

## Annex B – Question 1 Correspondence

### Extract of Procurement Options paper – 1 December 2023

1 December 2023

Cabinet Secretary for Transport, Net Zero and Just Transition  
Minister for Transport

## A9 Dualling Programme: Procurement Options

### Priority and Purpose

**Immediate** - This submission provides advice regarding the options for procurement of the remaining elements of the A9 Dualling Programme (“the Programme”) and seeks the views of the Cabinet Secretary on the relative importance to be placed on each of the factors differentiating the options, the contribution to the planned cabinet paper and the recommended proposals for updating Parliament on the Programme.

### Recommendation

It is recommended that the Cabinet Secretary:

- **Notes** the findings of the assessment of options for procurement and delivery of the remaining elements of the Programme;
- **Indicates** her views on the relative importance to be placed on each of the factors differentiating the options;
- **Indicates** her views on the contribution to the planned cabinet paper as set out at Annex D; and
- **Indicates** her views on the recommendation on the proposed timing of the detailed update to Parliament following the budget statement.

### Context and Issues

The Programme has been Scottish Government policy since 2007, with its Strategic Business Case completed in 2008 as part of the first Strategic Transport Projects Review (STPR1). It consists of eleven projects: two of which have been completed; one of which (Tomatin to Moy) is currently under procurement as a capital funded design and build (D&B) contract; and the remaining eight of which are the subject of this advice. Further details of the locations and current status of individual projects that make up the Programme are set out in Annex A.

The then Minister for Transport (Ms Gilruth) updated Parliament on the Programme on 8 February 2023, confirming that the target date of 2025 for completion of the whole of the Programme was no longer achievable and that, following receipt of advice expected in Autumn 2023, a further update would be provided to Parliament on a new timescale for completion of the Programme.

Work necessary to support advice to Ministers on the procurement options for the delivery of the remaining elements of the Programme has now been concluded and

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the outcomes of this work are set out in this paper. Comment on the affordability implications of these options is set out in the “Financial and Legal Considerations” section of this paper, and reference should also be made to the separate affordability advice issued by SG Exchequer in view of the cross-portfolio significance of decisions on further progress of the Programme.

This work included updating the Strategic and Socio-Economic Cases for the Programme, previously published in 2016 as the “Case for Investment”, which included undertaking an assessment of the value for money offered by the Programme.

This work noted that although the A9 is an existing trunk road corridor of considerable importance to Scotland, there are various problems and issues, including higher severity rate of accidents, high car ownership and dependency, journey time reliability issues as a result of poor resilience during adverse weather and a lack of alternative diversion routes. The Programme is the only available physical solution to these issues.

**The Strategic Case** is clear on the effectiveness of the Programme in addressing issues such as rural inequalities, economic peripherality and severity and occurrence of accidents. This Case demonstrates the need for intervention and that the Programme objectives are still relevant, appropriate, and robust.

**The Socio-Economic Case** includes the Value for Money assessment, which considers both the monetised and non-monetised benefits and disbenefits against the costs. Both the HMT Green Book and the SPFM make reference to the importance of taking a wider view of value for money than simply focusing on monetised benefits. Whilst the current monetised benefit cost ratio is 0.81, there is a strong supporting strategic case and significant non-monetised benefits which together improve the position to a positive Value for Money assessment for the Programme.

The positive Value for Money assessment by Transport Scotland’s Accountable Officer was endorsed by Executive Team in Investment Assurance mode on 22 August 2023.

### Options Considered and Advice

#### Procurement Options

Three core procurement options have been evaluated for the delivery of the remaining elements of the Programme. The procurement and construction sequence of each contract included in these options is set out in Annex B to this paper:

- **Design & Build (D&B) Option** – This option entails the procurement of eight individual D&B contracts, with funding primarily from the capital budget over the period from 2024/25 to 2035/36;
- **Mutual Investment Model (MIM) Option** – This option entails the procurement of three individual MIM contracts, with funding primarily from

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the resource budget, coming predominantly after 2031/32 for a period of around 30 years: and

- **Hybrid Option** – This option entails the procurement of two individual MIM contracts and three D&B contracts, with significant funding required from both capital and resource budgets.

The assessment of each option is based on the implications of seeking to achieve an earliest practicable completion date deliverable by that option, balancing factors such as market appetite, market capacity and levels of disruption to the travelling public during construction. An assessment has also been made of the implications of reprofiling the delivery periods of each of these options, which would involve procurement and construction being undertaken over an extended duration. As noted above, comment on the affordability implications of these options is set out in the “Financial and Legal Considerations” section of this paper and reference should also be made to the separate affordability advice issued by SG Exchequer.

### Assessment of Options

Table 1 provides a summary of the findings of the assessment of the core procurement options for delivery of the remaining elements of the Programme.

Table 1: Summary of assessment of the core procurement options

Option	Overview	Est. completion Timetable	Net Present Value of Cost (Apr 23 prices)
<b>Design and Build (D&amp;B)</b>	Predominantly supported by capital funding	2035	£2,388m
<b>Mutual Investment Model (MIM)</b>	Predominantly supported by resource funding	2033	£2,774m
<b>Hybrid of D&amp;B and MIM</b>	Supported by a combination of capital and resource funding	2033	£2,688m

### Completion Timetables

Details of the sequence of procurement and construction of each option are shown in Annex B to this paper. The earlier completion date for the MIM and Hybrid Options noted above is considered practically achievable due to the additional resources that the largely European-based contractors leading delivery of MIM contracts are capable of deploying, compared to the resources that the largely Scottish/UK-based contractors leading delivery of the D&B contracts would be capable of deploying.

Earlier dates for completion of the Programme than are noted above **are not** considered practically achievable.

As noted above, each of the options set out in Annex B has been developed to provide a sequence of work that balances market capacity to progress the work with levels of disruption during construction. Level of disruption considerations have also

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included how works can be phased to meet traffic management objectives on maximum lengths of road subject to continuous traffic management and minimum lengths of road between concurrent operations.

### Options to reprofile

**Alternative D&B Option:** The level of annual spend associated with the D&B Option could be “smoothed” by a resequencing the order of procurement of individual projects and timing each procurement to achieve a “target” level of spend. As the rate of spend would reduce this would result in a later completion date. This may be considered desirable, whether it is to align with available capital funding, to reduce the extent of disruption on the route, or to develop a pipeline of work that could build contractor confidence in Scotland. This would, however, increase the nominal cost of this option due to extending the period over which inflation would apply. As an illustration of the effects of such an approach, designing a construction sequence to optimise spend against a target annual capital budget of £250m (2024 prices, assumed to increase by 2% per annum), would mean that **completion would not be achieved until around 2038** and the nominal cost would increase by around £130m.

The **MIM Option** is not considered suitable for implementation at a reduced speed, as market consultation has highlighted the importance of providing a continuous ‘pipeline’ of MIM contract opportunities, to encourage and maintain market appetite and hence competition. However, commencement of the MIM Option could be delayed, which would result in a later overall completion date and increase the nominal cost of this option due to extending the period over which inflation would apply.

**Alternative Hybrid Option:** The speed of implementation of the Hybrid Option could be reduced, either by delaying implementation of the option as a whole, or by re-sequencing the programme of D&B and MIM contracts. This would result in a later completion date but would not significantly reduce the levels of annual capital funding required. It would, however, increase the nominal cost of this option due to extending the period over which inflation would apply. This may be considered desirable, if it is wished to defer decision making on use of MIM to a later date, which may see improved market conditions, whilst maintaining progress with the overall programme. As an illustration of the effects of such an approach, if the programme for the Hybrid Option was re-sequenced by progressing construction of the three D&B contracts early in the programme, decision making on whether to adopt MIM for delivery of the remaining elements could be deferred, with decision points possible in December 2025 and December 2027. If at either of those dates two MIM contracts were selected for delivery of the remaining five projects **then completion would be achieved around 2035 (December 2025 decision) or 2037 (December 2027 decision)**. Alternatively, if at either of those dates five D&B contracts were selected for delivery of the remaining five projects **then completion would be achieved around 2036 (December 2025 decision) or 2038 (December 2027 decision)**, subject to sufficient capital funding being available.

It should be noted that further work would be required to provide an equivalent level of detail on any of the alternative described above, or any other alternative, as is

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currently available for each of the three core options. Whilst there is confidence that the effects would be as described, if Ministers are minded to adopt any of these alternatives then it is recommended that this further work is undertaken.

### Estimated Costs

The estimated costs of each of the core options are summarised in Table 2. These costs are based on forward market rates of costs of borrowing forecast at 28 September 2023. It should be noted that the cost of each contract under the option being progressed will be subject to reassessment as part of normal governance processes at appropriate stages during the procurement of each contract.

Table 2: Estimated Costs of Remaining Elements of the Programme

Option	Nominal Costs			Net Present Value of Cost (Apr 23 prices)
	Capital	Resource	Total	
D&B Option	£3,242m	£1,458m	£4,700m	£2,388m
MIM Option	£281m*	£8,967m**	£9,248m	£2,774m
Hybrid Option	£1,088m*	£6,709m**	£7,797m	£2,688m

\* Inclusive of SG equity investment costs and returns

\*\* Inclusive of SPV corporation tax benefits

The estimated costs above for the MIM contracts in the MIM and Hybrid Options are net of corporation tax receipts from the MIM private sector company and inclusive of estimated public sector equity investment costs and returns based on a modelled equity investment of 15% by the public sector. Public sector equity investment of up to a maximum of 20% is currently permitted with a MIM model to maintain an off-balance sheet classification, with the reduced investment of 15% having been adopted by the Welsh Government in its procurements.

The estimated nominal costs above represent the cash budget expenditure over the period of the construction and maintenance of each option. The estimated Net Present Value costs above represent the same costs with account taken of when the expenditure actually occurs, which calculates the value of all future cash flows discounted, in accordance with Green Book guidance, at 5.8805% to a reference date, in this case 1 April 2023.

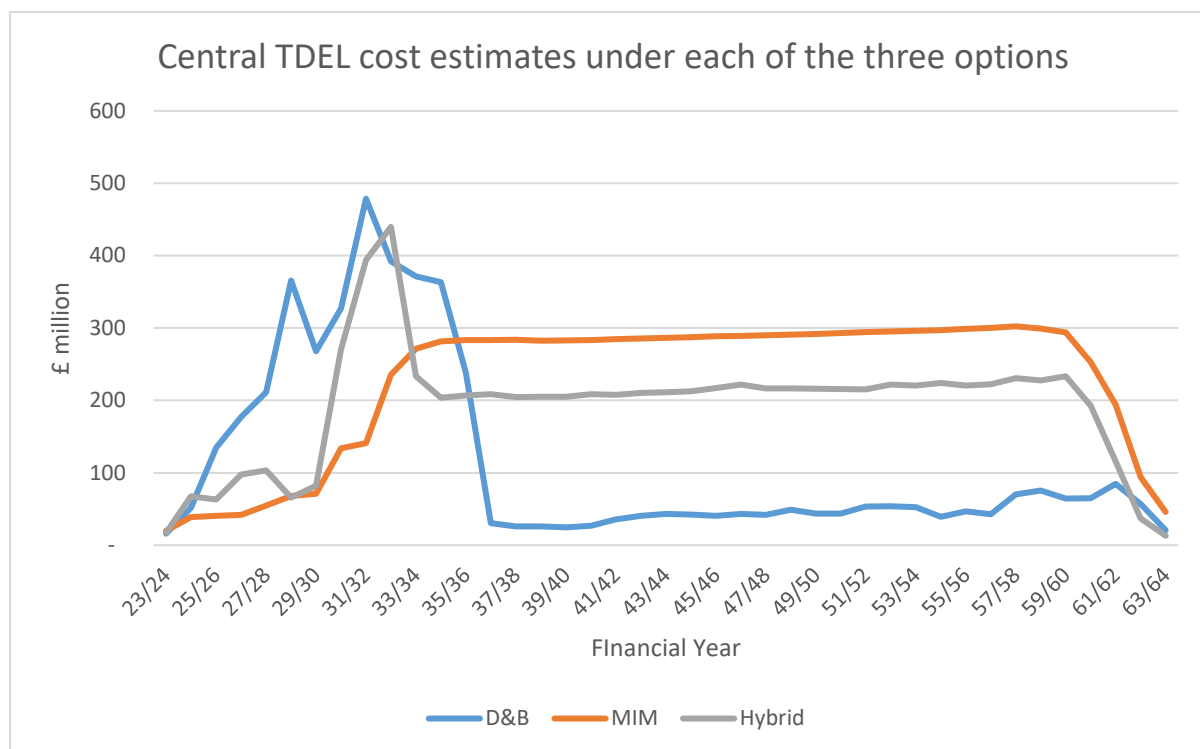
The nominal costs of the MIM and Hybrid Options are considerably higher than the nominal cost of the D&B Option, however, in terms of Net Present Value (NPV) of Cost, the scale of the difference is less significant. The D&B Option is estimated to result in the lowest Net Present Value (NPV) of Cost, being 11.1% lower than the Hybrid Option and 13.9% lower than the MIM Option respectively. Unless significant low likelihood/high value risk costs were to accrue, the D&B option therefore provides a better commercial VfM solution, but is clearly dependant on funding availability.

The total annual funding requirements (TDEL) of each core option are illustrated in Chart 1 below and further details of the annual funding requirement, including

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separate resource and capital funding, of each option is provided in Annex C to this paper.

