2 Need for the Scheme

2.1 Introduction

2.1.1 This chapter sets out the national and local context for the proposed scheme, a new trunk road scheme which connects the A9 Perth – Inverness Trunk Road at Inshes to the A96 Inverness – Nairn Trunk Road at Smithton.

2.1.2 A summary of the existing and future traffic conditions is also provided to highlight the impact of the proposed scheme on existing traffic flow.

2.1.3 The chapter is supported by the following figures, which are cross referenced where relevant:

- Figure 2.1 (Traffic Flows Location Plan Base Year/Do-Minimum); and
- Figure 2.2 (Traffic Flows Location Plan Base Year/Do-Something).

2.2 A9/A96 Inshes to Smithton Scheme

2.2.1 The proposed scheme commences to the west of the existing A9 and ends at the proposed A96 Smithton Junction, which would form part of the A96 Dualling Inverness to Nairn (including Nairn Bypass) scheme at the northern end of the C1032 Barn Church Road.

2.2.2 The proposed scheme includes 3.2km of new carriageway (mainline and side roads) and 0.7km of extended lane gain on the line of the existing A9. Further details regarding the layout of the proposed scheme are provided in Chapter 4 (The Proposed Scheme) and on Figure 4.1 (accompanying Chapter 5: The Proposed Scheme).

2.2.3 It is considered that the proposed scheme would improve the strategic road network in the area, improving its operation for longer distance and local journeys. The proposed scheme would complement the increased capacity of the A96 when the proposed dualling is complete and improve efficiency of journey times on the local road network.

2.3 National Context

2.3.1 The proposed scheme has been identified within several national strategies and policy frameworks as an important national infrastructure scheme.

2.3.2 The Government's vision and objectives for transport in Scotland are set out in Scotland's Transport Future (Scottish Executive 2004), which provides the policy framework for transport in Scotland with an overall aim to '*…promote economic growth, social inclusion, health and protection of our environment through a safe, integrated, effective and efficient transport system'* (page 17).

2.3.3 The National Transport Strategy which followed in 2006 (Scottish Executive 2006) outlined the long-term strategy to meet the aims identified in Scotland's Transport Future. This Strategy was refreshed in 2016 to take account of constitutional, political, economic, social or sectoral changes since 2006. The refresh recommended a full review of the National Transport Strategy and highlighted that the key strategic outcomes of the 2006 National Transport Strategy remained relevant. These include:

- improved journey times and connections, to tackle congestion and lack of integration and connections in transport;
- reduced emissions, to tackle climate change, air quality, health improvement; and
- improved quality, accessibility and affordability, to give choice of public transport, better quality services and value for money, or alternative to car.

2.3.4 To support the aims of Scotland's Transport Future and the National Transport Strategy, the Strategic Transport Projects Review (STPR) (Jacobs, Faber Maunsell, Grant Thornton and Tribal Consulting 2009) sets out the Scottish Government's transport investment priorities over the coming decades.

Specific trunk road interventions emerging from the review include a link road between the A9 and the A96 (Intervention 18). The STPR states the following:

'A new link connecting the A96 and the A9 (south of Inverness) would provide relief for Raigmore Interchange.' (Annex A: Summary of Draft Investments, paragraph A.176).

'The link between the A9 and the A96 would further reduce congestion by allowing traffic between the A9 and A96 to avoid local traffic congestion at Raigmore Interchange. These benefits are reflected in the economic analysis, which suggests that the intervention offers value for money'. (Annex A: Summary of Draft Investments, paragraph A.179).

2.3.5 The STPR also identifies that effective transport is key to supporting the delivery of Scotland's Economic Strategy. The review concludes that generally the network was performing to a high standard; however, a number of significant areas would require specific attention. In relation to the link road between the A9 and A96 the STPR highlights an aim '*to improve connectivity particularly by public transport between Inverness city centre and the growth area to the east including Inverness Airport'* (Annex B: Summary of STPR Work Packages, page 142).

2.3.6 The Scottish Government's Economic Strategy was originally developed in 2007 (Scottish Government 2007) and was updated in both November 2011 and March 2015 (Scottish Government 2011a and 2015). Its purpose is to create a more successful country, with opportunities for all of Scotland to flourish, through increasing sustainable economic growth. The Strategy is based on the principle that an efficient transport system is one of the key enablers for enhancing productivity and delivering faster, more sustainable growth and to support this aspiration, the Strategy seeks to enhance connections between Scotland's urban areas.

