implemented in line with current best practice.

Objectives addressed in this corridor:

Objective Addressed	*To promote continuing reduction in accident rates and severity rates across the strategic transport network.*