Chart 1:  
TDEL Costs of the programme under different financing options



The market forecast for borrowing rates at the date of financial close of each MIM contract to be procured was taken on 28 September 2023 from the SONIA<sup>1</sup> 6m sterling swap curve forecast. This forecast indicates that borrowing costs are not expected to reduce materially in the short to medium term period (from 2025-2029). This means that delaying procurement of MIM contracts within that timescale is unlikely to lead to lower borrowing costs being available. In addition, delaying these procurements would increase the nominal cost of these contracts, due to extending the period over which inflation would apply.

### Procurement Option Risks

MIM contracts, whether as part of the MIM Option or the Hybrid Option, provide an appreciably greater level of risk transfer to the private sector than is the case for D&B contracts. Whilst it is expected that contractors will include risk allowances within their pricing to reflect the risk that they carry under the contract, experience on previous contracts suggests that risk pricing has been competitive and, in particular, does not suggest that contractors are adding significant cost for low likelihood/high value risk events.

As a consequence, MIM contracts provide greater protection for the Scottish Ministers from exposure to increased costs during the contract term than can be

<sup>1</sup> SONIA is the Sterling Overnight Index Average, administered by the Bank of England

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achieved on D&B contracts. Whilst a cost provision for risks retained by the Scottish Ministers would be assessed for either form of contract, the extent of this cost provision would be significantly higher for D&B contracts, as under a D&B contract the contractor would be entitled to recovery of their reasonable costs were such risks to materialise. Examples of risks transferred under a MIM contract but retained by the Scottish Ministers under a D&B contract include delay and disruption costs associated with exceptionally adverse weather or utility diversions.

Key risks and mitigation measures associated with each of the procurement options are summarised in Table 3.

Table 3: Summary of Key Risks and Mitigation Measures

<b>Procurement Option</b>	<b>Risk</b>	<b>Mitigation Measures</b>
<b>D&amp;B Option</b>	Multiple procurements/ Contracts	<ul style="list-style-type: none"> <li>• Sequence procurements to limit concurrency</li> <li>• Deploy sufficient resources to manage concurrent procurements/contracts</li> </ul>
	Lack of Market Appetite	<ul style="list-style-type: none"> <li>• Adopt NEC4 contract (with amendments)</li> <li>• Establish clear pipeline of procurement opportunities</li> </ul>
	Multiple Contract interfaces	<ul style="list-style-type: none"> <li>• Sequence procurements to limit interfaces</li> <li>• Include obligations not to obstruct other contractors in contract requirements</li> </ul>
	Co-ordination across Programme	<ul style="list-style-type: none"> <li>• Deploy sufficient resources to maintain effective co-ordination across Programme</li> </ul>
	Cost Increases above central estimates, due to lower level of risk transfer and uncapped liabilities	<ul style="list-style-type: none"> <li>• Undertake comprehensive risk assessment prior to procurement</li> <li>• Implement risk management/mitigation strategies to eliminate or reduce risk where possible</li> </ul>
<b>MIM Option</b>	Balance Sheet Classification Status including changes to accounting standards	<ul style="list-style-type: none"> <li>• Seek pre-procurement indication of likely classification status</li> <li>• Assess effects on classification status of potential changes to contract emerging during procurement</li> </ul>

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Procurement Option	Risk	Mitigation Measures
		<ul style="list-style-type: none"> <li>• Do not proceed with award where classification status considered uncertain</li> <li>• Work closely to the Welsh contract, which has recently been granted off balance sheet status</li> </ul>
	Market Appetite/ Finance Availability for Contract Scale	<ul style="list-style-type: none"> <li>• Monitor market appetite for contracts of the scale envisaged to see if it deteriorates from current strong appetite</li> <li>• Monitor the debt market to provide confidence in the value for money expected on costs of borrowing for contracts of the scale envisaged.</li> </ul>
	Interfaces (fewer than under D&B Option)	<ul style="list-style-type: none"> <li>• Include obligations not to obstruct other contractors in contract requirements</li> </ul>
	Supply Chain	<ul style="list-style-type: none"> <li>• Explore robustness of supply-chain arrangements during procurement to provide confidence in deliverability of construction programme.</li> </ul>
	Higher levels of risk transfer may encourage Contractors to pursue disputes if losses arise	<ul style="list-style-type: none"> <li>• Maintain effective records and comply with contract obligations to minimise potential for contractor to pursue disputes to recover costs in the event of costs increasing</li> </ul>
	International bidders expected (rather than UK for D&B) meaning more profit “leaks” out of Scotland	<ul style="list-style-type: none"> <li>• Conditions can be added to the contract to require advertisement of opportunities on Public Contracts Scotland to encourage the use of local supply chains, and to ensure community benefits e.g. through training etc.</li> </ul>
<b>Hybrid Option</b> (Individual risks noted above apply proportionally to	Shorter MIM pipeline	<ul style="list-style-type: none"> <li>• Monitor market appetite in case reduced due to reduced number of MIM contract opportunities available</li> <li>• Consider whether other projects (e.g. A96) may be suitable candidates for</li> </ul>



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Procurement Option	Risk	Mitigation Measures
the Hybrid Option. Further risks unique to the Hybrid Option are noted here)		procurement as MIM, and hence able to be added to pipeline
	Supply Chain	<ul style="list-style-type: none"> <li>Monitor whether availability of D&amp;B contract opportunities reduces market appetite for contractors to seek sub-contract opportunities on MIM contracts</li> </ul>

### Summary of Options and Differentiating Factors

In overall terms, and subject to affordability considerations, it is considered that any of the core or alternative procurement options considered for completion of the Programme could be selected by Ministers. Depending on the relative importance attached to particular differentiating factors, options could be selected based on the grounds outlined below:

- **D&B Options** – may be selected if Ministers prioritise proceeding on the basis of capital funding, the lower NPV and nominal costs, accepting a later completion date and increased exposure to contracted costs increasing arising from the relatively lower extent of risk transferred;
- **MIM Option** – may be selected if Ministers prioritise proceeding on the basis of the earliest completion date, reduced exposure to contracted costs increasing arising from the relatively higher extent of risk transferred and delayed payments of costs, accepting the higher NPV and nominal costs; or
- **Hybrid Options** – may be selected if Ministers prioritise proceeding on the basis of achieving the earliest completion date, providing a range of contracting opportunities to the market, and reducing the resource funding demand of the MIM Option through the allocation of enhanced capital funding, accepting the higher NPV and nominal costs and some increased exposure to contracted costs increasing arising from the relatively lower extent of risk transferred on the D&B contracts included in this option.

Whichever option is selected, its certainty of delivery timetable is dependent on sufficient funding being committed to support its implementation.

### **Financial and Legal Considerations**

#### Affordability

Decisions on the timetable for completion of the Programme have significant financial implications, and at present no future allocation of capital and/or resource funding has been confirmed. The future outlook for both resource and capital budget is extremely challenging, with the costs of progressing the remainder of the Programme to completion currently unaffordable from indicative Transport Scotland/TNZJT budget allocations. A pathway to affordability therefore depends on Ministers prioritising completion of the Programme ahead of other projects or

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programmes within its overall capital and/or resource spending plans and allocating sufficient funding to support the completion timetable Ministers wish to achieve.

As noted above, adoption of any new timetable for completion of the Programme would require certainty of the funding required to support achievement of that timetable. This is the case for both the capital and resource financed options. For capital, there is a need for short to medium term assurances on the availability and prioritisation of capital funding. For options involving MIM contract, longer term consideration of resource funding across all of Scottish Government would be required as there is no potential for the transport budget to absorb in-year resource requirements in the region of £300 million. Additionally, assurance would be required over the CDEL elements of the MIM option.

It is understood from discussions with Scottish Government Exchequer (SGE) that there are significant concerns regarding the ability of the RDEL budget to absorb the additional long-term costs that would arise from the MIM Option, which are c.£270-300million per annum from 2033. However, SGE is also concerned that the CDEL budget is also under considerable strain over the medium-term, and therefore considers that it may be prudent to keep options open to lever in private finance at a later date, if market conditions and resource budgets allow, to complete the delivery of the programme in future.

The approach outlined above could be accommodated by the alternative Hybrid Option described at paragraph 5.6 above, under which a decision on the use of MIM can be deferred until December 2025 or December 2027. This also opens up the possibility that future MIM costs, which under this alternative option would be lower and would commence at a later date, could be met at least in part by redirecting funds that are used for repayment of existing public-private partnership contracts, albeit the sums involved for transport PPP projects are not significant and its likely future RDEL pressures will result in other calls for that budget when it becomes available.

For comparison purposes, the capital funding requirements over the remainder of the current capital spending review period of the options and variant options described in this paper are set out in Table 4. These figures exclude funding requirements for delivery of the Tomatin to Moy project. **Note that current TNZJT CDEL allocations do not include any budget for the A9 dualling, including Tomatin to Moy.**

Table 4: Capital Funding Requirements of Options over Capital Spending Review Period (Excluding Tomatin to Moy)

Option	FY 24/25	FY 25/26	FY 26/27	Total
D&B Option	£51m	£132m	£174m	£357m
Alternative D&B Option	£37m	£63m	£210m	£310m
MIM Option	£39m	£41m	£42m	£122m

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<b>Hybrid Option</b>	£68m	£63m	£96m	£227m
<b>Alternative Hybrid Option</b>	£55m	£75m	£104m	£234m

If the Cabinet Secretary is required to accommodate any of the above capital profiles within the Transport, Net Zero and Just Transition portfolio then significant reprioritisation would be required of current CDEL spending plans to accommodate delivery of the Programme. The following projects and programmes would all be significantly impacted:

- Cessation/delay of ferry building programme/harbour work, including for example the small vessels replacement programme, with minimal spend on essential maintenance and critical works to ensure new vessels can berth;
- Cessation/delay of all non-critical rail enhancement/decarbonisation work, meaning longer term reliance on aging diesel fleets as well as reduced modal shift across passenger and freight services;
- Undertaking only the most critical road maintenance activities and cutting back on funding any reduction of the backlog as far as possible, both while still complying with Ministers' legal duties as roads authority, subject to advice to establish whether this would create savings in practice, and if so, their value relative to the risk of increased costs of emergency repairs, to public safety and of possible legal challenge;
- Delaying the Rest and Be Thankful long-term solutions as long as possible;
- Cutting the road safety improvement fund;
- Delay to critical climate change adaptation programmes including across the transport system and flooding defences;
- Further delay to Just Transition, Heat in Buildings and Nature Restoration programmes;
- No progress on A96 Inverness to Nairn Dualling and City Deal projects and other road improvement projects; and
- Expectation that minimal spend on Active Travel, Low Carbon and Bus is maintained.

The implications of reprioritisation of current CDEL spending plans outlined above would clearly result in significant handling challenges across a wide range of projects and programmes and, given that many lie in the Net Zero space, would lead to inevitable comparisons on the prioritisations relative to carbon impacts. Additionally it is unlikely that this would be sufficient to cover the full capital requirements and therefore a full review and reprioritisation of SG capital spending plans would be required.

[redacted] – out with scope

### Conclusions and Next Steps

Notwithstanding the financial implications detailed above, on balance, Ministers may prefer to consider the **Alternative Hybrid Option**. It provides a compromise between the competing issues of earliest completion date, funding availability, the current cost of money as well as construction feasibility and disruption to traffic. Further work would be needed on this or any other alternative to bring the

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assessment to the same level of detail as available for the core options. If the Cabinet Secretary is minded then this work can be taken forward immediately, it would not, however, be available in advance of the statement in this parliamentary session.

[redacted] – out with scope work is in progress for the options for completion of the Programme to be set out for Cabinet in a budget cabinet paper, to be considered on 5 December 2023. Annex D includes the proposed contribution on the A9 Dualling programme. [redacted] – out with scope

It is recommended that the Cabinet Secretary:

- **Notes** the findings of the assessment of options for procurement and delivery of the remaining elements of the Programme;
- **Indicates** her views on the relative importance to be placed on each of the factors differentiating the options; and
- **Indicates** her views on the contribution to the planned cabinet paper as set out at Annex D; and
- **Indicates** her views on the recommendation on the proposed timing of the detailed update to Parliament following the budget statement.

