Annex A

A96 Dualling Inverness to Aberdeen Programme Board Meeting No 15 - 24 November 2020

[redacted]

Subject: FW: A96 Dualling Programme Board - Tuesday 24/11/2020 2pm
Location: BH 4th Floor Meeting Room 4W01 (10)

Start: Tue 24/11/2020 14:00
End: Tue 24/11/2020 16:00

Recurrence: (none)

Meeting Status: Accepted

Organizer: [redacted]

[redacted]

Please find below the erdm links to the programme board docs

-----Original Appointment-----
From: [redacted]
Sent: 20 November 2020 15:28
To: Graham A (Alasdair); Shedden L (Lee) (TRANS); Gillies H (Hugh); Irvine A (Alison); Rennie M (Michelle); [redacted]
Subject: A96 Dualling Programme Board - Tuesday 24/11/2020 2pm
When: 24 November 2020 14:00-16:00 (UTC+00:00) Dublin, Edinburgh, Lisbon, London.
Where: Microsoft Teams Meeting

All,

Please find below the erdm links to the Programme Board papers in advance of next week's meeting.

The meeting will be held via MS Teams and I have provided the link at the foot of this email. If you have any issues accessing the link please let me know. I will cancel the 'Placeholder' meeting invite.

A96 Dualling Inverness to Aberdeen - Programme Board - Meeting No 15 - Agenda - 17 November 2020
[redacted]

A96 Dualling Inverness to Aberdeen - Programme Board - Meeting No 15 - Minutes of Meeting No 14 - DRAFT
[redacted]

A96 Dualling Inverness to Aberdeen - Programme Board - Meeting No 15 - Paper A96PB14-01 - Progress Paper - 17 November 2020
[redacted]

A96 Dualling Inverness to Aberdeen - Programme Board - Meeting No. 15 Paper A96PB15-02 - East of Huntly to Aberdeen Preferred Option - 18 November 2020
[redacted]

Microsoft Teams meeting

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Kind Regards

[redacted]
Project Manager
Major Projects
[redacted]
transport.gov.scot

Transport Scotland, Buchanan House, 58 Port Dundas Road, Glasgow, G4 0HF

Transport Scotland, the national transport agency
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Agenda

Meeting Location: Microsoft Teams

Meeting Date/Time: 24 November 2020 – 14:00

Subject: A96 Dualling Programme Board Meeting Number 15

Headings

1. Introductions
2. Health and Safety
3. Previous Minutes
4. Progress Report (Paper A96PB15 – 01)
5. Specific Items for Discussion or Decision:
   - A96 Dualling East of Huntly to Aberdeen – DMRB Stage 2 Preferred Option (Paper A96PB15 – 02)
6. Governance
7. Procurement and Finance
8. Communications and Stakeholders
9. Risk
10. AOCB

Attendees

Alasdair Graham	(TS)
Lee Shedden	(TS)
Alison Irvine	(TS)
Hugh Gillies	(TS)
Michelle Rennie	(Scottish Government)
[redacted]	(TS)
	(TS)
	(TS)
	(TS)
	(TS)
	(AmeyArup) - Agenda Item 5 only
	(AmeyArup) - Agenda Item 5 only

A96 DUALLING INVERNESS TO ABERDEEN

Minute of Programme Board Meeting No. 14

Date: **Wednesday 11 March 2020 – 10:30am**
Venue: **Buchanan House; Room 9W01**

Present:

Transport Scotland

Alasdair Graham	(AG)	TS, Director of Major Projects (Chair)
Lee Shedden	(MB)	TS, Director of Finance
Alison Irvine	(AI)	TS, Director of Transport Strategy and Analysis
Hugh Gillies	(HG)	TS, Director of Roads
[redacted]	[redacted]	TS, Head of Planning and Design
[redacted]	[redacted]	TS, A96 Dualling Design Manager
[redacted]	[redacted]	TS, A96 Dualling East of Huntly to Aberdeen Project Manager
[redacted]	([redacted]	TS, Major Projects Strategic Communications Manager

AmeyArup Joint Venture

[redacted]	[redacted]	AmeyArup JV (AA) - Agenda Item 5 only
[redacted]	([redacted]	AmeyArup JV (AA) - Agenda Item 5 only

Apologies:

N/A

Item	Actions
1. Introductions 1.1 AG welcomed the attendees to the fourteenth A96 Dualling Programme Board Meeting noting the main item for discussion is the A96 Dualling East of Huntly to Aberdeen DMRB Stage 2 design development and supplementary work update. Previous Programme Board No. 13 was held on 03 October 2019. 1.2 Due to the availability of attendees, it was requested that the meeting started with agenda item number 5 – Programme Board Paper A96PB14 - 02) **2. Specific Items for Discussion of Decision:** 2.1 [redacted] and [redacted] joined the Programme Board meeting at this point. 2.2 [redacted] introduced [redacted] and [redacted] and informed the board that the purpose of Paper A96PB14 – 02 was to report on further design development and supplementary work that has been undertaken as part of the DMRB Stage 2 process. 2.3 [redacted] and [redacted] outlined the DMRB Stage 2 design development process to date and presented design changes as a result of this process. [redacted] and [redacted] explained the proposed junction developments from east to west and the reasoning behind the revised layouts. 2.4 A number of issues were raised and discussed: 2.4.1 New Junction – Pitscurry (Orange) – [redacted] advised that the new junction and link road to the B9001 attracts several thousand vehicles a day. AI queried where this traffic is coming from and [redacted] advised it is from the northwest of Inverurie, including locations such as Rothienorman. AI advised that the focus of the design development benefits needs to be on the local communities, including in and around Inverurie, due to reduced traffic. [redacted] queried the benefit of the new junction in terms of drawing traffic to the A96. [redacted] explained that a proportion of the traffic attracted to the new junction will continue on towards Aberdeen with the remainder approaching Inverurie from the south. This will reduce the traffic on the two existing northerly local roads. AI advised that the proposed public engagement should explain that the new junction considered public feedback.	[redacted] [redacted]

Item	Actions
2.4.2 Junction Development – Lawrence Road (Pink) – [redacted] highlighted that the revised junction, with east-facing slips only, would work in tandem with either the Cyan or Red junctions at Colpy which are west-facing slips only. The junctions would use the 'old' A96 to link both junctions. HG and AI advised that cognisance should be given to the infrastructure commission report recommendation that 'old infrastructure' should be considered for Active Travel, in particular the use of the detrunked A96. 2.4.3 Junction Development – Kellockbank (Brown) – [redacted] highlighted that the revised junction would operate in a similar manner to the Lawrence Road (Pink) junction, whereby it works in tandem with either the Cyan or Red junctions at Colpy. 2.4.4 Junction Development – Colpy (Red and Cyan) – [redacted] outlined the proposed junctions on both routes and again highlighted they would work in tandem with the Pink (Lawrence Road) or Brown (Kellockbank) junctions. [redacted] highlighted that the changes to the Cyan layout at Colpy have led to an approximate £10m increase due to surplus material. [redacted] xplained that they will be looking to optimise the earthwork balance on the scheme at DMRB Stage 3. 2.4.5 HG asked whether the proposed design developments needed to be made or presented at a future public engagement as the risk to challenge may be low. [redacted] advised that the changes made were an important step towards the identification of a preferred option and help ensure we make the correct decision. AG highlighted the importance of showing design changes to the public and [redacted] advised that this will reduce the likelihood of challenge in the future.	[redacted]
2.5 [redacted] outlined the expected traffic growth in 2030 and 2045 for the six route options. AI queried what the growth was down to. [redacted] advised that there is significant development proposed across the A96 corridor. [redacted] advised that the traffic numbers presented are based on a low growth scenario. AI highlighted the recent publication of the new National Transport Strategy (NTS2) and advised that the focus now is less on building for future growth. It was therefore agreed that only the 2030 traffic numbers should be shown. [redacted] queried whether the expected traffic growth on the A96 was a consequence of pulling traffic off local roads. 2.6 AI asked whether it is correct to say that the new junction on the Orange route improves the connectivity and accessibility of Inverurie. It was	[redacted]

Item	Actions
agreed it does and AI suggested more focus should be made on the benefits to Inverurie as a result of the changes. [redacted] advised that there is predicted to be less traffic congestion in Inverurie as both routes remove the strategic traffic from Inverurie. [redacted] advised that the focus should be on the traffic impact rather than just on traffic numbers. LS advised that value for money should also be considered.	[redacted]
2.7 LS queried how much of the traffic growth was due to the construction of a new road. [redacted] advised that some of the increase is due to development along the A96 corridor as well as a proportion due to the new road.	
AI asked whether the increase in carbon can be measured as a result of the increase in traffic growth. [redacted] advised that [redacted] are considering carbon as part of the DMRB Stage 2 Assessment. [redacted] asked whether this included emissions and embedded carbon. HG suggested that we consider the potential benefits of the bypass and improvements in Active Travel for reducing carbon towards the net-zero target.	[redacted]
2.8 HG advised that consideration needs to be given to how we show the design developments and traffic modelling in light of the recent publication of government policies such as NTS2.	[redacted]
2.9 HG left the meeting at this point although noted the outcome of the supplementary work.	
2.10 [redacted] xplained the supplementary work that has been undertaken investigating online dualling at Inverurie, including reducing the standard of the road. A general discussion over the challenges and deliverability of online dualling was held, including public acceptability.	
2.11 AI provided a summary: • Agree that the design development should be presented to the public. • Further consideration of the message to be conveyed to the public is required. • Agree with the supplementary work outcomes.	[redacted]
2.12 All Programme Board members confirmed they agreed with this summary and confirmed they were content with the design developments and the outcomes of the supplementary work and that Ministerial approval for public drop-in sessions in May 2020 should be sought.	
2.13 [redacted] and [redacted] left the meeting at this point.	