2.3.7 Scotland's Cities: Delivering for Scotland (Scottish Government 2011b) complements the Government's Economic Strategy. It highlights that successful cities are linked by key growth supporting characteristics including being '*connected cities, with strong digital and transport infrastructure'* (page 21). Scotland's Cities also recognises that there is a '*need to work collaboratively* (between cities) *to optimise growth for the benefit of the whole of Scotland'* (page 10) and that the '*investment in infrastructure…is a key driver of both short-term and long-term economic growth and performance'* (page 10).

2.3.8 The Scottish Government published the National Planning Framework 3 (NPF3) in June 2014 (Scottish Government 2014). The Framework guides Scotland's spatial development over the next 20 to 30 years setting out strategic development priorities to support the Scottish Government's central purpose to '*create a more successful country, with opportunities for all of Scotland to flourish, through increasing sustainable economic growth'* (paragraph 1.1).

2.3.9 In summary, at a national level the proposed scheme is specifically supported within the STPR and contributes towards the Scottish Government's overall objectives to provide an efficient, safe and integrated transport system which would act as a key enabler for sustainable economic growth.

2.4 Local Context

2.4.1 The Highland-wide Local Development Plan (HwLDP) (The Highland Council 2012) and the Inner Moray Firth Local Development Plan (IMFLDP) (The Highland Council 2015) reflect national policy in relation to delivering sustainable economic growth and developing an efficient, safe and integrated transport system.

2.4.2 Section 5.2.3 of the HwLDP supports a competitive and adaptable Highland economy by:

- '*helping to deliver, in partnership with Transport Scotland and other transport bodies, transport infrastructure improvements across the area in line with the Council's Local Transport Strategy and the Scottish Government's Strategic Transport Projects Review'; and*
- *'providing opportunities which encourage economic development and create new employment across the area focusing on the key sectors of life sciences, energy, tourism, food and drink, higher education, inward investment, financial and business services, creative industries, aquaculture and renewable energy, whilst at the same time improving the strategic infrastructure necessary to allow the economy to grow over the long term'* (The Highland Council 2012).

2.4.3 The Highland Council's vision within the IMFLDP (Highland Council 2015, Section 1: Introduction, paragraph 1.4) is that by 2030, the Inner Moray Firth will:

- '*have increased the number of jobs, people and facilities;*
- *have a growing City;*
- *have safeguarded and enhanced its special places;*
- *have made it easy for people and wildlife to move about through a green network;*
- *have more efficient forms of travel;*
- *have resolved its infrastructure constraints;*
- *have diversified its economy; and*
- *be regenerated and renewed.'*

2.4.4 The IMFLDP recognises the infrastructure constraints to economic growth and notes that the *'provision of infrastructure is fundamental to the delivery of development'* (page 15). The Plan makes specific reference to the 'East Link' road connecting the A9 to the A96 as being a major infrastructure requirement for the development of the Inverness to Nairn Growth Area.

2.4.5 The Inverness to Nairn Growth Area includes the area to the east of Inverness (Inverness East). This is a key area for mixed use and residential development, and to support its future growth the Inverness East Development Brief was adopted in June 2018. The Brief includes the proposed scheme within its indicative masterplan and notes that *'development of the Brief area requires parallel improvement in trunk road and local road networks in the eastern part of the city…'* including the *'East Link (better connectivity between the A96 and A9)'*. The Brief goes on to state that the *'East Link is integral to the pattern of land use within the heart of the Brief Area'* (The Highland Council 2018a, paragraph 44 and 46).

2.4.6 In January 2017 the Inverness and Highland City-Region Deal was signed and this represents an important delivery mechanism for the region's economic vision. The Deal permits investment of up to £135m by the Scottish Government to deliver measures to promote sustainable and inclusive economic growth. The Deal aims to improve road infrastructure and it is noted that the Deal will *'support the development of the A9/A96 Inshes to Smithton Link Road which will improve the operation of the network for longer distances and local journeys, providing relief to the A96 east of Inverness and the Raigmore junction'* (The Highland Council 2018b, paragraph 39). The Deal also sets out that The Highland Council and local partners will contribute £4m towards supporting infrastructure for the A9/A96 Inshes to Smithton Scheme, along with a £6m contribution to enhance the local network around Inshes (Inshes Junction Improvements Phase 2) that will be developed in tandem with the A9/A96 Inshes to Smithton Scheme to maximise overall project benefits.

2.4.7 As noted in the Deal, The Highland Council are working on enhancements to the local road network around Inshes and this includes the Inshes Junction Improvements - Phase 2 project, which aims to improve traffic capacity and alleviate congestion in the area. The proposed scheme would tie-in to this improvement project, with the schemes being inter-dependent on one another. Studies are currently ongoing regarding the optimum design solution for the Inshes Junction Improvements - Phase 2 project.