**Lawrence Shackman**

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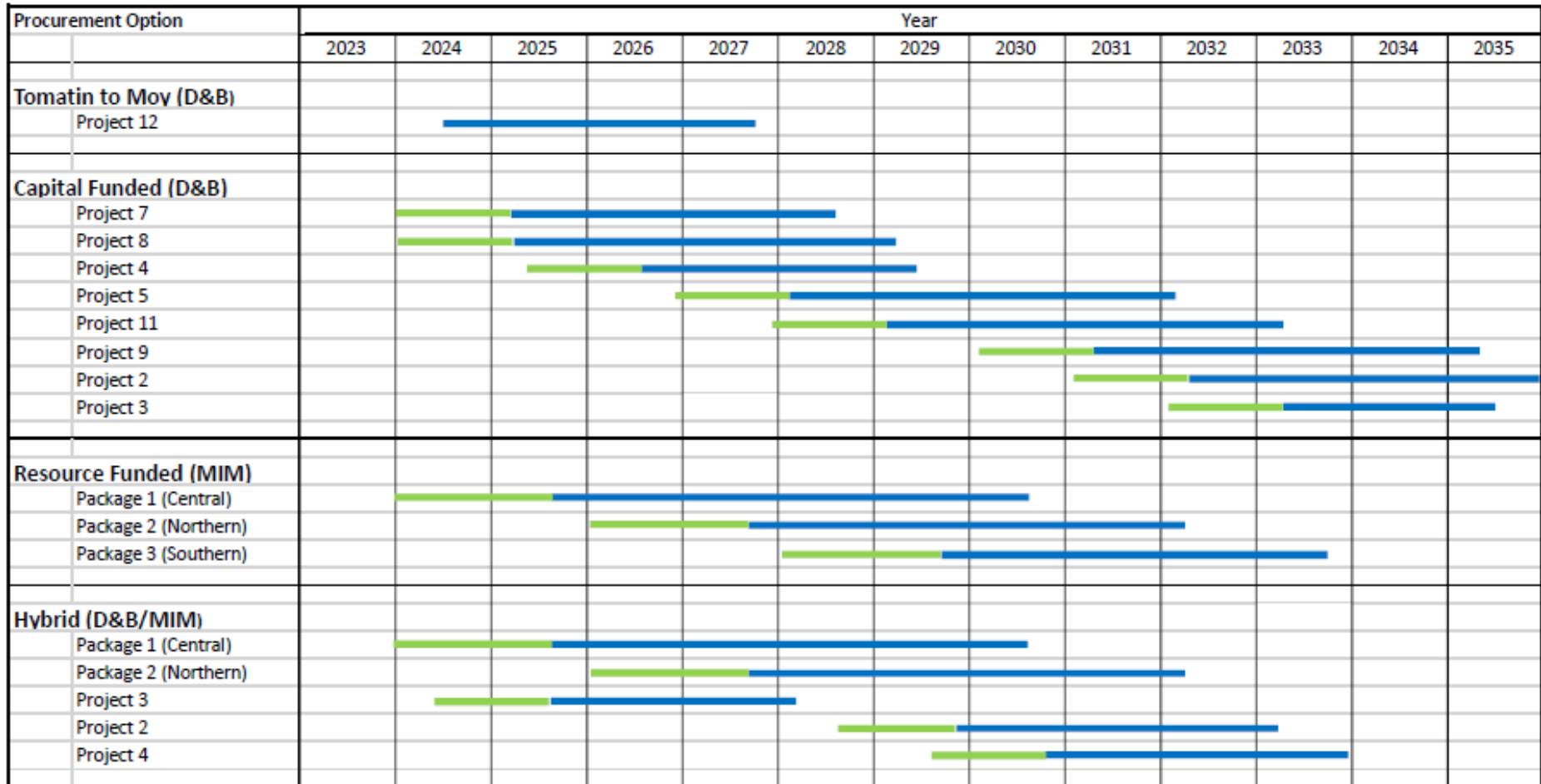
### ANNEX A – LOCATIONS AND STATUS OF PROJECTS COMPRISING A9 DUALLING PROGRAMME

#### Locations



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ANNEX B: PROCUREMENT AND CONSTRUCTION TIMELINES FOR EACH OPTION



————— Procurement
 ————— Construction

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ANNEX C – ANNUAL CAPITAL AND RESOURCE BUDGET PROFILES OF EACH OPTION

**D&B Option: Capital and Resource budget profile (to nearest £1m per annum)**

Cost Element	Nominal Total (£m)	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35	35/36	36/37	37/38	38/39	39/40	40/41	41/42	42/43	43/44	44/45
Capital Budget	<b>3,242</b>	16	51	132	174	207	358	257	316	463	371	349	338	210	-	-	-	-	-	-	-	-	-
Resource Budget	<b>1,458</b>	-	0	3	4	5	8	11	12	16	21	22	25	28	30	26	26	25	27	36	41	43	42
Total Budget Requirement	<b>4,700</b>	<b>16</b>	<b>52</b>	<b>135</b>	<b>177</b>	<b>211</b>	<b>366</b>	<b>268</b>	<b>327</b>	<b>479</b>	<b>392</b>	<b>372</b>	<b>363</b>	<b>238</b>	<b>30</b>	<b>26</b>	<b>26</b>	<b>25</b>	<b>27</b>	<b>36</b>	<b>41</b>	<b>43</b>	<b>42</b>
		45/46	46/47	47/48	48/49	49/50	50/51	51/52	52/53	53/54	54/55	55/56	56/57	57/58	58/59	59/60	60/61	61/62	62/63	63/64	64/65		
Capital Budget		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Resource Budget		41	43	42	49	43	44	53	54	53	39	47	43	70	75	64	65	85	57	21	21	-	-
Total Budget Requirement		<b>41</b>	<b>43</b>	<b>42</b>	<b>49</b>	<b>43</b>	<b>44</b>	<b>53</b>	<b>54</b>	<b>53</b>	<b>39</b>	<b>47</b>	<b>43</b>	<b>70</b>	<b>75</b>	<b>64</b>	<b>65</b>	<b>85</b>	<b>57</b>	<b>21</b>	<b>21</b>		

NOTE: Capital and Resource Budget are rounded and to the closest £1m p.a. Total Budget Requirement is accurate.

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**MIM Option: Capital and Resource budget profile (to nearest £1m per annum)**

Cost Element	Nominal Total (£m)	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35	35/36	36/37	37/38	38/39	39/40	40/41	41/42	42/43	43/44
Capital Budget	<b>439</b>	20	39	41	42	55	55	48	49	41	24	4	3	3	3	2	0	0	0	0	0	0
SG Equity Investment	<b>42</b>	0	0	0	0	0	0	0	13	0	16	12	0	0	0	0	0	0	0	0	0	0
SG Investment Distributions	<b>(200)</b>	0	0	0	0	0	0	0	0	(2)	(2)	(4)	(5)	(5)	(5)	(5)	(5)	(5)	(6)	(5)	(5)	(5)
Subtotal Capital Budget	<b>281</b>	<b>20</b>	<b>39</b>	<b>41</b>	<b>42</b>	<b>55</b>	<b>55</b>	<b>48</b>	<b>62</b>	<b>39</b>	<b>37</b>	<b>13</b>	<b>(2)</b>	<b>(2)</b>	<b>(3)</b>	<b>(3)</b>	<b>(5)</b>	<b>(5)</b>	<b>(5)</b>	<b>(5)</b>	<b>(5)</b>	<b>(5)</b>
Unitary Charge	<b>8,681</b>	0	0	0	0	0	15	25	73	102	194	250	274	275	276	277	278	278	279	280	281	282
Initial Service Payments	<b>6</b>	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
Irrecoverable VAT	<b>485</b>	0	0	0	0	0	1	2	4	6	11	14	15	15	15	15	16	16	16	16	16	16
Corporation Tax	<b>(204)</b>	0	0	0	(1)	(2)	(4)	(5)	(7)	(7)	(7)	(6)	(5)	(5)	(5)	(6)	(6)	(6)	(6)	(6)	(6)	(6)
Subtotal Resource Budget	<b>8,967</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>(1)</b>	<b>13</b>	<b>23</b>	<b>72</b>	<b>102</b>	<b>198</b>	<b>258</b>	<b>284</b>	<b>286</b>	<b>286</b>	<b>287</b>	<b>287</b>	<b>288</b>	<b>289</b>	<b>290</b>	<b>290</b>	<b>291</b>
Subtotal Budget Requirement	<b>9,248</b>	<b>20</b>	<b>39</b>	<b>41</b>	<b>42</b>	<b>55</b>	<b>68</b>	<b>71</b>	<b>134</b>	<b>141</b>	<b>236</b>	<b>271</b>	<b>282</b>	<b>283</b>	<b>284</b>	<b>284</b>	<b>282</b>	<b>283</b>	<b>283</b>	<b>285</b>	<b>285</b>	<b>286</b>
		44/45	45/46	46/47	47/48	48/49	49/50	50/51	51/52	52/53	53/54	54/55	55/56	56/57	57/58	58/59	59/60	60/61	61/62	62/63	63/64	
Capital Budget		0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	
SG Investment Distributions		(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(9)	(16)	(14)	(15)	(6)	(8)	
Subtotal Capital Budget		<b>(5)</b>	<b>(4)</b>	<b>(5)</b>	<b>(5)</b>	<b>(5)</b>	<b>(5)</b>	<b>(5)</b>	<b>(5)</b>	<b>(5)</b>	<b>(5)</b>	<b>(5)</b>	<b>(5)</b>	<b>(5)</b>	<b>(4)</b>	<b>(8)</b>	<b>(15)</b>	<b>(13)</b>	<b>(14)</b>	<b>(6)</b>	<b>(8)</b>	
Unitary Charge		283	283	284	285	286	287	288	289	290	291	292	293	294	295	297	298	255	201	96	51	
Irrecoverable VAT		16	16	16	16	16	16	16	16	16	16	16	16	16	17	17	17	14	10	5	3	
Corporation Tax		(6)	(6)	(6)	(7)	(7)	(7)	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(5)	(4)	(3)	(1)	(1)	
Subtotal Resource Budget		<b>292</b>	<b>293</b>	<b>294</b>	<b>295</b>	<b>296</b>	<b>297</b>	<b>298</b>	<b>299</b>	<b>300</b>	<b>301</b>	<b>302</b>	<b>304</b>	<b>305</b>	<b>306</b>	<b>307</b>	<b>309</b>	<b>265</b>	<b>208</b>	<b>100</b>	<b>53</b>	
Subtotal Budget Requirement		<b>287</b>	<b>289</b>	<b>289</b>	<b>290</b>	<b>291</b>	<b>292</b>	<b>293</b>	<b>294</b>	<b>295</b>	<b>296</b>	<b>297</b>	<b>299</b>	<b>300</b>	<b>302</b>	<b>299</b>	<b>294</b>	<b>253</b>	<b>194</b>	<b>94</b>	<b>46</b>	

NOTE: Due to rounding to nearest £1m, nominal totals for Capital and Revenue Budget may not be accurate, however, the Total Resource Requirement is accurate.



**Annex B – Question 1 Correspondence**

**Hybrid Option: Capital and Resource budget profile (to nearest £1m per annum)**

Cost Element	Nominal Total (£m)	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35	35/36	36/37	37/38	38/39	39/40	40/41	41/42	42/43	43/44
Capital Budget	<b>1,200</b>	17	68	63	96	103	52	58	182	289	232	32	1	1	1	0	0	0	0	0	0	0
SG Equity Investment	<b>29</b>	0	0	0	0	0	0	0	13	0	16	0	0	0	0	0	0	0	0	0	0	0
SG Investment Distributions	<b>(141)</b>	0	0	0	0	0	0	0	0	(2)	(2)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(3)
Subtotal Capital Budget	<b>1,088</b>	<b>17</b>	<b>68</b>	<b>63</b>	<b>96</b>	<b>103</b>	<b>52</b>	<b>58</b>	<b>195</b>	<b>287</b>	<b>245</b>	<b>29</b>	<b>(3)</b>	<b>(3)</b>	<b>(3)</b>	<b>(3)</b>	<b>(4)</b>	<b>(4)</b>	<b>(4)</b>	<b>(4)</b>	<b>(4)</b>	<b>(3)</b>
Unitary Charge	<b>6,085</b>	0	0	0	0	0	15	25	73	102	184	192	193	193	194	194	195	195	196	197	197	198
Initial Service Payments	<b>4</b>	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Irrecoverable VAT	<b>340</b>	0	0	0	0	0	1	2	4	6	10	11	11	11	11	11	11	11	11	11	11	11
Corporation Tax	<b>(146)</b>	0	0	0	(1)	(2)	(4)	(5)	(6)	(5)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Package 3 D&B Resource Budget	<b>426</b>	0	0	0.4	1	1	1	2	3	4	4	5	6	9	11	7	7	7	10	8	10	10
Subtotal Resource Budget	<b>6,709</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>14</b>	<b>25</b>	<b>76</b>	<b>107</b>	<b>194</b>	<b>204</b>	<b>206</b>	<b>209</b>	<b>211</b>	<b>208</b>	<b>209</b>	<b>209</b>	<b>213</b>	<b>211</b>	<b>214</b>	<b>214</b>
Subtotal Budget Requirement	<b>7,796</b>	<b>17</b>	<b>68</b>	<b>63</b>	<b>97</b>	<b>103</b>	<b>66</b>	<b>82</b>	<b>270</b>	<b>394</b>	<b>440</b>	<b>233</b>	<b>204</b>	<b>207</b>	<b>208</b>	<b>205</b>	<b>205</b>	<b>205</b>	<b>209</b>	<b>208</b>	<b>210</b>	<b>211</b>
		44/45	45/46	46/47	47/48	48/49	49/50	50/51	51/52	52/53	53/54	54/55	55/56	56/57	57/58	58/59	59/60	60/61	61/62	62/63	63/64	
Capital Budget		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SG Investment Distributions		(3)	(3)	(3)	(4)	(4)	(4)	(4)	(3)	(4)	(4)	(4)	(4)	(3)	(3)	(5)	(14)	(12)	(14)	(2)	0	
Subtotal Capital Budget		<b>(3)</b>	<b>(3)</b>	<b>(3)</b>	<b>(3)</b>	<b>(4)</b>	<b>(3)</b>	<b>(3)</b>	<b>(3)</b>	<b>(3)</b>	<b>(4)</b>	<b>(4)</b>	<b>(3)</b>	<b>(3)</b>	<b>(3)</b>	<b>(5)</b>	<b>(13)</b>	<b>(12)</b>	<b>(13)</b>	<b>(2)</b>	<b>0</b>	
Unitary Charge		198	199	200	200	201	202	202	203	204	204	205	206	207	208	208	209	166	111	6	0	
Irrecoverable VAT		11	11	11	11	11	11	11	11	11	11	11	12	12	12	12	12	9	6	0	0	
Corporation Tax		(4)	(4)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(3)	(2)	(0)	0	
Package 3 D&B Resource Budget		11	14	19	13	13	11	10	9	15	13	16	11	11	19	16	30	32	14	32	13	
Subtotal Resource Budget		<b>216</b>	<b>220</b>	<b>225</b>	<b>220</b>	<b>220</b>	<b>220</b>	<b>219</b>	<b>219</b>	<b>225</b>	<b>224</b>	<b>228</b>	<b>224</b>	<b>225</b>	<b>234</b>	<b>232</b>	<b>247</b>	<b>204</b>	<b>129</b>	<b>39</b>	<b>13</b>	
Subtotal Budget Requirement		<b>213</b>	<b>217</b>	<b>222</b>	<b>217</b>	<b>217</b>	<b>216</b>	<b>215</b>	<b>215</b>	<b>222</b>	<b>220</b>	<b>224</b>	<b>221</b>	<b>222</b>	<b>231</b>	<b>227</b>	<b>234</b>	<b>193</b>	<b>116</b>	<b>37</b>	<b>13</b>	