3. Health and Safety

3.1 No further discussion was held on the health and safety item outlined in the Programme Progress Report (A96PB14 – 01).

4. Previous Minutes

4.1 The minutes from the previous meeting (dated 03 October 2019) were agreed.

5. Progress Report (Paper A96PB14 – 01)

5.1 No further discussion was held on the progress report items outlined in the Programme Progress Report (A96PB14 – 01).

6. Governance

6.1 No further discussion was held on the governance items outlined in the Programme Progress Report (A96PB14 – 01).

7. Procurement and Funding

7.1 LS advised that there were no current concerns in terms of finance and regular contact continues with [redacted]

7.2 No further discussion was held on the expenditure items outlined in the Programme Progress Report (A96PB14 – 01).

8. Communications and Stakeholders

8.1 No further discussion was held on the communications items outlined in the Programme Progress Report (A96PB14 – 01).

9. Risk

9.1 AG requested that the next A96 Dualling programme risk workshop should be held before the next programme board meeting. [redacted]

9.2 No further discussion was held on the risk items outlined in the Programme Progress Report (A96PB14 – 01).

10. AOCB

10.1 LS requested that the proposed attendees list is added to the agenda. [redacted]

Item	Actions
10.2 Date of Next Meeting: TBC. Likely 3-4 months, with focus on DMRB Stage 2 Assessment. 10.3 [redacted] advised that if any of the board members had queries relating to the board papers then please contact him.	

A96 DUALLING
INVERNESS TO ABERDEEN

A96 Dualling Inverness to Aberdeen

Programme Board Meeting No 15

Paper A96PB15 - 01: Programme Progress Report

November 2020

Transport Scotland Programme Owner – Alasdair Graham

Report Produced by: [redacted]
Report Approved by: [redacted]

Date of Report: 17 November 2020

TRANSPORT SCOTLAND
CÒMHDHAIL ALBA

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1 Programme Activities

Legend for intervention strategy (IS)
***White**: No intervention required at this point. Resolution of actions with TS Programme Team*
***Yellow**: Intervention by TS Senior Management required but not urgent, within 1 to 3 months*
***Red**: Urgent intervention by TS Senior Management required within 1 month*

Topic	Achievements	Activities in the next period
Health and Safety	Consultants have all confirmed their competency to fulfil the CDM 2015 Principal Designer role and have been appointed. Their approach to the role has also been documented. A96 Dualling Consultants Health and Safety Forum has been established to share good practice across live commissions. Last convened 1 July 2020 with the next forum scheduled for 24 November 2020. No incidents to report during this period. Consultants have continued to work productivity through the pandemic. Resourcing was monitored weekly during the early stages of lockdown and aside from a few specialist survey staff being furloughed, activities have been ongoing. Some survey work has resumed in line with SG guidance and strict protocols have been put in place for those activities. No adverse comments from landowners have been received.	Continue to monitor with particular emphasis on any covid related changes to SG policy or law.
General programme management	Governance arrangements approved by Programme Board on 30 January 2014. Updated to reflect changes to Programme Owner and Programme Board membership. Programme Execution Plan and Project Execution Plans in place. Project teams established for live commissions. Weekly core management team update calls and monthly progress meetings on-going. A shared B3 Governance/Risk Manager is now in place to assist in keeping governance documents up to date.	An additional B3 Project Manager will be required for the Central Section to take forward procurement of Consultancy Contract and project manage the scheme – following identification of preferred option on Eastern Section. Graduate Engineer [redacted] leaves Design Team 3 on the 26th November 2020 being replaced by [redacted] who joined the team on 14 September.

Topic	Achievements	Activities in the next period
	Quarterly PEP meetings have been established. [redacted] Project Manager for the East of Huntly to Aberdeen section was replaced by his Jacobs colleague [redacted] in January 2019. [redacted] joined Design Team 3 on 12 November 2018. [redacted] replaced [redacted] who returned to parent company, Jacobs) as Project Manager on the East of Huntly to Aberdeen project with [redacted] managing the Inverness to Nairn (including Nairn Bypass) project. [redacted] Project Manager for the Hardmuir to Fochabers is taking a TS career break and is working in MP Contracts branch in the interim. [redacted] replaced [redacted] as PM on the scheme at the end of March 2020. [redacted] has been promoted into the role of A96 Dualling Programme Manager from February 2020.	
Budget	The 2020/21 budget contains a commitment to continue design and development work on dualling the A96 (Inverness to Nairn, Hardmuir to Fochabers and East of Huntly to Aberdeen). Future years estimates have been reviewed and those and scenario plans have been passed to TS Finance to support the capital spending review (CSR) for period 2021/22-2026/27.	Continue to monitor and review 2020/21 estimates (along with future years) and provide monthly updates to TS Finance. This CSR and 2021/22 Budget to be monitored and plans for managing any implications on future budgets to be developed.
Business Case	Strategic Business Case completed and published September 2014. AECOM awarded commission (Nov 2014 and subsequently March 2017) to develop Outline Business Case (Case for Investment) and A96 traffic model along with undertaking Lead Traffic and Economic Advisor role. Development of A96 traffic model (A96 CRAM model) completed.	Continue work on developing Programme Outline Business Case (Case for Investment). Continue to make improvements to the A96 CRAM model. Continue work on the project specific Outline Business Cases.

Topic	Achievements	Activities in the next period
	Lead Traffic and Economic Advisor meetings are held monthly with all scheme commissions represented.	Consolidated review of need and justification of the programme to be produced drawing on policy support, previous third party surveys and studies and evidence from scheme development.
Stakeholders	Regular cycle of stakeholder engagement meetings underway (Local Authority/RTP Forum, NMU Forum, Community Council Forums, Environmental Steering Group (ESG)). Latest ESG on 6 August & 5 November 2020. On-going consultation with TS Rail and Network Rail re interface with Aberdeen to Inverness plans. Current focus on the interface with the proposed Dalcross Station. High level engagement with Scottish Water on the Dipple Abstraction Scheme (Hardmuir to Fochabers) continues. Landowner and other stakeholder engagement (including with each Local Authority) continues on each project.	Next ESG to be held 4 February 2021. Next Network Rail Forum in the coming months, date TBC. Next LA/RTP & NMU forum early in the new year, dates TBC. Scottish Water Dipple extraction GI programmed for early 2021.
Communications	On-going rolling programme of regular engagement to provide opportunity for public to provide vital feedback. To date nearly 18,000 people have attended public engagement events on the Dualling Programme. **Inverness to Nairn:** There is unlikely to be any further proactive comms for the Inverness to Nairn (including Nairn Bypass) scheme until after the PLI decision. 17 October 2019 – Inverness to Nairn (including Nairn Bypass) PLI Report submitted to Scottish Ministers for consideration. Schools engagement on-going. **Hardmuir to Fochabers:** December 2018 – Preferred option exhibitions held.	**Hardmuir to Fochabers:** Publication of draft Orders and public exhibitions

Topic	Achievements	Activities in the next period
	29-31 October 2019 – exhibitions held to update the public on the DMRB Stage 3 design development for Hardmuir to Fochabers. 20 January 2020 – Preliminary GI news release issued with site works starting 27 January 2020. **East of Huntly to Aberdeen:** October 2018 – Initial options exhibitions. April 2019 - Schools engagement celebration event held. May 2019 – updated options exhibitions. Very active and ongoing campaign by A96 Action Group, mostly focussed on opposition to the Violet route option and pushing for the online option through Inverurie to be reinstated. Reactive lines developed to respond. 30 October DMRB Stage 2 design development update made available on project webpage, including the on-line at Inverurie supplementary study.	expected late 2020/21. **East of Huntly to Aberdeen:** Preferred option virtual exhibitions expected in the coming months.

Topic	Achievements	Activities in the next period
Ministerial interaction	19 November 2018 – Cabinet Secretary approval to present Hardmuir to Fochabers preferred option at exhibitions 4-7 December. 28 November 2019 – Cabinet Secretary met Fergus Ewing MSP in Parliament (official support provided). 11 March 2019 – Cabinet Secretary met Lewis McDonald in Parliament (official support provided) 7 June 2019 - Cabinet Secretary noted Gillian Martin MSP meeting in East Of Huntly to Aberdeen local office arrangement. 2 Sept 2019 - Cabinet Secretary noted the arrangements for the route tour with Richard Lochhead MSP on Hardmuir to Fochabers. 11 Sept 2019 – Cabinet Secretary reaffirmed the Scottish Government's intention that all our cities will be joined by dual carriageways. 18 September 2019 - Cabinet Secretary met Peter Chapman MSP, Gillian Martin MSP & the A96 Action Group in Parliament (official support provided). A96 Hardmuir to Fochabers preliminary ground investigation contract award approval – October 2019. A96 Hardmuir to Fochabers notification of exhibitions due to be held 29-31 October to update the public on the DMRB Stage 3 design development – October 2019. 29 October 2020 – Cabinet Secretary approval to present A96 East of Huntly to Aberdeen design development update on TS website – 30 October 2020.	Subject to Programme Board approval, seek approval from Cabinet Secretary to present A96 East of Huntly to Aberdeen preferred option at virtual engagement event in coming months.
Funding and procurement	Procurement strategy for Multi-Disciplinary Support Services for Western, Central and Eastern Sections approved by Programme Board. Three Design Contracts currently in	Procurement of Multi-Disciplinary Support Services Contract for Central Section programmed to commence after the East of Huntly to

Topic	Achievements	Activities in the next period
	place: • Inverness to Nairn – Jacobs (May 2015) • Hardmuir to Fochabers – Mott MacDonald Sweco JV (June 2016) • East of Huntly to Aberdeen – Amey Arup JV (July 2017) OBC (Case for Investment) and Lead Traffic and Economic Advisor role Commission procured through MFA for modelling, case for investment and transport planning advice (AECOM awarded recent commission in March 2017).	Aberdeen preferred option announcement – following identification of preferred option on Eastern Section and subject to outcome of the capital spending review and Scottish Budget 2021/22 on 28 January 2021.