2.4.8 In summary, at a local level the proposed scheme is a strategic infrastructure requirement to unlock the future growth opportunities in the Inverness East development area. It is integral to the pattern of land use in the development area and would improve the operation of the network for longer distances and local journeys and provide relief to the A96 east of Inverness and the Raigmore junction. The implementation of the scheme is supported through local policy within the HwLDP, IMFLDP and the Inverness East Development Brief, with a financial commitment to the supporting infrastructure for the proposed scheme made within the Inverness and Highland City-Region Deal.

2.5 Objectives of the Proposed Scheme

2.5.1 The objectives for the proposed scheme have been developed in relation to the national and local objectives discussed above. These include the following:

- to encourage more effective use of the road network hierarchy and thereby improve the operation of the network for longer distance and local journeys;
- to contribute to The Highland Council's Development Plan aims for development east of the A9, and to complement the benefits arising from the dualling of the A96;
- to improve safety for motorised and non-motorised users where the trunk and local road network interact; and
- to maximise opportunities for active travel and public transport connections arising from the road infrastructure improvements.

2.6 Traffic Conditions

2.6.1 As set out in paragraph 2.3.4, Intervention 18 of the STPR outlined the need to address congestion at Raigmore Interchange, by way of a new link road connecting the A96 and the A9 (south of Inverness). Traffic modelling work undertaken as part of the A96 Dualling Inverness to Nairn (including Nairn Bypass) DMRB Stage 2 Scheme Assessment Report (Jacobs 2010) highlighted the degree of inter-dependency between Inshes, Raigmore, Longman and Smithton junctions, and the adjacent local road networks.

2.6.2 Further work was undertaken by Jacobs as part of the Problems and Objectives Report (Jacobs 2013) and the key issues affecting the strategic road network and trunk road junctions within the study area were found to be as follows:

- Delays on the A9 southbound diverge at Raigmore Interchange at the traffic signals during the evening peak, with a similar level of delay on the B865 approach.
- Increased traffic flows travelling into Inverness following the planned development to the east, which would increase the pressure on Longman Roundabout.
- Delays at Inshes Roundabout due to the junction layout and signals on the approach arms.
- Limited opportunities to cross the A9 Corridor resulting in east to west movements using the Raigmore Interchange and B9006 overbridge.
- Future developments to the east of Inverness leading to an increase in traffic flows on the route, increasing the pressure on the junctions accessing the A96 and Raigmore Interchange, as well as on Smithton Roundabout and Barn Church Road.

2.6.3 The A9/A96 Connections Study (Jacobs 2016) presented thirteen options across four locations for addressing the traffic issues in the study area, with the Inshes to Smithton Link Road and grade separation of Longman Roundabout recommended for further assessment. The grade separation of Longman Roundabout is being taken forward separately, and it is expected that these interventions, along with The Highland Council's Inshes Phase 2 project referred to in paragraph 2.4.7, would ease the current and predicted future traffic problems in the study area.

2.6.4 The proposed scheme is expected to alleviate traffic pressure on the A9 and A96 trunk roads, particularly at Raigmore Interchange, and improve efficiency of the local road network by providing quicker routes for local journeys. Furthermore, by reducing traffic levels approaching Raigmore Interchange from the A9 and A96, it is anticipated that the proposed scheme would ease congestion on the local road network and improve the safety of Raigmore Interchange for motorised and non-motorised users (NMUs).

Moray Firth Transport Model (MFTM)

2.6.5 The traffic modelling for the environmental assessment was undertaken using an updated version of the Moray Firth Transport Model (MFTM). This is a regional, four-stage, multimodal forecasting model that has been recalibrated and validated to a base year of 2018 and represents 2018 operating conditions.

2.6.6 The observed Annual Average Daily Traffic flow (AADT) for the base year of the proposed scheme (2018), the proposed Opening Year (2022), and the proposed Design Year (2037) for the 'Do Minimum' (without the proposed scheme) are shown on Figure 2.1. The AADT traffic levels for the Opening Year of the proposed scheme (2022) and the Design Year (2037) for the 'Do Something' (with proposed scheme) are shown on Figure 2.2.

2.7 References

Reports and Documents

Jacobs, Faber Maunsell, Grant Thornton and Tribal Consulting (*on behalf of Transport Scotland)* (2009). Strategic Transport Projects Review – Final Report.

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