NOTE: Due to rounding to nearest £1m, nominal totals for Capital and Revenue Budget may not be accurate, however, the Total Resource Requirement is accurate

**ANNEX D – [redacted] – r10(4)(e) internal communications**

**Extract of briefing for meeting on 16 November 2023**

**AGENDA**

Number	Item
1	<p>A9 Dualling - Update on consideration of options for completion of programme (Information Note, Supplementary Note from Transport Scotland and paper from SG Exchequer as background for discussion). <b>(circa 15 mins)</b></p> <p>[redacted] – r10(4)(e) internal communications</p>
2	<p>A9 Dualling - Discussion of key factors for decision-making on completion of the programme. <b>(Circa 15 mins)</b></p> <p>[redacted] – r10(4)(e) internal communications</p>
3	<p>[redacted] – r10(4)(e) internal communications</p>
4	<p>[redacted] – out with scope</p>

Relevant documents to be discussed:

- Information Note dated 1 November 2023;
- A Value for Money summary, which is referred to in the Information Note;
- [redacted] – out with scope

## **Strategic and socio-economic case and value for money**

Transport Scotland  
TSA

16 August 2023

Version 1.0

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## 1. Introduction

A programme level business case for the A9 dualling programme has been prepared by Transport Scotland and its advisors, including Strategic and Socio-Economic Cases (collectively the “Case for Investment”) prepared by AECOM alongside the Financial, Commercial and Managerial cases in line with the HMT “5 case” model. This paper summarises the Case for Investment as of August 2023, compares it with the original 2016 Case for Investment and provides a Transport Scotland assessment of the implications in terms of Value for Money.

## 2. Background and Context

The A9 is the fifth longest Trunk Road in the United Kingdom and the longest In Scotland (433km). It is the strategic north – south spine, connecting the Highland and Islands with the Central Belt (and beyond). It serves an area of approximately 30,000km<sup>2</sup> (i.e. ~35% of Scotland’s total land mass). This is critical to the movements of freight, business travellers and for leisure and tourism purposes.

The A9 has greater value both physically and symbolically than simply being a road.

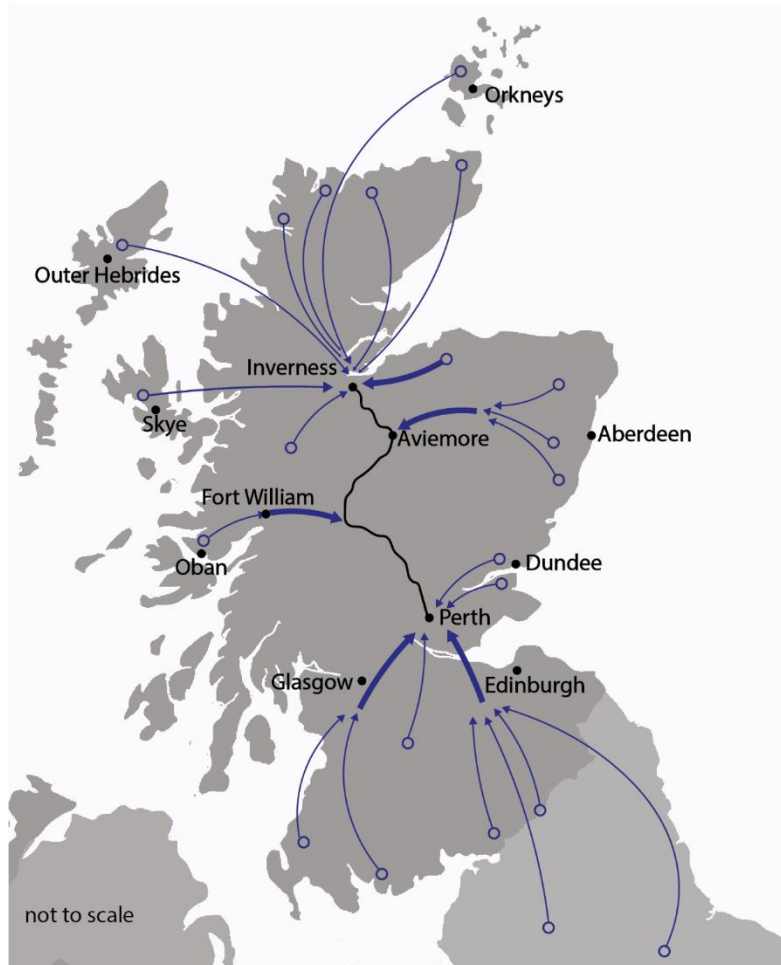


Figure 1 – Origin and Destination of Journeys using the A9 based on 2012 Roadside Interviews

It is a critical corridor in Scotland for facilitating the efficient movement of people and goods. A Specialised Goods Vehicle Count (SGVC) was undertaken in February and September 2014 and estimated that almost 10 million tonnes of goods are transported along the A9 Route Corridor on an annual basis and equated to more than £19Bn. Whilst not directly comparable, the GDP of Scotland in 2014 was c. £160Bn. Valued at over 10% of the size of the economy, the cargo being transported on the A9 Route Corridor forms a significant proportion of the materials required for Scotland to function.

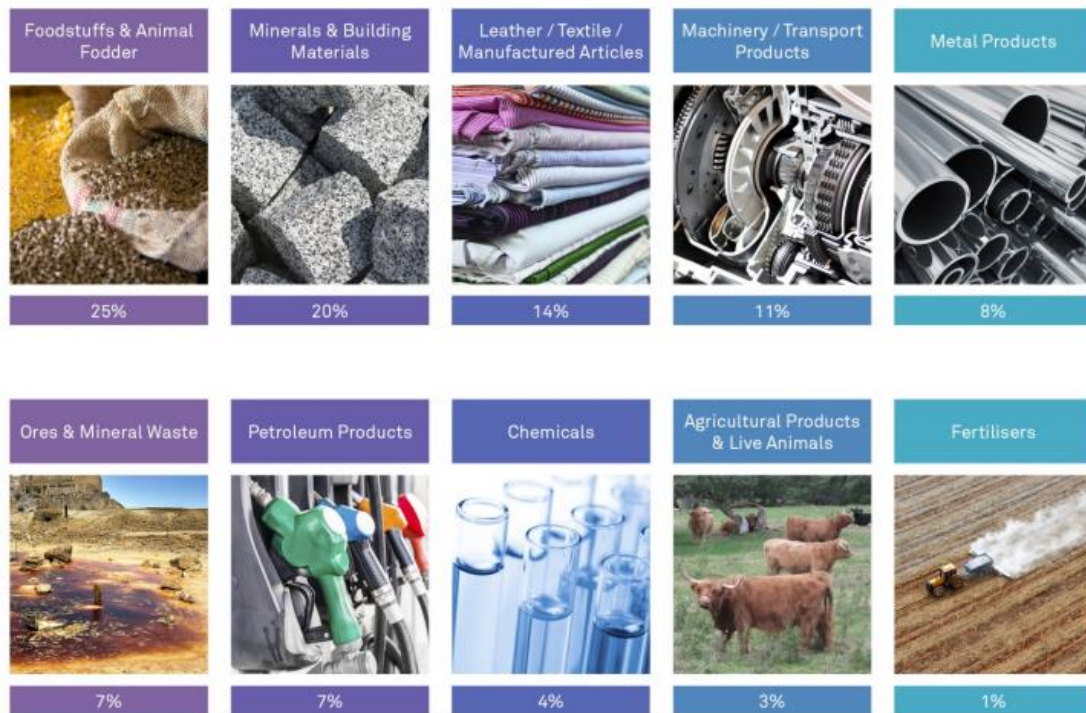


Figure 2 – Industries using the A9 Corridor based on 2012 Roadside Interviews

But the impact is wider than simply economic – there is a distinct aspect of it being the “backbone” that connects urban and rural Scotland. The A9 is the principal connection to and from the Highlands, which is world renowned for its whisky production, timber industry and tourism. For the c. 10,000 people living along the route it can often be the only connection for accessing education, employment or healthcare.

The Inverness and Cromarty Firth Green Freeport aims to create 25,000 jobs and generate £4.8bn in investment for the area, with a focus on floating offshore wind, nuclear and hydrogen that will drive a transition to net zero by 2045. An expansion of the Inverness Campus and Powerhouse is also planned, along with proposals to deliver innovation and skills support. The site includes the Ports of Inverness, Cromarty Firth and Nigg and Inverness Airport. Although formal analysis has not yet been undertaken, it is reasonable to assume that the A9 dualling programme and these interventions will be mutually reinforcing and each is likely to strengthen the business case for the others.

Transport and other connectivity-related infrastructure are highlighted within the Population Strategy as touching the lives of every person, regardless of whether they live in an urban or rural area, or whether they live in an area where the population is growing or decreasing. In the Strategy, Scottish Government has committed to 'explore opportunities around our anchor institutions, ensure our economic development is regionally targeted and our housing supply, transport and public services are fit for purpose across all of Scotland'. Physical connectivity infrastructure, including roads such as the A9, and the resilience thereof, are acknowledged as key to supporting the sustainability of communities in our country.

The basic principles of appraisal mean that greater impacts accrue where there are more people. This is not a flaw in the variety of methodologies used across different departments of government but a simple physical fact. As such the strategic case and wider considerations than monetarised benefits become particularly important when considering investment in rural areas.

It is important to note that this is not exclusive to Scotland and is a live issue internationally. For example Transport Scotland have recently discussed the issue with officials and academics from Japan. Japan adopted UK transport appraisal techniques in line with HMT Green Book in the 1990's and are currently experiencing issues with rural depopulation. As a result it is becoming increasingly harder for rural transport projects to achieve a Benefit Cost Ratio (BCR – the value of each £1 spent) greater than 1 and there are concerns about this causing further rural decline (in the context of an aging population more widely). Interest was expressed in the approach within STAG, and being increasingly adopted in wider UKG departments as it remains aligned with the Green Book (see for example Annex A2 – [The Green Book \(2022\) – GOV.UK \(www.gov.uk\)](#) that stresses the importance of the strategic case and rural issues and where the BCR should not be considered in isolation when appraising projects. This issue is covered in more detail below.

### **3. The Strategic Case**

Whilst this is an existing trunk road corridor of considerable importance, there are problems and issues along the A9 corridor that have previously been summarised as:

- Higher severity rate of accidents (compared to Scottish average) and perception as a 'dangerous' route to drive.
- Forecast increase in population/households (although it is recognised that this is no longer the case, the way in which population projections are calculated means that any decline, caused by wider factors, is embedded in future estimates but could be mitigated by improving connections).
- High car ownership and dependency.
- Lower rates of employment in the higher income band sectors relative to Scotland as a whole
- Poor resilience during adverse weather and a lack of alternative diversion routes.



The A9 is a strategic corridor with high levels of long-distance trips where public transport modes are not currently competitive with the car, (although forecasts indicated little modal shift with full dualling in place). There is a high dependency of local, regional and national businesses on efficient transport for the movement of goods, access to markets and workforce. The quality of road infrastructure is important for supporting inclusive rural access to services, mobility and connectivity (A Rural Economy Framework Outcome from “[New Blueprint for Scotland’s Rural Economy, 2018](#)”) and also for attracting investment. In EY’s Attractiveness Survey UK 2022, “reliability and coverage of infrastructure” was the joint most commonly chosen factor for a company’s choice of country to invest in, along with cost-competitiveness.

Mixed carriageway standards along the A9 trunk road with a mix of vehicle types and speeds leads to considerable platooning. Slow moving vehicles, the build-up of platoons and the restrictions of travel speed to below desired levels has also led to high levels of driver frustration. The implementation of the safety cameras on the A9 in 2014 has not fully addressed this problem.