2 Project Activities

Legend for intervention strategy (IS) – (note: the legend relates to the table and not the plan below)
White*: No intervention required at this point. Resolution of actions with TS Programme Team*
Yellow*: Intervention by TS Senior Management required but not urgent, within 1 to 3 months*
Red*: Urgent intervention by TS Senior Management required within 1 month*

Project	Achievements	Activities in the next period
A96 Dualling Inverness to Nairn (including Nairn Bypass)	Draft Orders, Environmental Statement and DMRB Stage 3 Report published on 29 November 2016. 122 objections remained outstanding (42 of which are statutory). Morton Fraser appointed to act as legal advisors to TS. Senior Counsel ([redacted]) appointed June 2018 to represent TS at Inquiry (Lord Advocate approval received on 14 June). Pre-Inquiry meeting held in Inverness on 5 June 2018. 18 parties have confirmed that they intend to participate at the Public Local Inquiry. Purchase of property at 6 Milton of Culloden South (approval to purchase received on 20 January 2017 – property included in draft CPO) completed in January 2019. A Public Local Inquiry was held between 30 October and 20	Continue stakeholder engagement and the development of the specimen design. Early procurement strategy and contract documents being prepared by the project team.

Project	Achievements	Activities in the next period
	November 2018 to consider objections received and not withdrawn. Reporters submitted their report to the Scottish Ministers on 17 October.	
A96 Dualling Hardmuir to Fochabers	Options under consideration presented to the public 19-22 June 2017 for feedback. Pairwise workshop held on 12 January 2018 reducing long list to 34 end to end routes. Route option design update drop-in sessions held 27 February – 2 March 2018 for feedback. Pairwise workshop number 2 held 27 April 2018 reducing end to end route options from 34 to 8. Route option design update issued 17 August 2018 confirming 8 route options. DMRB Stage 2 VFM Workshop held 20 September 2018. Preferred option approved by Programme Board on 2 October 2018. Preferred Option exhibitions held 4-8th December 2018 for feedback. Preferred option design update public exhibitions held on 29-31 October 2019. Preliminary ground investigation survey site works commenced 27 January 2019 (contract award November 2019).	Continue to progress DMRB stage 3 design and assessment. Ground Investigation works at Scottish Water Dipple abstraction scheme due to take place Q4 2020/21
A96 Dualling East of Huntly to Aberdeen	Multi-Disciplinary Support Services Contract awarded to Amey Arup Joint Venture in July 2017. “Meet the Team” events held on 8-10 October 2017. Route Options Sifting Workshop held 19 April 2017. Workshop	Continue to progress DMRB Stage 2 route options assessment process. This includes giving consideration to the feedback received following publication of the design development update on the project webpage on 30 October 2020.

Project	Achievements	Activities in the next period
	ratified the options to be presented to the public in October – Programme Board approval received at Programme Board No 10 on 24 August 2018. DMRB Stage 2 Options under consideration to be presented to the public 8-11 October 2018 for feedback. Pairwise sifting workshop held 1 March reducing end to end route options to 8. Route option design update presented at public exhibitions 28-31 May 2019 confirming 8 route options. DMRB Stage 2 design development update published on the project webpage 30 October 2020.	Preferred option announcement in the coming months.

3 Programme Milestones

3.1 Programme/Project milestones for 2019/20 are shown in the Table 1.1 below. Future Programme/Project milestones are outlined in Table 1.2 below.

Table 1.1 Programme/Project Milestones - 2019/20

Activity	Target Date	Actual date	Comments
A96 Dualling Inverness to Nairn (including Nairn Bypass) – Reporters submitting PLI Report to the Scottish Ministers	Spring 2019	17 October 2019	Under active consideration
A96 Dualling East of Huntly to Aberdeen – DMRB Stage 2 Route Option Sifting Exhibitions	Spring 2019	28-31 May 2019	Programme Board approval received with paper Programme Board No. A96PB–PS-06
A96 Dualling Hardmuir to Fochabers – DMRB Stage 3 Design Development Exhibitions	End 2019	29-31 October 2019	Programme Board approval received with paper Programme Board No. A96PB13–02 Feedback response programmed March 2020
A96 Dualling Hardmuir to Fochabers – commencement of preliminary ground investigation contract	Early 2020	27 January 2020 (contact awarded 11 November 2020)	Works substantially complete when COVID-19 restrictions forced site closure.
A96 Dualling Hardmuir to Fochabers – commencement of topographical survey data processing contract	End 2019	Contract award 27 February 2020	Work delayed due to COVID-19 restrictions. Completion anticipated Q4 2020/21
A96 Dualling East of Huntly to Aberdeen – DMRB Stage 2 Design Development Exhibitions	Late 2019 / Early 2020	30 October 2020	DMRB Stage 2 Design Development update including Online at Inverurie Supplementary Study published on project webpage. Programme Board approval received with paper Programme Board No. A96PB14–02
A96 Dualling East of Huntly to Aberdeen – DMRB Stage 2 – Preferred Option Exhibition	Late 2020		Extensive consultation feedback extending DMRB Stage 2 assessment programme. Preferred option decision moved into 2020 due to extensive feedback received.

Table 1.2 Future Programme/Project Milestones

Project	Next key milestone	Target Date	Current Status
A96 Dualling Inverness to Nairn (including Nairn Bypass)	Made Orders	2021	Awaiting Ministerial decision.
A96 Dualling Hardmuir to Fochabers	End of Stage 3	2021	A revised programme for the publication of draft Orders and the Environmental Impact Assessment Report (EIAR) is not yet fully developed as we assess the effects of the COVID-19 pandemic on the delivery of the Scheme. Further information on programme will be made public once this has been fully developed.
A96 Dualling East of Huntly to Aberdeen	End of Stage 2	End 2020	Programme Board meeting planned for 24/11/20 then Cabinet Secretary Approval sought.

4 Expenditure Profiles

Expenditure Profile

Commission	Current 2020/21 Estimate	Spend to November 2020
A96 Dualling Inverness to Nairn (including Nairn Bypass)	£1,751,200	£978,966
A96 Dualling Hardmuir to Fochabers Western and Eastern Section Preparation	£4,568,242	£2,255,107
A96 Dualling East of Huntly to Aberdeen	£4,695,000	£1,803,875
A96 Dualling Outline Business Case (Case for Investment) and Traffic and Economic Advisor	£350,000	£235,254
Total	**£11,364,442**	**£5,273,232**

Monthly monitoring of expenditure and progress ongoing and programme remains forecast to spend the budget allocation for the year.

5 Risk and Opportunity Management

5.1 As part of the Risk Management Strategy and Framework MTRIPS staff develop and maintain Programme and/or Project Risk Registers for all schemes. Project Managers are responsible for developing and maintaining Risk Registers. Risk Registers are normally developed at inception workshops as outlined in the Value for Money Manual[1]. Following the development of the Risk Register, the Register is reviewed on a regular basis e.g. monthly at progress meetings.

5.2 A Risk Register for the A96 Dualling Programme has been developed and a Risk Workshop was held on 18 July 2014 with representatives from all live commissions attending. The latest Programme Risk Workshop was held on 18 November 2020, also attended by representatives from all live commissions. A copy of the latest Programme Risk Register is attached to the Board papers. The next Programme Risk Workshop will be scheduled early in the new year.

5.3 A Risk Register for individual commissions (e.g. the A96 Inverness to Nairn (including Nairn Bypass) project) within the A96 Dualling Programme is contained in their relevant Project Execution Plan. Information from the A96 Project Risk Registers are fed into the A96 Programme Risk Register.

5.4 As with other projects key A96 Programme risks are reported at MTRIPS Directorate Quarterly Progress Meetings for review, and also to the Programme Board.

To assist with business case planning an opportunities register has also been developed.

[1] The Value for Money Manual, Scottish Executive Development Department, July 2001

FOR DECISION **November 2020**

PROGRAMME BOARD
PAPER A96PB15–02

Paper Title: A96 Dualling East of Huntly to Aberdeen DMRB Stage 2 Assessment – Emerging Preferred Route

Purpose

To report on the outcome of the Design Manual for Roads and Bridges (DMRB) Stage 2 Assessment and recommend a preferred option for the A96 East of Huntly to Aberdeen scheme.

Priority

Routine.

Decisions/Actions required of the Board

The Board is invited to decide whether it is content:

1. with the outcome of the DMRB Stage 2 assessment work and the recommended preferred option; and
2. to authorise a virtual public exhibition of the preferred option to be held later this year (currently programmed for December) following Ministerial approval.

Key information the Board will need to support its decisions/action

The Board needs to know:

Background

Transport Scotland appointed AmeyArup in July 2017 to take forward route options assessment on the 30-mile (48km) section of the A96 Dualling between east of Huntly and the AWPR at Craibstone.

Previous option sifting

The scheme has been split into sections for practical convenience of assessment (see Figure 1 overleaf). As described in previous board papers and in accordance with usual practice, a wide range of options has been through a gradual sifting process over the course of the development work to date. This has taken us from the original long list of 80 options down to the final pairs for each of the three scheme sections being considered. This process of evidence gathering and sifting is essential in producing a robust justification for later statutory consents stages.

The remaining route selection that the board is being asked to consider here is shown in Figure 1 as cyan and red between East of Huntly and Colpy, brown and

pink between Colpy and Pitcaple and violet and orange between Pitcaple and Kintore.

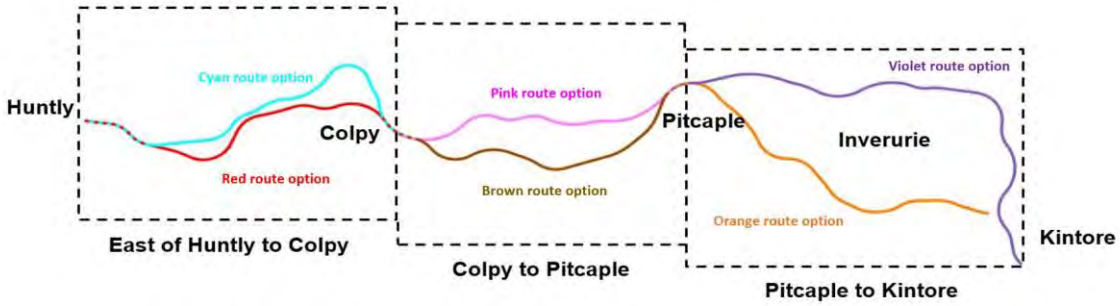


Fig 1: route options for decision

Public Engagement to inform design

The sifting has been informed by an extensive process of public engagement and feedback has directly informed the routes being presented in this paper.

The developing route options were consulted upon in October 2018.

As agreed at the A96 Programme Board in March 2019, updated route options were presented to the public at Design Update Drop-In Sessions held in May 2019 for further comment. The information provided more engineering detail of routes and junctions and four areas where route elements had been de-selected following the Pairing assessment. Drop-In sessions were held over a four-day period at three venues. Community Council Forums were also held in June 2019.

As a direct consequence of feedback from those events, a further review of the junction strategy and layouts was undertaken to try and address comments raised. This resulted further junction changes at five locations: Cyan Colpy Junction, Red Colpy Junction, Pink Kellockbank (previously Lawrence Road) Junction, Brown Kellockbank Junction and the addition of the Orange Pitscurry Junction. These amendments are incorporated into the options the board is being presented with.

Following Programme Board approval in March 2020 to publish the proposed changes, a design update was published online at the end of October 2020, to inform the public of the ongoing development work. The design update also included traffic information and supplementary work regarding consideration of online dualling at Inverurie. Feedback to date has been generally positive, with some affected landowners advising they were pleased with the proposed junction changes. A few landowners have expressed concern with the potential impact of the scheme on their business. These issues will be explored further during DMRB Stage 3 (i.e. detailed development and assessment of the preferred option) with them.

AmeyArup have now concluded the route option assessment work, which has been carried out in accordance with the requirements of a Stage 2 Assessment as outlined in the DMRB.

Option Assessment Workshop

An options assessment workshop was held on 29 September 2020, facilitated by Capital Value and Risk Limited. At this workshop, the AmeyArup project team

presented their initial option assessment framed around the scheme objectives and the STAG criteria: economy, safety, environment, accessibility and integration. Three other criteria were also considered as part of the assessment relating to construction and maintenance, being promotable through the statutory processes and resilience. It was explained how the scheme objectives sit within the context of the new National Transport Strategy.

Scheme costs have been calculated, including risk, for each of the end-to-end options. These are based on Q2 2018 costs excluding VAT. The following discounted monetised benefits were also considered: Benefit / Cost ratio (BCR); Present Value of Benefits (PVB) and Net Present Value (NPV).

The assessment considered the eight end-to-end options, with assessment scores compiled for each end-to-end option.

For the purpose of design and assessment the scheme is described in three parts: East of Huntly to Colpy; Colpy to Pitcaple; and Pitcaple to Kintore. Key issues identified for each constituent part are described below and these contribute to the overall Utility Score.

Option Assessment - East of Huntly to Colpy

- The Cyan route option results in less adverse effects on the landscape than the Red route option, since it is closer to the existing A96 corridor and avoids the steep topography through Hill of Foudland and Hill of Skares;
- The Cyan route option has less impact on local ecology and nature conservation by passing through less undisturbed Wildcat Priority Area habitat;
- Offline phased construction can be achieved for both route options, although there are more interfaces with the existing A96 for the Cyan route option;
- The Red route option includes construction works of greater complexity at the Hill of Foudland. Diversion of high-pressure gas mains and electricity transmission lines is necessary where the route option passes through a large cutting. The cutting is in slate strata and generates very large quantities of material;
- The Cyan route option offers greater resilience benefits than the Red route option, particularly with regards to winter weather; and
- The Cyan route option provides slightly better opportunities to facilitate active travel.

Option Assessment - Colpy to Pitcaple

- The Pink route option is better screened by the surrounding topography. The Brown route option is more visible from higher elevations such as Bennachie and Meikle Wartle;
- The Pink route option has less adverse effects due to traffic noise and vibration since there are fewer residential receptors;

- The Pink route option affects fewer farm units and directly impacts less prime agricultural land than the Brown route option;
- The Brown route option has greater impact upon existing amenity areas, and existing NMU routes;
- The Pink route option has slightly less impact on ancient woodland and nature conservation areas including Logie Woodland; and
- Both route options can be constructed offline. The Pink route option has a lower number of significant structures and less extensive earthworks.

Option Assessment - Pitcaple to Kintore

- The Orange route option is preferred from a people and communities perspective due to the impacts and loss of land on community facilities such as equestrian facilities on the Violet route option;
- Both route options feature large crossings of extensive floodplain;
- The Orange route option is considered to have less of an impact upon the wider landscape than the Violet route option since it is more contained within an undulating landscape;
- The Orange route option has less of an impact upon existing agriculture and forestry than the Violet route option. There are more adverse impacts on farm units and a greater amount of prime agricultural land on the Violet route option;
- The Violet route option results in more adverse effects due to traffic noise and vibration since there are a greater number of residential receptors;
- The Orange route option offers better integration with future development of Inverurie, particularly to the south of Inverurie at Crichie;
- The Orange Route option has greater opportunity for new NMU routes serving more populated areas;
- The Violet route option features more extensive and complex construction works to the existing dualled A96 at Tavelty Junction and on the Kintore Bypass; and
- The Orange route option offers better connections with the existing A96 and hence improved operational resilience.

Option Assessment – End to End Options

Appraisal of performance against Economy, Safety and Accessibility criteria was undertaken on an end-to-end basis because their performance is dependent on how the route options are combined. Cost is also calculated on an end-to-end basis to consider opportunities for re-use of earthworks arisings across the scheme.

The Economy assessment criteria identifies that Red-Pink-Orange is the best performing option, followed closely by Cyan-Pink-Orange and Red-Brown-Orange. Cyan-Brown-Violet is the least well performing of the options. Key contributory factors are improved journey times, journey time reliability and overtaking

opportunities. The best performing options attract more traffic on to the new A96 dual carriageway.

All options perform well and similarly under the Safety criteria. Options containing Violet perform best for reducing conflicts with Non-Motorised Users, and Options containing Orange perform best in terms of calculated accident rate reductions on the wider road network.

Accessibility assessment identifies that all options perform well in terms of reducing traffic in urban areas, contributing to better conditions for active travel. Options including Orange perform best in terms of reducing the length of journeys within the urban area of Inverurie, by providing alternative access routes to destinations.

The Integration criteria considers access to public transport facilities and how the options fit or enhance the Local Development Plan. Options containing Violet provide better connectivity to Inverurie Railway Station. Red-Pink-Violet or Red-Pink-Orange options generate the greatest reduction in traffic on existing local bus routes. Options containing Orange are considered to offer better access to existing, planned and potential development areas within the Local Development Plan. Both options provide equal access to the new Kintore Railway Station.

Preferred end-to-end option

The Options Assessment Workshop recommended that Cyan-Pink-Orange is the preferred option as shown on the drawing in Annex A.

Table 1 shows the assessment summary and the full option assessment scoring table is included as Annex B.

End-to-end options	Utility score (a)	Scheme cost £M (b)	Value Index (a/b)	Present value of benefits (PVB)	Net present value (NPV)	Indexed BCR	
Cyan-Pink-Violet	3209	£890m	3.61	£274m	-£222m	79	
Cyan-Pink-Orange	3408	£899m	3.79	£350m	-£151m	100	Preferred Option
Cyan-Brown-Violet	3157	£943m	3.35	£250m	-£276m	68	
Cyan-Brown-Orange	3386	£933m	3.63	£328m	-£193m	90	
Red-Pink-Violet	3164	£960m	3.30	£297m	-£238m	79	
Red-Pink-Orange	3354	£970m	3.46	£370m	-£171m	98	
Red-Brown-Violet	3144	£993m	3.16	£273m	-£281m	71	
Red-Brown-Orange	3326	£1003m	3.32	£354m	-£206m	90	

Table 1 – End to End Options Assessment Summary

Cyan-Pink-Orange has the second lowest estimated scheme cost and demonstrates best value for money with a benefit/cost ratio of 0.72, excluding the Wider Economic Impacts (WEIs) and the monetised impacts of driver frustration.

The addition of driver frustration (£127.5m) further increases the benefits and BCR of Cyan-Pink-Orange to 0.98. The addition of WEIs (£86.7m) increases the benefits and BCR of Cyan-Pink-Orange to 0.89. Including both driver frustration and WEIs provides a BCR of 1.15 for Cyan-Pink-Orange.