Although the overall injury accident rate is lower on the A9 corridor than the Scottish average, when injury accidents do occur they tend to have a higher severity rate than the Scottish average. Evidence has linked the continuing high incidence of serious and fatal road accidents to the single carriageway road standard and overtaking manoeuvres.

*Table 1 – A9 KSI Accidents per Annum by Severity*

	<b>Fatal</b>	<b>Less serious</b>	<b>Moderately serious</b>	<b>Serious</b>	<b>Very serious</b>	<b>Total</b>
2015	4			6		10
2016	4			6		10
2017	4			9		13
2018	5			13		18
2019	1	4	3	4	4	16
2020	1	4	1		2	8
2021	1	5	3		4	13
2022	8	3	6		4	21
<b>Total</b>	<b>28</b>	<b>16</b>	<b>13</b>	<b>38</b>	<b>14</b>	<b>109</b>

Serious Injury accident categorisation changed mid 2019, 2020/2021 figures excluded from analysis due to Covid impacts.

Geographical and capacity constraints, and quality issues on the transport networks, coupled with a lack of alternative diversion routes, has contributed to poor resilience of the transport networks during adverse weather and low accessibility levels along the corridor. Problems caused by incidents on the A9 can cause lengthy diversions

and delays due to a lack of convenient alternative routes, impacting on both business and private road users. The dualling programme will by design significantly reduce these strategic issues. For example, with dual carriageways, separated by safety barriers, accidents will be reduced but also the impact of any remaining accidents will be reduced, as the second carriageway offers resilience without diversionary routes being utilised, which can be long on sections of this route.

This is a particularly pertinent problem to the operation of emergency vehicles in attending collisions. A casualty's chance of survival increases significantly when medical assistance is available in a timely manner, thus reinforcing non-monetarised aspects of safety benefits.

The dualling programme is the only (available) physical solution to these issues. As such the programme is crucial to the strategic importance of the route, as opposed to the significance of the current physical layout.

The Strategic Case is clear in terms of the combination of rural inequalities, the economic significance of the route, severity and causation of accidents that would be addressed by the dualling of such a key connection between rural Scotland and the Central Belt.

### 3.1 2016 Case for Investment Scheme Objectives

The A9 Dualling Case for Investment, as published in 2016 set the following programme objectives:

- To improve the operational performance of the A9 by:
  - Reducing journey times;
  - Improving journey time reliability;
- To improve safety for motorised and non-motorised users by:
  - Reducing accident severity;
  - Reducing driver stress.
- Facilitate active travel in the corridor.
- To improve integration with Public Transport Facilities.

### 3.2 Updated assessment of A9 scheme 2023

Since the original publication in 2016, the policy context has changed, most notably with the second National Transport Strategy (NTS2) and National Planning Framework 4, which recognises the Global Climate Emergency as well as the National Strategy for Economic Transformation.

The NTS2 has strong links with the National Performance Framework and is well aligned with the 3 priorities of [Equality, opportunity, community: New leadership – A fresh start – gov.scot \(www.gov.scot\)](#). In terms of the NPF, of the indicators used to monitor the performance of the National Performance Framework, International Exporting, Productivity and Economic Growth are identified as being of relevance in that the A9 Dualling Programme is expected to contribute towards, through

improving local and strategic connectivity, increasing competitiveness across National and wider International markets.

**Scotland's National Strategy for Economic Transformation (NSET)** <sup>2</sup>, published in 2022, sets out the vision for Scotland's economy to significantly outperform the last decade both in terms of economic performance and tackling structural economic equalities. On the International front, Scotland will be recognised as a nation of entrepreneurs and innovators who embrace the opportunities of new technologies. This overarching vision will be underpinned by achieving a fairer, wealthier, and greener economy that builds on the internationally competitive economy Scotland currently has whilst demonstrating leadership towards the net zero transition. Of the Six Policy Programmes established to deliver this strategy, the third policy seeks *Productive Business and Regions* which is underpinned by three projects of which improving connectivity infrastructure is prominent which is expected to be contributed through delivery of the A9 Dualling Programme in addition to it also being recognised that the scale and significance of the infrastructure proposals are also likely to allow Scotland's regions to maximise their potential which has also been identified as one of the three new projects.

National Planning Framework 4 recognises the importance of the A9 and maintaining it as a resilient link from Thurso to the Central Belt, which is achieved and improved by the dualling of the A9 between Perth and Inverness. The NPF4 promotes Rural Revitalisation as one of its Spatial Principles, which will be achieved by distributing investment and infrastructure strategically to support rural development and employment, improving access to markets and supply chains. Nonetheless, the A9 scheme objectives can be mapped to the NTS2 priorities and outcomes.

Whilst the Climate Change emergency is not included in the A9 scheme objectives, it has been integrated into STAG criteria and the business case has been updated to reflect this. There is minimal impact in terms of additional CO2 generation by the completed programme although like all infrastructure projects, there will be significant CO2 embedded in construction materials.

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<sup>2</sup> Scotland's National Strategy for Economic Transformation, Scottish Government, 2022, <https://www.gov.scot/publications/scotlands-national-strategy-economic-transformation/documents/>

#### 4. The Socio-Economic Case

The Scottish Transport Appraisal Guidance (STAG) is based on the principles set out in the Scottish Public Finance Manual and HM Treasury's Green Book "5 Case Model" and draws heavily on DfT's Transport Appraisal Guidance (TAG). A transport appraisal considers in detail the strategic and socio-economic dimensions of the proposals to assess whether they are likely to meet intended objectives and deliver intended benefits, by assessing if they:

- Make a robust case for change – the "strategic case"; and
- Optimise Value for Money in terms of economic, social and environmental benefit – the "socio-economic case".

Value for Money considers both the monetised and non-monetised benefits and disbenefits against the costs in line with HMT Green Book. Not all impacts of an intervention can be monetised, but these are still important effects, particularly when they impact on the government's policy position. Whilst this has always been the case within STAG it is an approach that is being increasingly adopted across UKG, particularly in the context of rural areas and the levelling up agenda. There is also considerable academic research to support the approach of taking a wider view of value for money than focussing on benefits that can be accurately monetised.

The assessment is for the programme as a whole. Out of a total length of 177km, 48 km was already dualled (historically). This was included in the Do-Minimum as existing infrastructure. Some 17km out of the remaining 129 km in the programme has been completed to date but this 17km is considered part of the programme and as such is in the Do-Something. This is usual practice (otherwise there would be significant time and delivery impacts) when updating business cases. Additionally, the programme was designed at the behest of Ministers in terms of maximising speed of deliverability of an agreed position of the full dualling between Perth and Inverness which was confirmed based on the positive 2016 value for money case. As such there is no authorising authority to change the programme design or staging at this point.

More technically, the removal of the Average Speed Cameras (ASCs) as part of the A9 Dualling Programme is within the Do Something scenarios. This is simply because a commitment was made before the cameras were installed to remove the cameras once the dualling was complete. They are a temporary measure. If this position were to change the impact would be an increase in the safety benefits (increasing the BCR) in the Do-Something as the ASC system still has benefits on dual carriageway. There would be some cost associated with adjusting the system as dualling is put in place. This has not been examined in detail as removal is the stated policy position.

The 28<sup>th</sup> dated appraisal uses a multi-criteria framework which adopts a seven-point assessment scale ranging from major positive (+3) to major negative (-3) impacts. The criteria and assessment for the A9 Dualling Programme are shown overleaf.

#### 4.1 Summary of the socio-economic case

The table below is a summary of the Socio-Economic case and assessment against the programme objectives (which are an indication of the strength of the Strategic case). Whilst there are slight negative impacts in 4 of the criteria, the overall performance is strong with a rating of slight to moderate positive in qualitative terms overall.

		Strong Negative	Moderate Negative	Slight Negative	Neutral	Slight Positive	Moderate Positive	Strong Positive
		-3	-2	-1	0	+1	+2	+3
<b>Environment</b>								
	Environment			-1				
<b>Climate Change</b>								
	Greenhouse Gas Emissions			-1				
	Vulnerability to Climate Change				0			
	Potential to Adapt to the Effects of Climate Change					+1		
<b>Health, Safety and Wellbeing</b>								
	Accidents						+2	
	Security					+1		
	Health					+1		
	Health & Wellbeing					+1		
	Visual Amenity				0			
<b>Economy</b>								
	Transport Economic Efficiency						+2	
	Construction & Maintenance			-1				
	Junction Rationalisation			-1				
	Driver Frustration						+2	
	Journey Time Reliability						+2	
	Wider Economic Impacts						+2	
<b>Equality &amp; Accessibility</b>								
	Public Transport Network Coverage				0			
	Active Travel Network Coverage					+1		
	Comparative Access by People Groups					+1		
	Comparative Access by Geographic Location						+2	
	Affordability				0			
<b>Programme Objectives</b>								
	Improve the operational performance of the A9						+2	
	To improve safety for motorised and non-motorised users						+2	
	Facilitate Active Travel in the corridor					+1		
	Improve integration with public transport facilities					+1		
<b>Aggregated</b>								
	Overall Appraisal for A9 Dualling Programme					+1	+2	

## 4.2 Quantifying the Benefits

A summary of the monetised elements of the 2016 socio-economic case estimates at 2010 values and prices:

- Present value of transport benefits to be £1470 million
- Driver frustration £430 m
- Wider economic benefits £210 m and
- Present value of cost to government £1890 m.

This is estimated to give a benefit-cost to government ratio of:

- 0.78 for transport benefits
- 1.01 when including driver frustration,
- 0.89 including wider economic benefits and
- 1.12 including both wider economic benefits and driver frustration.

The monetised elements of the 2023 socio-economic case estimates at 2010 values and prices:

- Present value of transport benefits to be £800 million
- Driver frustration £230 m
- Wider economic benefits £210 m and
- Present value of cost to government £1520 m.

This is estimated to give a benefit-cost to government ratio of

- 0.52 for transport benefits
- 0.68 when including driver frustration,
- 0.66 including wider economic benefits and
- 0.81 including both wider economic benefits and driver frustration.

Whilst there are many changes in the assessment methodology between the 2016 and 2023 cases for investment, the reduction in monetised transport benefits and driver frustration benefits compared to the 2016 appraisal is primarily due to:

- The adoption of 'with policy' forecasts within our Transport Model for Scotland (TMfS). These forecasts capture a number of anticipated 'post COVID' behavioural responses, including the expectation that there will be, at a national level, further behaviour changes in order to deliver the Scottish Government's policy ambition for a 20% reduction in car km by 2030 compared to 2019. The assumption results in a fall of around 10% in traffic on the route of the A9 and is consistent with the approach taken within the Strategic Transport Projects Review 2 (STPR2).
- Updated assumptions around the future vehicle fleet, moving from Internal Combustion Engines (ICE) vehicles to Battery Electric vehicles (BEV).

- Changes in a range of appraisal parameters (including Value of Time [VOT]), in line with normal practice. See Section 5.3 for an indication of potential upcoming changes.

The breakdown of benefits across the 5 STAG criteria at a summary level are shown in the table below and in greater detail in Annex A.

<b>Element of Case</b>	<b>Case for Investment (2016)</b>		<b>Updated Assessment (2023)</b>
Valuation (£m, 2010 values and prices)			
Environment	-50		-1
Safety	344		193
Economy	1,045		601
Taxation Impacts	134		3
Present Value of Benefits (PVB)	1,473		797
Driver Frustration (DF) Benefits	430		228
Wider Economic Impacts (WEI) Benefits	210		206
Total present value of Benefits (PVB+DF+WEI)	2113		1230
Present Value of Costs (PVC)	1,892		1,518
Benefit to Cost Ratios (BCRs)			
BCR (PVB/PVC)	0.78		0.52
BCR ((PVB+DF)/PVC)	1.01		0.68
BCR ((PVB+DF+WEI)/PVC)	1.12		0.81

The A9 dualling is likely to give rise to slight negative impacts across a range of environmental receptors along the route, particularly as a result of the need to utilise undeveloped land and the impacts associated with construction. The most notable adverse impact is expected to occur with regards to interaction of the route with the Killiecrankie Battlefield. However, there are betterment opportunities in relation to wildlife crossings, improved drainage/filtering and noise reduction arising from the improvements. As such these impacts are classified as slight and would not have a material effect if monetarised.

The monetarised carbon disbenefits of operation are extremely low at £1.3m in 2010 prices and values. The calculation of these impacts is, arguably, one of the most robust methodologies in existence for capturing carbon impacts across all government departments. The transport model used tracks vehicle speeds and distances and hence fuel consumption, accounts for fuel mix, and vehicle type (eg ICE vs EV) and generates the CO2 differences between the Do-Minimum and Do-Something (including demand scenarios) from these basic principles. The monetary values are then calculated using standard HMT/UKG carbon values.

The process of construction and maintenance will lead to additional carbon emissions through activities associated with construction and the production of materials used in construction. Approximately half of these emissions (production of materials used) are expected to be in scope of emissions trading schemes and so their economic costs are implicitly included in construction costs. Other, non-traded emissions (e.g. from construction vehicles and equipment) are currently too uncertain to form part of the core socio-economic estimates of costs and benefits, but initial estimates indicate that the economic cost (of approximately £70m) will not materially change the overall conclusion of the socio-economic case (there would be a reduction in the BCR of around 0.05 but it should be noted that any alternative capital investment would also have negative construction CO2 impacts). Estimates will be further developed at detailed design phases.