Programme / Key Milestones

The current public commitment is to announce a preferred option for A96 Dualling East of Huntly to Aberdeen scheme in the coming months.

Further engagement is planned for later this year to communicate the preferred option to the public via a virtual exhibition (currently programmed for 14 December 2020).

Financial Implications

Based on the Stage 2 assessment work the estimated total scheme cost range of the recommended preferred option is £820m - £995m at Q2 2018 prices (including risk and optimism bias, excluding VAT).This is the first time the estimated total scheme cost has been reported.

The scheme costs and economics will be updated and refined under the Stage 3 Assessment work prior to the publication of draft Orders.

Handling

Based on feedback received to date, from statutory and non-statutory consultees, it is likely the announcement of the preferred option will be generally well received as it removes uncertainty over route selection moving forward. However, it is recognised that the preferred option will still have an impact on a number of landowners and communities, and as part of the proposed virtual exhibition, staff members will be available to discuss any concerns people may have. Furthermore, as part of the DMRB Stage 3 process, there will be a continuation of our rolling programme of engagement to ensure communities', businesses and individuals affected by the work are kept fully informed and their vital feedback considered.

Advice and Conclusions

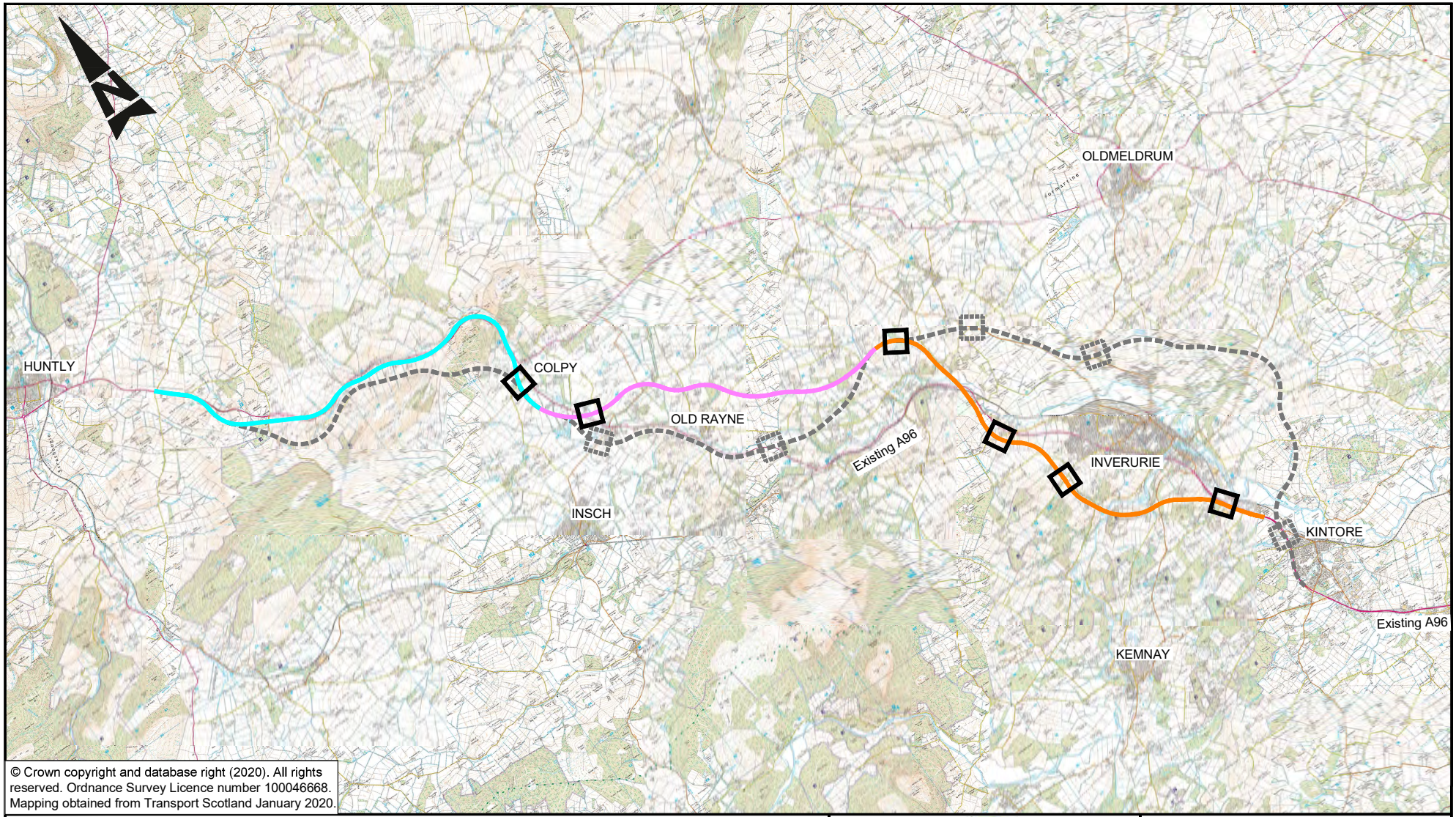
Based on the outcome of the Stage 2 assessment, it is recommended that Cyan–Pink–Orange is taken forward as the preferred option for the East of Huntly to Aberdeen scheme.

It is also recommended, subject to Ministerial approval, that the preferred option is presented to the public through a virtual exhibition in December 2020 to provide route certainty for affected parties.

[redacted]
A96 Dualling Design Manager
18 November 2020

Annex A – Preferred Option Drawing
Annex B – A96 East of Huntly to Aberdeen Option Assessment Summary

Annex A – Preferred Option Drawing



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- Cyan Route Option
- Pink Route Option
- Orange Route Option
- Deselected Route Option
- Potential Junction Location
- De-selected Junction Location

A96 DUALLING

TRANSPORT SCOTLAND

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Scale @ A3: N/A | Project Ref. No: 250002-92 | Stage:

Project Name
A96 Dualling East of Huntly to Aberdeen

Drawing Title
Preferred Option and
De-selected Route Options

Drawing Number

Project	Originator	Volume	Location	Type	Role	Number
A96PEA -	AMAR -	HGN -	SWI	DR	CH	300124

Suitability	Suitability Description	Revision
S0	Initial non-contractual code	P01.1

Annex B – A96 East of Huntly to Aberdeen Option Assessment Summary

A96 VFM Assessment Criteria

Table 1 - East of Huntly to Colpy

CYAN	RED

Criteria	Assessment Criteria Reference	Sub-criteria		Weighting	SECTIONAL ASSESSMENT Score (0-10)		WEIGHTED SCORES		
					CYAN	RED	CYAN	RED	
Environment									
			Weighting total	20	Score /10	Score /10	192.5	163.5	Comments
Environment 1	SO6 STAG 1	To avoid significant environmental impacts and, where this is not possible, to minimise the environmental effect upon: - the communities and people in the corridor; and - natural and cultural heritage assets	Nature Conservation	2	10	7	20	14	Scoring reflects the scale of impact upon the Wildcat Priority Area habitat.
Environment 2			Road Drainage and the Water Environment	1	9	10	9	10	Scoring reflects the realignment on River Urie for the Cyan route option.
Environment 3			Geology, Soils, Contaminated Land and Groundwater	1.5	10	8	15	12	Scoring reflect the impacts on geological resources.
Environment 4			Noise and Vibration	1	10	8	10	8	Scoring reflects the impact upon residential receptors.
Environment 5			Policies and Plans	0.5	9	10	4.5	5	Scoring reflects potential impact upon land associated with LDP policy HE1 (Protecting historic buildings, sites and monuments).
Environment 6			Landscape	2	10	5	20	10	Scoring reflects impact of earthworks upon landscape character.
Environment 7			Visual Effects	2	10	5	20	10	Scoring reflects impact upon visual impact receptors.
Environment 8			People and Communities	1.5	10	9	15	13.5	Scoring reflects impact upon private burial site.
Environment 9			Air Quality	0.5	10	10	5	5	Both route options have similar impacts.
Environment 10			Materials	2	10	8	20	16	Scoring reflects disposal of unsuitable material excavated.
Environment 11			Agriculture, Forestry and Sporting Interests	1.5	10	10	15	15	Both route options have similar impacts.
Environment 12			Cultural Heritage	2	8	10	16	20	Scoring reflects the impact on the setting of Colpy Cottage Palisaded Enclosure Scheduled Monument.
Environment 13			Health	0.5	10	10	5	5	Both route options have similar impacts.
Environment 14			Climate Change	2	9	10	18	20	Scoring reflects aggregated emissions for the 60-year study period.
Accessibility (part)									
			Sectional assessment weighting total	6	Score /10	Score /10	60	56	
Accessibility 1	SO4 STAG 5	To facilitate active travel within the corridor	Impact on existing NMU infrastructure	2	10	10	20	20	Few existing NMU routes affected. (No direct interfaces). No difference between route options.
Accessibility 2			Opportunities for new NMU routes	4	10	9	40	36	Opportunities for both route options for NMU route between Huntly and Colpy. Scoring reflects better opportunities associated with the Cyan route option for NMU users, due to proximity to existing road corridor and properties.
Integration (part)									
			Sectional assessment weighting total	4	Score /10	Score /10	40	40	
Integration 3	STAG 4.3	Integration with plans and policies	Integration with Plans and Policies (LDP)	4	10	10	40	40	No difference between route options. Isolated existing planning applications only.
Others									
			Weighting total	20	Score /10	Score /10	198	154	
Others 1	VFM 1	Construction and maintenance	Construction complexity, construction programme, residual maintenance and residual risk (CDM) Minimising disruption during construction	10	10	7	100	70	Scoring reflects significant utility diversions and larger earthworks excavation required for the Red route option. Existing road interfaces on Cyan can be constructed mainly offline.
Others 2	VFM 2 STAG 8	Promotability	Promotability through the statutory process	2	9	10	18	20	Scoring reflects a close interface with the scheduled monument at Colpy Cottage for the Cyan route option.
Others 3	SO1.6	Resilience	Facilitate Network Resilience	8	10	8	80	64	Scoring reflects the greater exposure of the Red route option to winter conditions through and across Hill of Foudland.