The agglomeration benefits are relatively high (£161m) as part of the Wider Economic Benefits and so this component of the business case is effectively bringing businesses closer together and supporting supply chains. Whilst this is not one of the primary objectives of the A9 dualling case, it aligns with the work of the National Strategy for Economic Transformation to improve Scottish supply chains. It should be noted that the Wider Economic Benefits section as a whole employs a set of techniques, and specific methodology, that were developed across the UK by the late 2000's following an initial investigation in the 1990's.

Going further, the agglomeration benefits are by their nature a sub-set of wider supply chain benefits. For instance diversion routes off the A9 can double travel times between Perth and Inverness. This especially affects time-critical goods such as fishery products and even non-time critical goods, such as whisky, are still part of the 'Just in Time' supply chain. Note that such diversions are less likely with dualling in place, given the opportunity to operate temporary two-way traffic on the unaffected carriageway of the dualled A9 during an incident.

#### 4.3 Interaction with financial and commercial case

The BCR calculation is, as is appropriate for the socio-economic case, based on resource use – the costs are calculated at the point where they are occurred by society regardless of the way in which they are funded. This is in line with the principles of cost-benefit analysis and is equivalent to a Design & Build (D&B) contract in financial terms.

The funding of the programme is covered within the financial/commercial case and examines the Net Present Value of costs of different funding options. The financial case uses the same discount rate as the socio-economic case but as it deals with nominal rather than real values also includes an adjustment for inflation and does not require expression of results in 2010 prices as in the socio-economic case. In addition, it includes all maintenance costs rather than comparing with the Do-Minimum.

The financial case shows that there is a small difference between the NPV of costs between a D&B funding approach and one using the Mutual Investment Model (MIM). The MIM approach is around 4.8% more expensive in NPV terms (although



there are wider factors such as risk transfer that are not within this estimate). It is not normal practice to apply results from the financial and commercial case to the socio-economic case (the decision to go ahead with a project as a result of the socio-economic case is generally separate from the preferred choice of funding, and the cost streams in the financial case are not directly comparable because of the maintenance issue described above). However, it is clear that applying this difference to the NPV of costs in the socio-economic case would result in a small fall in the BCR for MIM funding compared with D&B based on choice of funding alone.

## 5. Value for money

As discussed above, both the [Green Book](#) and the Scottish Public Finance Manual (SPFM) make reference to the importance of taking a wider view of value for money than simply focusing on monetarised benefits. This section of the paper explores the issues of weighting of benefits, the potential for further monetarisation of benefits than the current position, the impact of possible future changes to appraisal techniques and a detailed discussion of the non-monetarised benefits of the programme.

### 5.1 Weighting of benefits

STAG explicitly does not weight the benefits of schemes across different criteria – this is left to decision makers as part of Investment Decision Making processes. This section explores the implications of weighting the different components within the business case in different ways.

Transport for London (TfL) give a 3 times weight to safety benefits within urban rail schemes. A simplistic application of this approach on the A9 dualling programme would increase the A9 Health and Wellbeing benefits from £190m to £570m an increase of £380m which would bring the monetarised benefits to £1,610m compared with costs of £1520m – a BCR of 1.06 However, the TfL approach is generally used where safety benefits are the prime rationale for intervention and other impacts are limited i.e. small scale urban rail interventions. In those circumstances such an approach is sensible. For more complex schemes such as the A9 it is not appropriate to simply weight some components more highly without weighting others less (in the context of whether a scheme represents overall value for money, it however could be used for choosing between options to deliver the same objectives).

This means that calculating a formal weighted BCR is problematic technically as there are not monetarised components across all the criteria – as such a more appropriate approach with complex schemes is for decision makers to consider more subjectively the importance of the safety benefits of the Programme. In this context, which could be thought of as giving a higher subjective value to the values of life/prevention of injury within the appraisal, it is more appropriate to think of an uplift to safety benefits rather than a formal reweighting. For instance (slightly over) a

doubling of the valuation of the safety benefits would (approximately) result in a BCR of 1.

The core values used are those suggested by the Green Book for Value of Life so any deviation needs to be considered as a sensitivity only.

## 5.2 Potential further monetarisation

A range of other potential benefits were explored which covered a number of areas in which appraisal methodology has evolved in recent years. A summary table can be found in Annex B. The conclusion of the work was that whilst there were a number of areas that, with additional work, could generate additional monetarisation of benefits that are currently unmonetarised, it was unlikely that any of these would be significantly large.

One exception to this conclusion is recent guidance from HMT on the monetarisation of [Wellbeing in appraisal](#). The guidance is quite complex but provides a monetarised value for improvements in individual (person) wellbeing in terms of a shift in 1 point on the standard Office of National Statistics 0-10 measure of (subjective) wellbeing<sup>3</sup>. This value is £13,000 per annum with a range of Low: £10,000 to High: £16,000 in 2019 prices and values.

The major issue with the approach for use in transport is that it requires measurement of changes that would result from a transport project, in subjective wellbeing. This is likely to be difficult both theoretically and practically to measure and determine. For example, the ONS questions (see footnote) are retrospective and would need to be reworked to reflect both an individual's current position and that which would be caused by potential future changes. There is not an immediately clear way of doing this whilst controlling appropriately for potential bias in responses.

In order to consider this for the A9 programme, what change in wellbeing would be required for the benefits of the A9 to outweigh the costs has been examined. In order for the monetarised benefits of the A9 to be in line with the costs, there would need to be a wellbeing impact for the population of the two Local Authority areas concerned (Highland and Perth & Kinross) of 0.1 shift in the measure i.e. 10% of one point on the scale. This is based on the wellbeing impacts declining over 10 years and that these effects are additional to those captured by the traditional TEE analysis i.e. not about travel time, driver frustration etc.

For Scotland as a whole, the latest available data suggests a current wellbeing score of 7.5 which allows the calculation of the required change in wellbeing. We thus have: "For the economic case of dualling the A9 to represent VfM in pure monetary terms, it would need to result in an increase in the average wellbeing of those living broadly in the vicinity of 1.3% (0.1/7.5), on top of the direct transport benefits". This

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<sup>3</sup> The Office for National Statistics (ONS) uses four survey questions to measure personal wellbeing. The questions are: "Overall, how satisfied are you with your life nowadays?" "Overall, to what extent do you feel the things you do in your life are worthwhile?" "Overall, how happy did you feel yesterday?" "Overall, how anxious did you feel yesterday?" People are asked to respond to the questions on a scale from 0 to 10 where 0 is "not at all" and 10 is "completely".

seems somewhat reasonable but is clouded by the additionality issue – it is likely that wellbeing aspects replace some but not all of the benefits captured already.

To avoid the additionality issue the test was rerun replacing ALL the benefits of the A9, for the full appraisal period but allowing the impact to similarly decline over time i.e. at year 60 it is zero (as well as discounting in the normal way). This gives a figure of a 0.04 shift in wellbeing. This results in “For the economic case of dualling the A9 to represent VfM, it would need to result in an increase in the average wellbeing of those living broadly in the vicinity of around ½ of 1%.”

The final test looks at Scotland as a whole. This is (arguably) appropriate as a measure of the total benefits of the programme as it also captures cultural, existence and non-use values. In this case, and in terms of ALL the required benefits over the appraisal period and again allowing them to decay to zero over 60 years gives a required change in wellbeing of 0.003. This gives us “For the economic case of dualling the A9 to represent VfM, it would need to result in an increase in wellbeing of those in Scotland of around 0.04%”

This sort of analysis has not been applied to transport projects to date so should be treated at this point as an additional sensitivity test.

### 5.3 Future changes to appraisal techniques and parameters

Any business case for any project is subject to change over time. This has been demonstrated by the changes in the assessment of the A9 dualling between the 2016 assessment and now. The case for the Borders railway had a BCR of 1.09 at Strategic Business Case, 1.2 at OBC and 0.7 at FBC. Despite the BCR being less than 1 at FBC stage, Ministers chose to proceed based on the Strategic case of restoring a vital link between rural and urban Scotland. Whilst the circumstances (and financial environment) are different it is worth remembering that the evaluation of Borders suggests that the realised impact was closer to the OBC than the FBC. Whilst this was primarily driven by an increase in patronage from that estimated at FBC stage (due to the recovery of the economy and housing market following the 2008 Financial Crisis) it is worth bearing in mind that infrastructure investment decisions are long term and a rounded view of the long-term impacts is appropriate. As noted above, changes in appraisal parameters have had an impact between the original case in 2016 and current position.

One particularly pertinent piece of information has become available at the time of writing. DfT has commissioned research of the value of time for goods vehicles. Historically this has been valued at the level of driver wages and this is the assumption that is present in current guidance.

The research will address the issue empirically and is likely to provide new estimates of goods VOT. There is the potential – given factors such as: just-in-time supply chains, deterioration of goods during transportation or disruption of production process for goods arriving late and the that the value of all of these is significantly greater than the amount paid to those driving the vehicle – for there to be significantly large changes suggested – over 5 times does not seem unreasonable..

Any uncertainty over the results relates to the impact of diversion routes and rerouting via off-scheme alternatives – an issue that is not likely to be applicable in the specific context of the A9 given the lack of alternative routes. The economic rationale for such a change in appraisal parameters is strong and it is considered likely that some change will be implemented by DfT and will represent a significant improvement in how freight movements are dealt with in appraisal. Current DfT plans are to consider this for inclusion within their appraisal guidance by spring 2024, following due consideration and process.

It has been possible to estimate the impact on the case for A9 dualling should the change be implemented. The freight travel time savings within the A9 dualling business case are around £250m (out of a total of £650m travel time savings that makes a significant contribution to the total TEE benefits). An increase in the value of freight time of the potential scale (5x) would increase these benefits to £1250m resulting in total benefits of £2230m and a resultant BCR of 1.47 which would represent good value for money for the scheme in terms of monetarised benefits alone. If a value were adopted at a higher level, the BCR would clearly improve further – and it would require a simple doubling of values to result in an BCR of 1.

It is considered that this alone, although the research has not yet been adopted as guidance, constitutes a considerable additional rationale for concluding that the programme is likely to provide value for money.

#### 5.4 Discussion of non-monetarised benefits

The improvements to laybys and active travel infrastructure will provide security and health benefits to visitors and residents on the corridor. Many of the smaller communities have limited access to health facilities and with an older than average population profile, the dualling will improve this access through reduced journey times. This reduction in journey times will also benefit individuals relying on emergency services making urgent responses to incidents at locations accessed from the A9 corridor. Such incidents may be unrelated to road usage, for example paramedics responding to heart attack or stroke patients, or fire services responding to residential or commercial property fires, and therefore these benefits are not captured within the monetised safety benefits. The benefits include reaching incident locations more quickly to provide immediate assistance and, for individuals requiring further healthcare in a hospital setting, enabling paramedics to take those individuals to hospital more quickly. The programme would also provide a safer environment for high speed travel by emergency responders themselves than currently exists in the single carriageway sections of the corridor.

The dualling provides an improvement in accessibility for those travelling the full length of the A9 corridor between Perth and Inverness as well as a more-local level for the communities that live and work along it. Transport benefits are broadly proportionate to population density and low deprivation. More people on higher incomes leads to more benefits. Investment decisions based on monetarised benefits alone would see nearly all investment going into the Central Belt and would reinforce and exacerbate issues within more rural communities.

Importantly, the A9 dualling provides an opportunity for the route to adapt to climate change impacts – particularly in relation to flooding events, which are expected to increase in Scotland.

Implementation of the A9 Dualling Programme is forecast to reduce fatalities by 3 casualties per annum and serious casualties by 6 per annum. By contrast with the historic accident statistics in Table 1 above, this presents a stark improvement in the severity of collisions on the route. This, in combination with the adaptations to climate change, will reduce the frequency and duration of any closures of the A9 improving the resilience of the corridor and improve journey time reliability.

The dualling would provide a consistent standard of road with increased overtaking opportunities. The provision of safer overtaking opportunities would reduce the number of vehicles travelling in platoons behind slower moving vehicles, leading to a reduction in driver frustration, which is a key contributor to driver stress.

The A9 Dualling Programme maintains existing use of Non-Motorised User facilities, whilst providing safer access points through grade-separated crossings across the A9. It also provides an opportunity for enhancing existing Active Travel infrastructure and providing new high-quality routes.

The A9 Dualling Programme is being designed to integrate with existing and planned public transport facilities along the corridor with further opportunities for integration with the Highland Main Line railway line. These benefits could be greater once a preferred route option is identified for the A9 at Dunkeld and Birnam Railway Station.

The process of construction and maintenance will lead to additional carbon emissions through activities associated with construction and the production of materials used in construction. Approximately half of these emissions (production of materials used) are expected to be in scope of emissions trading schemes and so their economic costs are implicitly included in construction costs. Other, non-traded emissions (e.g. from construction vehicles and equipment) are currently too uncertain to form part of the core socio-economic estimates of costs and benefits, but initial estimates indicate that the economic cost (of approximately £70m) will not materially change the overall conclusion of the socio-economic case (there would be a reduction in the BCR of around 0.05 but it should be noted that any alternative capital investment would also have negative construction CO<sub>2</sub> impacts). Estimates will be further developed at detailed design phases.

The Value for Money of the A9 Dualling is dependent on other policies. Climate Change emission disbenefits are heavily influenced by the future fleet composition driven by the policy to phase out the need to buy new petrol and diesel cars and vans by 2030. The relationship with the policy ambition to reduce car km by 20% by 2030 from 2019 levels is complicated. Not achieving that ambition will increase travel time benefits but also increase climate change disbenefits.

## 5.5 Social Distribution of Benefits

The socio-economic welfare benefits and disbenefits of infrastructure investment is broadly proportionate to population density. The more people being impacted, the larger the impact.

Conversely, the costs of infrastructure investment is broadly proportionate to the size of the infrastructure. A large intervention is more expensive than a small intervention. Whilst urban areas have higher land values, rural areas have more challenging terrain (which is often why they are rural).

The effect of this is that densely populated urban areas will give much higher monetised Value for Money compared to sparsely populated rural areas. The UK government recently recognised this and updated the HM Treasury Green Book and created the Department of Levelling Up, Housing, and Communities (DLUHC).

This is why it is important to assess Value for Money with a Multi-Criteria Analysis considering both monetised and non-monetised impacts and the policy context in which the decision is being made.

## 5.6 Conclusions on Value for Money

The current value of money case for the A9 dualling programme has a standard benefit cost ratio of 0.81 which includes driver frustration and wider economic benefits. There is a strong supporting strategic case and significant unmonetarised benefits which alone improve the position to a marginally positive value for money assessment.

Two further factors improve this further. Firstly, new guidance on wellbeing impacts suggest that a small increase in wellbeing at the valuations suggested by HMT guidance would be sufficient to show a strong impact in terms of monetarised benefits. There are issues with the practical application of this approach in transport but it is an important contributory factor that should not be ignored in the context of a wellbeing economy as laid out by Scotland's National Strategy for Economic Transformation. The fact that this approach is established in HMT guidance means it is appropriate for it to be considered within the overall assessment of value for money

However, significantly more importantly, the forthcoming research by DfT, if adopted as is currently planned for spring 2024, would increase the value attributable to freight on the route, to better reflect the economic impact that is currently unmonetarised within the strategic case. Estimates suggest that this would increase the BCR, when adopted, for the A9 dualling programme from 0.81 to perhaps 1.4 to 1.5 or potentially higher.

Together, these factors represent a strong rationale, at this point in time (irrespective of the funding approach), to consider that a value for money case for the Programme exists at present and may well significantly improve before the Final Business Case.

## Annex A – Detailed appraisal results

Criteria	Value
<b>Environment</b>	
Global air quality – CO2	-1.3
<b>Accidents</b>	
Total discounted savings	192.6
<b>Economic (TEE)</b>	
Travel Time (TEE)	654.7
Travel Time (Construction & Maintenance)	-33.3
Travel Time (Junction Rationalisation)	-15.6
User Charges (TEE)	3.6
Vehicle Operating Costs (TEE)	-1.5
Vehicle Operating Costs (Junction Rationalisation)	-1.8
Revenues	-3.9
Monetised summary	602.1
<b>Driver Frustration</b>	
Driver Frustration	228.5
<b>WEIs</b>	
Agglomeration economies	161.8
Increased output in competitive markets	42.2
Wider benefits – labour supply	2.2
Monetised summary	206.2
<b>Cost to Public Sector</b>	
Public sector investment costs	-1,428.1
Public sector O&M costs	-89.8
Grant/subsidy payments	0.00
Revenues	0.00
Taxation impacts	3.2

## Annex B – Exploration of other potential benefits

A range of other potential benefits were explored which covered a number of areas in which appraisal methodology has evolved in recent years. A summary of the coverage and conclusions is set out in the table below.

Potential further benefits	Coverage	Comments	Assessment methodology	Conclusion of review
<b>PB1: cycling benefits</b>	journey time savings, improved journey quality, safer routes, health benefits of increased physical activity	Benefits from improved, safer active travel routes including increased usage	Department for Transport's Active Mode Toolkit	Gaps in data on current usage and impact of A9 improvements. Likely small scale of impact on case. Don't pursue at this time
<b>PB2: Pedestrian benefits</b>	health and journey quality impacts	Benefits from improved, safer active travel routes including increased usage	Department for Transport's Active Mode Toolkit (Methodology used on A465)	As above
<b>PB3: Journey quality/driver experience</b>	Traveller stress (frustration, fear of accidents, route uncertainty)		Transport for London's Benefit Calculator with values adapted to reflect national values.	Some overlap with driver frustration adjustment. Would require information on what A9 users value in terms of journey quality. Don't pursue at this time.
	Traveller's views		(Methodology used on A465)	
	Traveller care (facilities, information etc)			
<b>PB4: Noise reduction</b>	Impact on sleep disturbance, amenity, AMI, stroke and dementia	Benefits from use of low noise surfacing, noise barriers	TAG Noise assessment Workbook (Methodology used on A465)	Would require review of DMRB Stage 3 reports to see if suitable data existed.
<b>PB5: Flood risk</b>	Reduction in flood risk	Benefits from improved road, drainage and watercourse crossing standards. Reduced frequency of flooding and climate change impact in terms of reduced risk of flooding of property and reduced risk of road closure, associated delays and substantial diversion length.	Value of flood damage avoided, value of reduced delays and avoidance of increased journey length	Would require review of DMRB Stage 3 and SEA. Not aware of any impacts that could be monetarised in this way for A9.
<b>PB6: Distributional and employment wellbeing impact</b>	Welfare and equity benefits including reduction in inequality, creation of jobs resulting in reduced social isolation and increased purpose and wellbeing	Benefits from improved accessibility, improved job opportunity from supply chain effects, increased local trade	Assessment undertaken by Simetrica Jacobs	No information has been identified that could help with this. Note that wellbeing is covered elsewhere in this paper.



			HM Treasury Guidance -, combination of welfare and equity weights to monetised benefits	
			(Methodology used on A465 – assessment undertaken by Simetrica Jacobs)	
<b>PB 7: Land value</b>	Increase in land and property value	Increase in land and property value due to improved accessibility	Land Value Uplift – likely to be low adjacent to the scheme but potential increases in the wider corridor and across north of Scotland due to improved accessibility.	No dependent developments have been identified that relate to the A9 project
<b>PB 8: Lack of suitable diversion routes -</b>	Delay time and increased journey length	Significant proportions of the route have no suitable local diversion route resulting in substantial delays and/or increased journey lengths of 60- 80 miles in event of road closure.	Value of reduced delays and avoidance of increased journey length	Data is available on the duration and frequency of incidents but not on the number of road users affected. Relatively small number of incidents per year suggest that this may not yield a significant estimated monetary impact.
<b>PB 9: Safety benefit weighting</b>	Application of multiplier to safety benefits	TfL apply a multiplier to of up to 3 in valuation of safety benefits in vfm assessment to schemes where a key driver is improving safety.	Business Case Development Manual – TfL Finance	Conclusion is that it is not clear that there is sufficient rationale to apply this multiplier.
<b>PB 10: Maintenance Improvements</b>	<b>Reduction in maintenance delays</b>	More in-depth analysis of operational and safety benefits derived from the reduction in maintenance delays. Improved infrastructure resilience reducing closures / delays.		Maintenance impacts already covered in A9 socio economic case. Not clear that there is anything additional that could be covered here.



# A9 Dualling Programme

## Discussion

Transport Scotland, SG Exchequer and Financial Management Division

16 November 2023



## 1 A9 Dualling



- Outcomes from meeting:
  - [redacted]
  - Timetable - target date for statement
  - [redacted]
  - [redacted]



\*[redacted] – out with scope

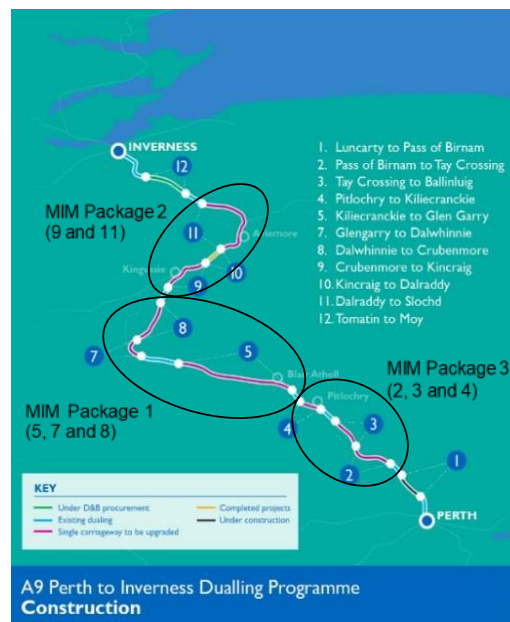
# 1 a) Case for Investment/VfM



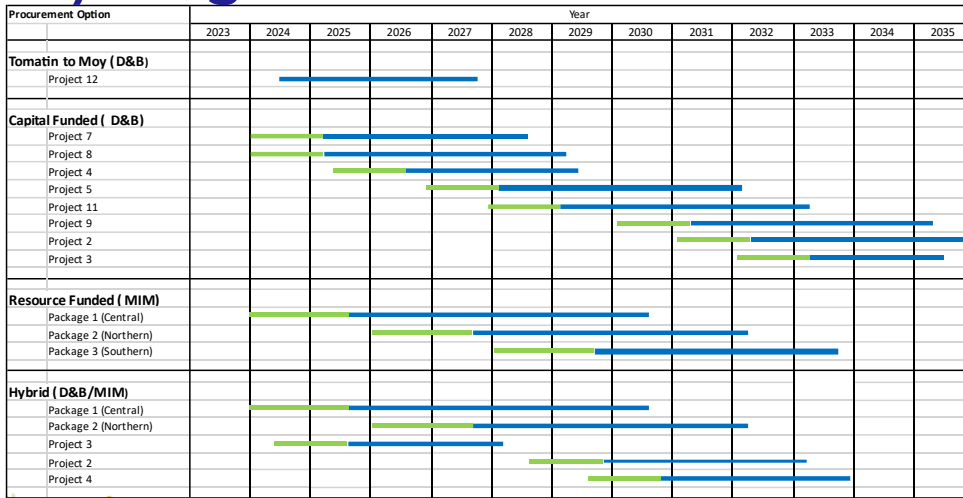
- The Strategic Case and Socio-Economic Case for the A9 Dualling Programme have been updated in 2023 (previously published Case for Investment was in 2016).
- **The Strategic Case** demonstrates the need for intervention and that the A9 Dualling Programme Objectives are still relevant, appropriate, and sufficiently robust.
- **The Socio-Economic Case** includes the Value for Money assessment, which considers both the monetised and non-monetised benefits and disbenefits against the costs in line with HMT Green Book.
- While the current monetised benefit cost ratio is 0.81, there is a strong supporting strategic case and significant non-monetised benefits which together improve the position to a positive value for money assessment for the A9 Dualling Programme.
- **The positive Value for Money assessment for the A9 Dualling Programme was endorsed by Executive Team in Investment Assurance Mode on 22 August 2023.**



# 1 a) Options Plan Layout



# 1 a) Programme Timeline



— Procurement — Construction

# 1 a) Risks



Risk	Impact	Option
Risk of insufficient bids / Market appetite	Adverse to achievability of Programme and or increase costs	D&B (more susceptible) MIM/Hybrid
Market capacity	Programme delay and or cost increase	D&B (more susceptible) MIM/Hybrid
Reduced extent of risk transfer to contracting party	Increased liability and costs associated with TS retained risk	D&B Hybrid (proportionally less than D&B)
Changes to cost of borrowing (from modelled in Business Case)	Increase in costs to TS	MIM/Hybrid (proportionally)
Funding availability	Affordability affects achievability of Programme	D&B (capital funding) MIM (cost of private financing) Hybrid (proportionally to both)
Interface challenges	Conflicting programmes, competing resource demands, delays and cost increases	D&B (more susceptible, TS risk) MIM (less susceptible, SPV risk) Hybrid (proportionally)
ONS accounting Classification post contract is 'on balance sheet'	Requires capital funding offset	MIM/Hybrid

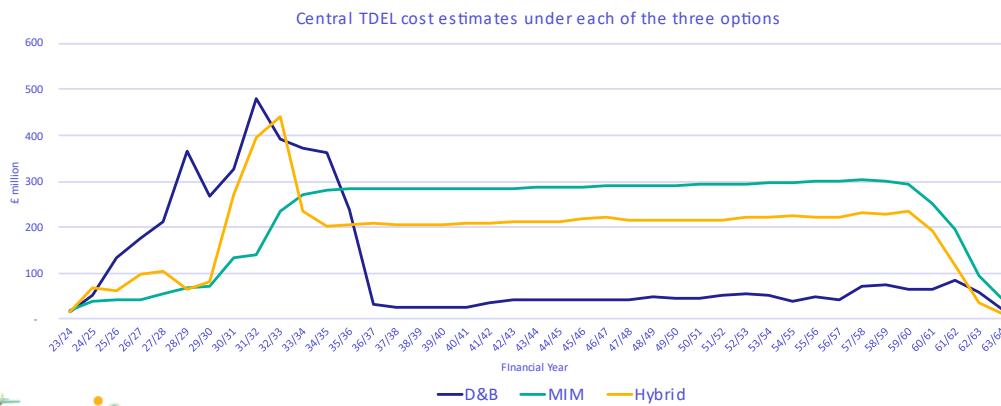


# 1 a) Costs

Option	Nominal Costs			Net Present Value of Cost (Apr 23 prices)
	Capital	Resource	Total	
<b>D&amp;B Option</b>	£3,242m	£1,458m	£4,700m	£2,388m
<b>MIM Option</b>	£281m	£8,967m	£9,248m	£2,774m
<b>Hybrid Option</b>	£1,088m	£6,709m	£7,797m	£2,688m



## The annual cost profile is quite different across the three options



## 1 a) SFT Guideline Ratios

Ratio	SFT Guideline*	MIM Option	Hybrid Option
Cost Multiplier Ratio	3.70	4.01	4.03
Revenue Commitments Ratio	9-12%	12.6%	12.7%

\* These are indicative guides rather than setting rules for decision making.