CYAN	RED	CYAN	RED

SO x.x Scheme Objective x.x
STAG Scottish Transport Appraisal Guidance reference
VFM x AmeyArup Value For Money assessment criteria reference
Economy, Safety, Accessibility (part) and Integration (part) are assessed on an end-to-end basis.

A96 VFM Assessment Criteria

Table 2 - Colpy to Pitcaple

PINK	BROWN

Criteria	Assessment Criteria Reference	Sub-criteria		Weighting	SECTIONAL ASSESSMENT Score (0-10)		WEIGHTED SCORES		
					PINK	BROWN	PINK	BROWN	
Environment									
			Weighting total	20	Score /10	Score /10	193.5	170.5	Comments
Environment 1	SO6 STAG 1	To avoid significant environmental impacts and, where this is not possible, to minimise the environmental effect upon: - the communities and people in the corridor; and - natural and cultural heritage assets	Nature Conservation	1.5	10	9	15	13.5	Scoring reflects impact on ancient woodland.
Environment 2			Road Drainage and the Water Environment	1.5	10	10	15	15	Both route options have similar impacts.
Environment 3			Geology, Soils, Contaminated Land and Groundwater	1	10	9	10	9	Scoring reflects impact upon prime agricultural land.
Environment 4			Noise and Vibration	1.5	10	7	15	10.5	Scoring reflects adverse impacts on receptors.
Environment 5			Policies and Plans	0.5	9	10	4.5	5	Scoring reflects greater impact on planned developments.
Environment 6			Landscape	2	10	7	20	14	Scoring reflects Brown route option alignment through Logie House Non-Inventory Designed Landscape
Environment 7			Visual Effects	2	10	8	20	16	Scoring reflects the number of receptors and visibility to long distance views
Environment 8			People and Communities	2	10	8	20	16	Scoring reflects impact on four Non-Motorised User (NMU) routes within Logie/Durno woodland area
Environment 9			Air Quality	0.5	10	10	5	5	Both route options have similar impacts
Environment 10			Materials	0.5	10	9	5	4.5	Scoring reflects earthwork deficit for the Brown route option.
Environment 11			Agriculture, Forestry and Sporting Interests	2	10	8	20	16	Scoring reflects impact upon farm units and proportion of prime agricultural land affected.
Environment 12			Cultural Heritage	2	7	10	14	20	Scoring reflects the impact upon the setting of Scheduled Monuments.
Environment 13			Health	1	10	8	10	8	Scoring reflects adverse impact on health due to impacts on amenity
Environment 14			Climate Change	2	10	9	20	18	Scoring reflects aggregated emissions for the 60-year study period.
Accessibility (part)									
			Sectional assessment weighting total	12	Score /10	Score /10	104	116	
Accessibility 1	SO4 STAG 5	To facilitate active travel within the corridor	Impact on existing NMU infrastructure	4	10	9	40	36	Scoring reflects fewer adverse effects upon NMU routes for the Pink route option than for the Brown route option.
Accessibility 2			Opportunities for new NMU routes	8	8	10	64	80	Scoring reflects proximity to existing communities and opportunities to create new connections using existing routes.
Integration (part)									
			Sectional assessment weighting total	4	Score /10	Score /10	32	40	
Integration 3	STAG 4.3	Integration with plans and policies	Integration with Plans and Policies (LDP)	4	8	10	32	40	Scoring reflects better connections to LDP development sites in Old Rayne and Insch.
Others									
			Weighting total	13	Score /10	Score /10	118	125	
Others 1	VFM 1	Construction and maintenance	Construction complexity, construction programme, residual maintenance and residual risk (CDM) Minimising disruption during construction	5	10	9	50	45	Scoring reflects the size of structures to cross watercourses and flood plain.
Others 2	VFM 2 STAG 8	Promotability	Promotability through the statutory process	2	10	10	20	20	No difference between route options.
Others 3	SO1.6	Resilience	Facilitate Network Resilience	6	8	10	48	60	Scoring reflects better operational resilience via connections to existing A96 and additional junction provision

PINK	BROWN	PINK	BROWN

SO x.x Scheme Objective x.x
STAG Scottish Transport Appraisal Guidance reference
VFM x AmeyArup Value For Money assessment criteria reference
Economy, Safety, Accessibility (part) and Integration (part) are assessed on an end-to-end basis.

A96 VFM Assessment Criteria

Table 3 - Pitcaple to Kintore

					VIOLET	ORANGE	VIOLET	ORANGE	
Criteria	**Assessment Criteria Reference**	**Sub-criteria**		**Weighting**	**SECTIONAL ASSESSMENT Score (0-10)**		**WEIGHTED SCORES**		
					VIOLET	**ORANGE**	**VIOLET**	**ORANGE**	
Environment									
			Weighting total	20	Score /10	Score /10	169.5	174	Comments
Environment 1	SO6 STAG 1	To avoid significant environmental impacts and, where this is not possible, to minimise the environmental effect upon: - the communities and people in the corridor; and - natural and cultural heritage assets	Nature Conservation	1.5	10	6	15	9	Scoring reflects the impact upon Pitscurry Moss LNCS and ancient woodland
Environment 2			Road Drainage and the Water Environment	2	10	10	20	20	New crossings of extensive floodplains for both route options
Environment 3			Geology, Soils, Contaminated Land and Groundwater	1	7	10	7	10	Scoring reflects risk related to historic landfills, and impact upon ground water abstraction points.
Environment 4			Noise and Vibration	1	8	10	8	10	Scoring reflects the number of adverse impacts for receptors.
Environment 5			Policies and Plans	1.5	10	5	15	7.5	Scoring reflects land take of the Crichie development site
Environment 6			Landscape	2	7	10	14	20	Scoring reflects the number of adverse impacts on the landscape character.
Environment 7			Visual Effects	1.5	7	10	10.5	15	Scoring reflects a higher number of visual receptors and visibility within long range views of receptors.
Environment 8			People and Communities	1.5	5	10	7.5	15	Scoring reflects adverse effects due to impacts on private property and community facilities.
Environment 9			Air Quality	0.5	10	9	5	4.5	Scoring reflects number of receptors predicted to experience changes in air quality
Environment 10			Materials	1	9	10	9	10	Scoring reflects fill material quantity required.
Environment 11			Agriculture, Forestry and Sporting Interests	1.5	7	10	10.5	15	Scoring reflects greater number of adverse impacts on farm units and prime agricultural land.
Environment 12			Cultural Heritage	2	10	5	20	10	Scoring reflects the impacts upon the settings of Scheduled Monuments within the Orange route option.
Environment 13			Health	1	10	8	10	8	Orange route has the lowest ranking data zones for deprivation, with impacts on open space, core paths, and existing local routes.
Environment 14			Climate Change	2	9	10	18	20	Scoring reflects aggregated emissions for the 60-year study period.
Accessibility (part)									
			Sectional assessment weighting total	12	Score /10	Score /10	96	116	
Accessibility 1	SO4 STAG 5	To facilitate active travel within the corridor	Impact on existing NMU infrastructure	4	10	9	40	36	Scoring reflects fewer adverse impacts upon NMU routes for the Violet route option than for the Orange route option.
Accessibility 2			Opportunities for new NMU routes	8	7	10	56	80	Scoring reflects better opportunities for new connections between NMU routes, settlements and development areas.
Integration (part)									
			Sectional assessment weighting total	12	Score /10	Score /10	96	120	
Integration 3	STAG 4.3	Integration with plans and policies	Integration with Plans and Policies (LDP)	12	8	10	96	120	Scoring reflects better opportunities for connections to existing and potential LDP development sites.
Others									
			Weighting total	27	Score /10	Score /10	228	258	
Others 1	VFM 1	Construction and maintenance	Construction complexity, construction programme, residual maintenance and residual risk (CDM) Minimising disruption during construction	15	8	10	120	150	Both route options contain siginficant and complex engineering works. Scoring reflects more extensive, complex works in presence of live traffic at Tavelty Junction and along the Kintore bypass for the Violet route option.
Others 2	VFM 2 STAG 8	Promotability	Promotability through the statutory process	6	10	8	60	48	Scoring reflects interactions with significant scheduled monuments, particularly St Apolinaris Chapel (Orange).
Others 3	SO1.6	Resilience	Facilitate Network Resilience	6	8	10	48	60	Scoring reflects better operational resilience due closer connections to the existing A96 as a diversionary route.

VIOLET	ORANGE	VIOLET	ORANGE

SO x.x Scheme Objective x.x
STAG Scottish Transport Appraisal Guidance reference
VFM x AmeyArup Value For Money assessment criteria reference
Economy, Safety, Accessibility (part) and Integration (part) are assessed on an end-to-end basis.

A96 VFM Assessment Criteria

Table 4 - East of Huntly to Kintore - End to End Utility Score Assessments

Criteria	Assessment Criteria Reference	Sub-criteria			Cyan	Cyan	Cyan	Cyan	Red	Red	Red	Red	
					Pink	Pink	Brown	Brown	Pink	Pink	Brown	Brown	
					Violet	Orange	Violet	Orange	Violet	Orange	Violet	Orange	
					C-P-V	C-P-O	C-Br-V	C-Br-O	R-P-V	R-P-O	R-Br-V	R-Br-O	
Economy					**End to end scores**								
				Weighting	60	Scores /10 on an end to end basis							Comments
Economy 1	SO1	To improve the operation of the A96 and inter-urban connectivity through:	SO1.1 - Reduced journey times;	9.0	9	10	8	9	9	10	9	10	All of the options offer journey time savings. Scoring reflects the length of the end-to-end option.
			SO1.2 - Improved journey time reliability;	8.5	10	10	10	10	10	10	10	10	All of the options improve journey time reliability.
			SO1.3 - Increased overtaking opportunities;	8.5	8	10	7	9	8	10	7	10	Options which attract the most traffic to the dual carriageway score highest as they provide safe overtaking opportunities for the highest number of vehicles.
			SO1.4 - Improved efficiency of freight movements along the transport corridor;	8.5	8	10	7	9	9	10	8	9	All of the options offer peak hour HGV journey time savings. Scoring reflects the length of the end-to-end option and the slower speed of HGV traffic.
			SO1.5 - Reduced conflicts between local traffic and strategic journeys; and	8.5	8	9	7	9	9	10	8	9	All of the options reduce potential conflicts. Scoring reflects the removal of longer distance trips from existing inter-urban roads in favour of a dualled A96.
Economy 2	SO3	To provide opportunities to grow the regional economies on the corridor through:	SO3.1 - Improved access to the wider strategic transport network	8.5	8	10	9	10	8	10	10	10	Scoring reflects the increase in the number of households within 30 minutes peak period driving time of Craibstone (Park and Ride, Aberdeen International Airport and AWPR).
			SO3.2 - Enhanced access to jobs and services	8.5	8	10	8	10	8	10	8	10	Scoring reflects the increase in the number of households within 30 minutes peak period drive of Inverurie (key local hub for jobs and services in Aberdeenshire).
Safety													
				Weighting	60	Scores /10 on an end to end basis							
Safety	SO2	To improve safety for motorised and Non-Motorised Users through:	SO2.1 and SO2.2 Reduced accident rates and severity and reduced Driver Stress	30	8	10	7	10	8	10	8	10	All options are predicted to reduce the number of Personal Injury Accidents (PIA). Scoring reflects the proportional reduction in PIAs.
			SO2.3 Reduced potential conflicts between Motorised and Non Motorised Users	30	10	8	10	8	10	8	10	8	Scoring reflects the overall reduction in through traffic in towns and villages within the area of influence.
Accessibility (part)													
				End to end assessment weighting total	30	Scores /10 on an end to end basis							
Accessibility 3	SO4 STAG 5	To facilitate active travel within the corridor	Reduction in traffic in urban areas	30	9	10	9	10	9	10	9	10	Scoring reflects the overall reduction in traffic and distance travelled by vehicles within urban areas.
Integration (part)													
				End to end assessment weighting total	40	Scores /10 on an end to end basis							
Integration 1	SO5 STAG 4.1 & 4.2	To facilitate integration with Public transport facilities	Bus Services	15	9	9	9	9	10	10	9	9	All options offer journey time savings and improved relaibility for buses. Scoring reflects magnitude of benefit to both local and express bus services.
Integration 2			Railway Stations	15	10	9	10	9	10	9	10	9	Scoring reflects the ease of access from junctions on the new dual carriageway to railway stations within the corridor. All options offer good connectivity to railway stations.
Integration 4	STAG 4.3	Integration with plans and policies	Integration with Plans and Policies (Transport)	10	8	10	8	10	8	10	8	10	Scoring reflects the proximity and ease of access from the new dual carriageway to planned housing and business development areas identified in the Local Development Plan.

1 Sectional scores are added together to form the end to end total weighted score for a given end to end combination
2 Sectional scores are applicable where impacts and effects are associated only with the geographical location of the route option.
3 End to end scores are applicable where the combination of route options could be expected to influence the assessment.
4 Environment, Accessibility (part), Integration (part) and Others are assessed on a sectional basis

Cyan	Cyan	Cyan	Cyan	Red	Red	Red	Red
Pink	Pink	Brown	Brown	Pink	Pink	Brown	Brown
Violet	Orange	Violet	Orange	Violet	Orange	Violet	Orange
C-P-V	C-P-O	C-Br-V	C-Br-O	R-P-V	R-P-O	R-Br-V	R-Br-O

A96 VFM Assessment Criteria

Table 5 - East of Huntly to Kintore - End to End Utility Score Calculation

Overall End to End Utility Score = Sum of weighted scores below							
3209	3408	3157	3386	3164	3354	3144	3326

Subject	Assessment Criteria Reference	Objective and criteria description		Cyan / Pink / Violet	Cyan / Pink / Orange	Cyan / Brown / Violet	Cyan / Brown / Orange	Red / Pink / Violet	Red / Pink / Orange	Red / Brown / Violet	Red / Brown / Orange
				C-P-V	C-P-O	C-Br-V	C-Br-O	R-P-V	R-P-O	R-Br-V	R-Br-O
				End to End Weighted Scores							
Economy											
				506	592	480	566	523	600	515	583
Economy 1	SO1	To improve the operation of the A96 and inter-urban connectivity through:	SO1.1 - Reduced journey times;	81	90	72	81	81	90	81	90
			SO1.2 - Improved journey time reliability;	85	85	85	85	85	85	85	85
			SO1.3 - Increased overtaking opportunities;	68	85	60	77	68	85	60	85
			SO1.4 - Improved efficiency of freight movements along the transport corridor;	68	85	60	77	77	85	68	77
			SO1.5 - Reduced conflicts between local traffic and strategic journeys; and	68	77	60	77	77	85	68	77
Economy 2	SO3	To provide opportunities to grow the regional economies on the corridor through:	SO3.1 - Improved access to the wider strategic transport network	68	85	77	85	68	85	85	85
			SO3.2 - Enhanced access to jobs and services	68	85	68	85	68	85	68	85
Safety											
				540	540	510	540	540	540	540	540
Safety	SO2	To improve safety for motorised and Non-Motorised Users through:	SO2.1 and S02.2 Reduced accident rates and severity and reduced Driver Stress	240	300	210	300	240	300	240	300
			SO2.3 Reduced potential conflicts between Motorised and Non Motorised Users	300	240	300	240	300	240	300	240
Environment											
				556	560	533	537	527	531	504	508
Environment 1	SO6 STAG 1	To avoid significant environmental impacts and, where this is not possible, to minimise the environmental effect upon: - the communities and people in the corridor; and - natural and cultural heritage assets	Nature Conservation	50	44	49	43	44	38	43	37
Environment 2			Road Drainage and the Water Environment	44	44	44	44	45	45	45	45
Environment 3			Geology, Soils, Contaminated Land and Groundwater	32	35	31	34	29	32	28	31
Environment 4			Noise and Vibration	33	35	29	31	31	33	27	29
Environment 5			Policies and Plans	24	17	25	17	25	17	25	18
Environment 6			Landscape	54	60	48	54	44	50	38	44
Environment 7			Visual Effects	51	55	47	51	41	45	37	41
Environment 8			People and Communities	43	50	39	46	41	49	37	45
Environment 9			Air Quality	15	15	15	15	15	15	15	15
Environment 10			Materials	34	35	34	35	30	31	30	31
Environment 11			Agriculture, Forestry and Sporting Interests	46	50	42	46	46	50	42	46
Environment 12			Cultural Heritage	50	40	56	46	54	44	60	50
Environment 13			Health	25	23	23	21	25	23	23	21
Environment 14			Climate Change	56	58	54	56	58	60	56	58
Accessibility											
				530	580	542	592	526	576	538	588
Accessibility 1	SO4 STAG 5	To facilitate active travel within the corridor	Impact on existing NMU infrastructure	100	96	96	92	100	96	96	92
Accessibility 2			Opportunities for new NMU routes	160	184	176	200	156	180	172	196
Accessibility 3			Reduction in traffic in urban areas	270	300	270	300	270	300	270	300
Integration											
				533	562	541	570	548	577	541	570
Integration 1	SO5 STAG 4.1 & 4.2	To facilitate integration with Public transport facilities	Bus Services	135	135	135	135	150	150	135	135
Integration 2			Railway Stations	150	135	150	135	150	135	150	135
Integration 3	STAG 4.3	Integration with plans and policies	Integration with Plans and Policies (LDP)	168	192	176	200	168	192	176	200
Integration 4			Integration with Plans and Policies (Transport)	80	100	80	100	80	100	80	100
Others											
				544	574	551	581	500	530	507	537
Others 1	VFM 1	Construction and maintenance	Construction complexity, construction programme, residual maintenance and residual risk (CDM) Minimising disruption during construction	270	300	265	295	240	270	235	265
Others 2	VFM 2 STAG 8	Promotability	Promotability through the statutory process	98	86	98	86	100	88	100	88
Others 3	SO1.6	Resilience	Facilitate Network Resilience	176	188	188	200	160	172	172	184

1 Sectional scores are added together to form the end to end total weighted score for a given end to end combinaton
2 Sectional scores are applicable where impacts and effects are associated only with the geographical location of the proposed route option.
3 End to end scores are applicable where the combination of route options could be expected to influence the assessment.

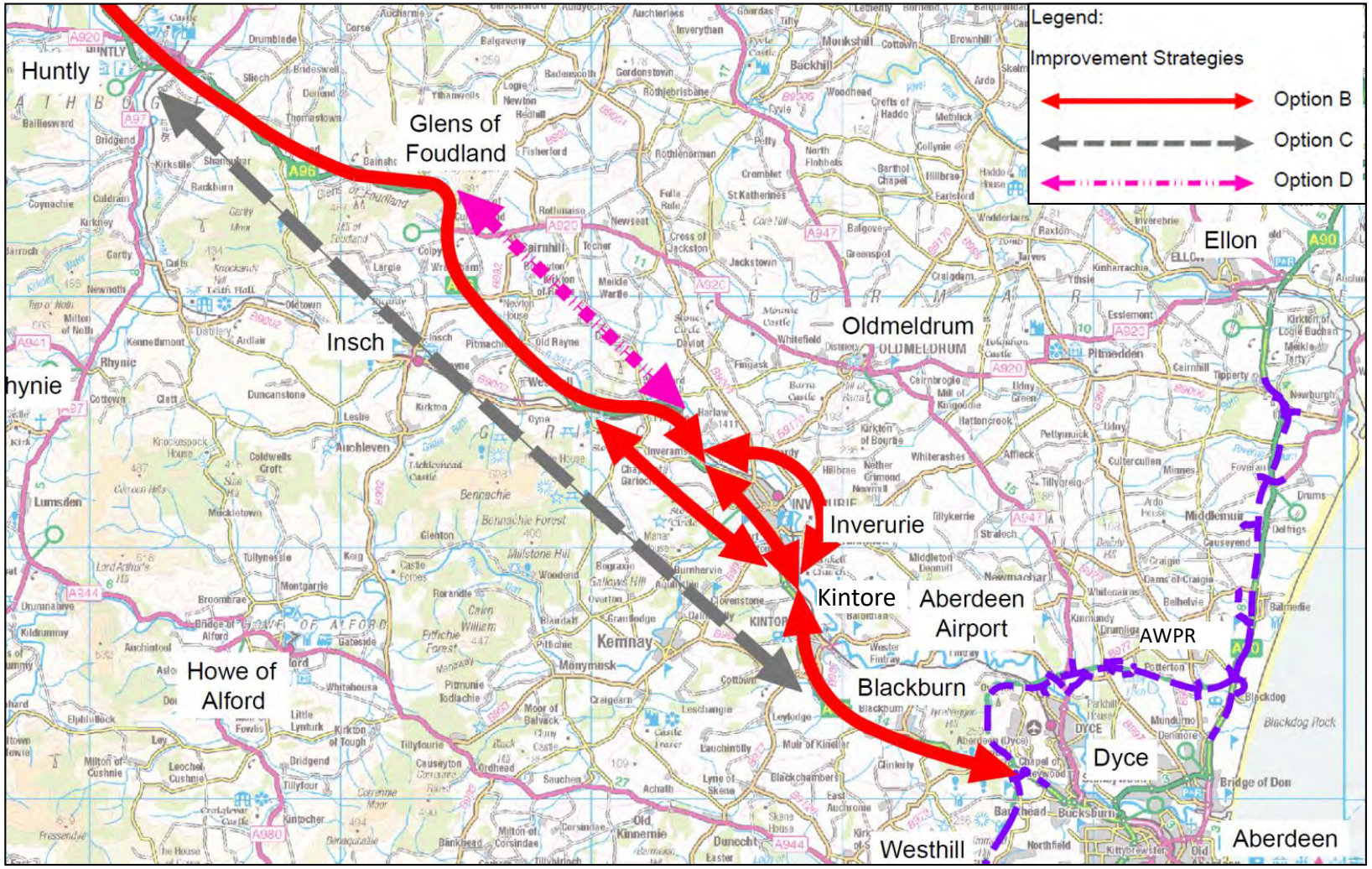
Cyan / Pink / Violet	Cyan / Pink / Orange	Cyan / Brown / Violet	Cyan / Brown / Orange	Red / Pink / Violet	Red / Pink / Orange	Red / Brown / Violet	Red / Brown / Orange
C-P-V	C-P-O	C-Br-V	C-Br-O	R-P-V	R-P-O	R-Br-V	R-Br-O

TABLE 6 - ASSESSMENT SUMMARY - END TO END ASSESSMENT

				A96 Utility Score Weighted	A96 Utility Score Weighted Rank	Combined cost including risk (£m)	Combined Cost Rank	A96 Value Index	Value Index Rank	Benefit / Cost ratio (BCR) Indexed	BCR Rank	Present Value of Benefits (PVB, £m)	PVB Rank	Net Present Value (NPV, £m)	NPV Rank	6 Criteria Overall Score	Overall Rank
				a	b	c	d	e = a/c	f	g	h	i	j	k	l	b+d+f+h+j+l	
Cyan	Pink	Orange	C-P-O	3408	1	899	2	3.79	1	100	1	350	3	-151	1	9	1
Cyan	Brown	Orange	C-Br-O	3386	2	933	3	3.63	2	90	3	328	4	-193	3	17	2
Red	Pink	Orange	R-P-O	3354	3	970	6	3.46	4	98	2	370	1	-171	2	18	3
Cyan	Pink	Violet	C-P-V	3209	5	890	1	3.61	3	79	5	274	6	-222	5	25	4
Red	Brown	Orange	R-Br-O	3326	4	1,003	8	3.32	6	90	3	354	2	-206	4	27	5
Red	Pink	Violet	R-P-V	3164	6	960	5	3.30	7	79	5	297	5	-238	6	34	6
Cyan	Brown	Violet	C-Br-V	3157	7	943	4	3.35	5	68	8	250	8	-276	7	39	7
Red	Brown	Violet	R-Br-V	3144	8	993	7	3.16	8	71	7	273	7	-281	8	45	8

A96 Dualling East of Huntly to Aberdeen
DMRB Stage 2 Assessment: Preferred Option
Programme Board
24 November 2020

DMRB Stage 1 Outcome



- Take Improvement Strategy Options B, C and D into DMRB Stage 2

Scheme Objectives

- To improve the operation of the A96 and inter-urban connectivity through:
  - Reduced journey times
  - Improved journey time reliability
  - Increased overtaking opportunities
  - Improved efficiency of freight movements along the transport corridor
  - Reduced conflicts between local traffic and strategic journeys
  - Improved network resilience
- To improve safety for motorised and Non-Motorised Users through:
  - Reduced accident rates and severity
  - Reduced driver stress
  - Reduced potential conflicts between Motorised and Non-Motorised Users
- To provide opportunities to grow the regional economies on the corridor through:
  - Improved access to the wider strategic transport network
  - Enhanced access to jobs and services
- To facilitate active travel in the corridor
- To facilitate integration with Public Transport Facilities
- To avoid significant environmental impacts and, where this is not possible, to minimise the environmental effect on:
  - The communities and people in the corridor
  - Natural and cultural heritage assets

Mapped Scheme Objectives to NTS2 Priorities

A96 Dualling East of Huntly to Aberdeen- Scheme Objectives

- Reduced journey times;
- Improved journey time reliability;
- Increased overtaking opportunities;
- Improved efficiency of freight movements along the transport corridor;
- Facilitate network resilience;
- Facilitate integration with public transport facilities.

Associated Outcomes

- Will be affordable for all
- Will provide fair access to services we need
- Will be easy to use for all

Reduces inequalities

A96 Dualling East of Huntly to Aberdeen- Scheme Objectives

- Reduced journey times;
- Improved efficiency of freight movements along the transport corridor;
- To minimise the environmental effect on: the communities and people in the corridor; and natural and cultural heritage assets;
- Facilitate network resilience;
- Facilitate active travel in the corridor.

Takes climate action

Associated Outcomes

- Will adapt to the effects of climate change
- Will promote greener cleaner choices
- Will help deliver our net zero target

NTS2 Priorities

Associated Outcomes

- Will get people and goods where they need to get to
- Will be reliable, efficient and high quality
- Will use beneficial innovation

Improves our health and wellbeing

- Reduced accident rates and severity;
- Reduced driver stress;
- Reduced potential conflicts between motorised and non-motorised users;
- Reduced conflicts between local traffic and strategic journeys;
- Reducing traffic in urban areas;
- To minimise the environmental effect on: the communities and people in the corridor, and natural and cultural heritage assets;
- Facilitate network resilience.

A96 Dualling East of Huntly to Aberdeen- Scheme Objectives

Helps deliver inclusive economic growth

Associated Outcomes

- Will get people and goods where they need to get to
- Will be reliable, efficient and high quality
- Will use beneficial innovation

- Reduced journey times;
- Improved journey time reliability;
- Increased overtaking opportunities;
- Improved efficiency of freight movements along the transport corridor;
- Improved access to the wider strategic transport network;
- Enhanced access to jobs and services;
- Facilitate integration with public transport facilities;
- Facilitate network resilience.

A96 Dualling East of Huntly to Aberdeen- Scheme Objectives

DMRB Stage 2 Timeline & Key Milestones

A96 DUALLING
EAST OF HUNTLY TO ABERDEEN

TRANSPORT SCOTLAND
CÒMHDHAIL ALBA

Develop route options taking account of feedback from May 2015 exhibitions and 2017 Meet the Team

Early Sifting - Initial options assessment

Corridor, First Fix and Second Fix iterations of option development, assessment and sifting
Utilising Scheme Objectives and STAG Criteria

Programme Board August 2018

Early public consultation on Initial options (Oct 2018)

Develop options following public consultation

Pairing Assessments, Option Sifting

Programme Board April 2019

Design update public drop-in sessions (May 2019)

Further design development and supplementary work

Junction development and supplementary work for OLI following May 2019 feedback

Programme Board March 2020

Design Development TS Website Update (Oct 2020)

Finalise DMRB Stage 2 assessment and reporting

DMRB Stage 2 assessment considering engineering, environment, traffic and economics and VFM Workshop to identify preferred option.

Programme Board November 2020

Public consultation to present Preferred Option