## 1 b) Key Factors

- Contract Form/Funding Source/Timetable/Risk
  - Views on use of MIM in principle
  - Preconditions for a MIM decision
  - Affordability of capital (D&B/Hybrid) v resource (Hybrid/MIM)
  - Target timetable for completion
  - Views on risk implications
  - Views on D&B v's MIM v's Hybrid



## **Extract of Updated Information Note – 1 November 2023**

From: **Lawrence Shackman**  
**Transport Scotland, Major Projects**  
01 November 2023

Cabinet Secretary for Transport, Net Zero and Just Transition  
Minister for Transport

### **A9 DUALLING PROGRAMME: UPDATED INFORMATION NOTE**

#### **Priority and Purpose**

**Routine** – This note provides information regarding issues relating to the procurement of the remaining elements of the A9 Dualling Programme (“the Programme”), including work to update the Case for Investment, findings of the assessment of procurement options and an initial indication of affordability issues relating to completion of the Programme.

#### **Recommendation**

It is recommended that the Cabinet Secretary:

- Notes the findings of the updated Case for Investment for the Programme, including the conclusions of the Accountable Officer in relation to Value for Money;
- Notes the findings of the assessment of options for procurement and delivery of the remaining elements of the Programme; and
- Notes the likely issues relating to the affordability of delivery of the remaining elements of the Programme, which will be the subject of separate further advice to be provided in due course.

#### **Context and Issues**

The Programme has been Scottish Government policy since 2007, with its Strategic Business Case completed in 2008 as part of the first Strategic Transport Projects Review (STPR1). It consists of eleven projects: two of which have been completed; one (Tomatin to Moy) is currently under procurement as a capital funded Design and Build contract and the remaining eight projects are the subject of this Information Note. Further details of the current status of individual projects that make up the Programme are set out in Annex A.

The then Minister for Transport (Ms Gilruth) updated Parliament on the Programme on 8 February 2023, confirming that the target date of 2025 for completion of the whole of the Programme was no longer achievable and that, following receipt of advice expected in Autumn 2023, a further update would be provided to Parliament on a new timescale for completion of the Programme.

Since the statement to Parliament on 8 February 2023 work has been underway to:

- Update cost estimates and programmes for procurement options, including an updated assessment of actual and forecast inflation rates, costs of borrowing, and risk costs;
- Prepare an Outline Business Case for the Programme, including the Strategic and Socio-Economic Cases that together form an update to the Case for Investment, which was originally published in 2016;
- Engage with colleagues from SG Exchequer's Infrastructure and Investment Division (IID) and Scottish Futures Trust (SFT) on wider issues relating to the potential use of the Mutual Investment Model (MIM) form of contract; and
- Engage further with Welsh Government on its experience of using the Welsh Government MIM model for the A465 Trunk Road contract (currently in construction), following previous engagement in 2020.

The outcomes of this work to date are set out in this note.

## **Options Considered and Advice**

### Case for Investment

The Case for Investment considers both the Strategic Case and the Socio-Economic Cases for the Programme. The Strategic Case sets out the assessment of how the Programme performs in respect of its specific Transport Planning Objectives as well as against wider Government policy. The Socio-Economic Case sets out the assessment of the performance of the Programme in terms of quantified costs and benefits. Together these cases establish whether the Programme is considered to represent an appropriate investment proposal, including whether it is expected to provide Value for Money.

Value for Money considers both the monetised and non-monetised benefits and disbenefits against the costs in line with HMT Green Book. This recognises that certain effects may be significant in terms of cost and/or benefit, particularly when they impact on the Government's policy position, although they may not be able to be monetised. Whilst this has always been the case within Scottish Transport Appraisal Guidance (STAG) it is an approach that is being increasingly adopted across UK Government, particularly in the context of rural areas and the levelling up agenda. There is also considerable academic research to support the approach of taking a wider view of value for money than focussing on benefits that can be accurately monetised.

A summary of the Value for Money assessment reported in the Strategic and Socio-Economic Cases prepared as part of the Outline Business Case for the Programme is included in Annex B to this paper. That assessment concludes that the combination of quantified and unquantified costs and benefits of the Programme can be considered to represent a Value for Money case for the Programme.

The Value for Money assessment of the Programme made by Transport Scotland's Accountable Officer was endorsed by Executive Team in Investment Assurance mode on 22 August.



## Procurement Options

Three procurement options have been considered:

- **Design & Build (D&B) Option** – This option entails the procurement of eight individual D&B contracts, with funding primarily from the capital budget;
- **Mutual Investment Model (MIM) Option** – This option entails the procurement of three individual MIM contracts, with funding primarily from the resource budget: and
- **Hybrid Option** – This options entails the procurement of two individual MIM contracts and three D&B contracts, with significant funding from both capital and resource budgets.

The assessment of each option is based on the implications of seeking to achieve an earliest practicable completion date deliverable by that option, balancing factors such as market appetite, market capacity and levels of disruption to the travelling public during construction. These are presented below for illustrative purposes, however it is worth noting that other options, for example based on capital availability, managing impact of the works, transport investment priorities or finance market conditions can also be considered before decisions are made.

### **Assessment of Options**

Key findings of the assessment of the procurement options are summarised in Table 1.

Table 1: Summary of assessment of the procurement options for the remainder of the Programme

<b>Option</b>	<b>Overview</b>	<b>Est. completion Timetable</b>	<b>Net Present Value of Cost (Apr 23 prices)</b>
<b>Design and Build (D&amp;B)</b>	Procurement and construction of eight D&B contracts, predominantly supported by capital funding	2035	£2,388m
<b>Mutual Investment Model (MIM)</b>	Procurement and construction of three MIM contracts, predominantly supported by resource funding	2033	£2,774m
<b>Hybrid of D&amp;B and MIM</b>	Procurement and construction of two MIM contracts and three D&B Contracts, supported by a combination of capital and resource funding	2033	£2,683m

## Completion Timetables

The earlier completion date for the MIM and Hybrid Options is considered practically achievable due to the additional resources that the largely European-based contractors leading delivery of MIM contracts are capable of deploying, compared to the resources that the largely Scottish/UK-based contractors leading delivery of the D&B contracts would be capable of deploying.

While earlier dates than are noted above are not considered practically achievable, the speed of implementation of the D&B Option could be reduced. This would result in a later completion date and hence lower the annual levels of capital funding required across the period concerned. This may be considered desirable, whether it is to align with available capital, to reduce the extent of disruption on the route, or to develop a pipeline of work that could build contractor confidence in Scotland. This would, however, increase the nominal cost of this option by extending the period over which inflation would apply.

The MIM Option is not considered suitable for implementation at a reduced speed, as market consultation has highlighted the importance of providing a continuous 'pipeline' of MIM contract opportunities, to encourage and maintain market appetite and hence competition.

The speed of implementation of the Hybrid Option could also be reduced by programming the delivery of the D&B contracts to later dates. This would result in a later overall completion date but would not significantly reduce the levels of annual capital funding required. This would, however, increase the nominal cost of this option by extending the period over which inflation would apply.

## Estimated Costs

The estimated costs of each of the options are summarised in Table 2. These costs are based on forward market rates of cost of borrowing forecast at 31 March 2023. Work is underway to update these estimated costs based on forward market rates of cost of borrowing forecast at 28 September 2023. These updated estimates will be reported in further advice to Ministers.

Table 2: Estimated Costs of Remaining Elements of the Programme

Option	Nominal Costs			Net Present Value of Cost (Apr 23 prices)
	Capital	Resource	Total	
D&B Option	£3,242m	£1,458m	£4,700m	£2,388m
MIM Option	£281m*	£8.967m**	£9,248m	£2,774m
Hybrid Option	£1,116m*	£6,700m**	£7,816m	£2,683m

\* Inclusive of SG equity investment costs and returns

\*\* Inclusive of SPV corporation tax benefits

The figures above for the MIM contracts in the MIM and Hybrid Options are net of corporation tax receipts from the MIM company and inclusive of estimated public sector equity investment costs and returns based on a modelled equity investment of 15% by the Public Sector. Public sector equity investment of up to a maximum of 20% is currently permitted with a MIM model to maintain an off balance sheet classification, with the reduced investment of 15% having been adopted by the Welsh Government in its procurements.

Although the nominal cost of the MIM and Hybrid Options are considerably higher than the nominal cost of the D&B Option, in terms of Net Present Value (NPV) of Cost, the scale of the difference is less significant. The D&B Option is estimated to result in the lowest Net Present Value (NPV) of Cost, being 10.6% lower than the Hybrid Option and 13.9% lower than the MIM Option respectively.

The performance of the MIM contracts forming part of the MIM Option and the Hybrid Option have been assessed in relation to guideline ratios identified by the Scottish Futures Trust (SFT) for reference when considering the use of MIM. The results of this assessment are summarised in Table 3.

Table 3: Performance of MIM contracts in respect of SFT guideline ratios

<b>Ratio</b>	<b>SFT Guideline Levels</b>	<b>MIM Option Performance</b>	<b>Hybrid Option Performance</b>
Cost Multiplier ratio (ratio of 'total revenue commitment over the entire contract length period' to 'total construction cost')	Up to 3.70	4.01	4.03
Revenue Commitments ratio (ratio of 'First Year Revenue Commitment' to the 'total construction cost' of the Programme)	9-12%	12.6%	12.8%

As can be seen from Table 3, the performance of the MIM contracts assessed under the MIM Option and the Hybrid Option is out with the guideline ratio levels identified by SFT.

The principal annualised funding requirements of each option are summarised in Table 4.

Table 4: Annualised funding requirement for Programme delivery options

<b>Option</b>	<b>Period over which highest levels of funding are required</b>	<b>Min. and Max. funding requirement per annum</b>	<b>Average funding requirement per annum</b>
D&B Option (capital funding)	11 Years	Min. £132m Max. £463m	£289m
MIM Option (resource funding)	26 years	Min. £279m Max. £302m	£290m
Hybrid Option (Capital and resource funding)	D&B - 10 years	Min. £40m Max. £281m	£120m
	MIM – 28 years	Min. £202m Max. £240m	£215m

### Procurement Option Risks

Although the D&B Option is estimated to result in a lower NPV of Cost based on an “expected” level of risk materialisation, it should be noted that the MIM Option provides an appreciably greater level of risk transfer to the private sector and hence protection for the Scottish Ministers from exposure to increased costs during the contract term in the event of occurrence of low likelihood/high value risk events such as delays to critical utility diversions and unexpected ground conditions being encountered.

Key risks and mitigation measures associated with each of the procurement options are summarised in Table 5.

Table 5: Summary of Key Risks and Mitigation Measures

<b>Procurement Option</b>	<b>Risk</b>	<b>Mitigation Measures</b>
D&B Option	Multiple procurements/ Contracts	<ul style="list-style-type: none"> <li>• Sequence procurements to limit concurrency</li> <li>• Deploy sufficient resources to manage concurrent procurements/contracts</li> </ul>
	Lack of Market Appetite	<ul style="list-style-type: none"> <li>• Adopt NEC4 contract</li> <li>• Establish clear pipeline of procurement opportunities</li> </ul>
	Multiple Contract interfaces	<ul style="list-style-type: none"> <li>• Sequence procurements to limit interfaces</li> <li>• Include obligations not to obstruct other contractors in contract requirements</li> </ul>

Procurement Option	Risk	Mitigation Measures
	Co-ordination across Programme	<ul style="list-style-type: none"> <li>• Deploy sufficient resources to maintain effective co-ordination across Programme</li> </ul>
	Cost Increases due to lower level of risk transfer and uncapped liabilities	<ul style="list-style-type: none"> <li>• Undertake comprehensive risk assessment prior to procurement</li> <li>• Implement risk management/mitigation strategies to eliminate or reduce risk where possible</li> </ul>
MIM Option	Balance Sheet Classification Status	<ul style="list-style-type: none"> <li>• Seek pre-procurement indication of likely classification status</li> <li>• Assess effects on classification status of potential changes to contract emerging during procurement</li> <li>• Do not proceed with award where classification status considered uncertain</li> </ul>
	Market Appetite/ Finance Availability for Contract Scale	<ul style="list-style-type: none"> <li>• Monitor market appetite for contracts of the scale envisaged to see if it deteriorates from current strong appetite</li> <li>• Monitor value for money expected on borrowing for contracts of the scale envisaged</li> </ul>
	Interfaces	<ul style="list-style-type: none"> <li>• Include obligations not to obstruct other contractors in contract requirements</li> </ul>
	Supply Chain	<ul style="list-style-type: none"> <li>• Explore robustness of supply-chain arrangements during procurement</li> </ul>
	Higher levels of risk transfer may encourage Contractors to pursue disputes if losses arise	<ul style="list-style-type: none"> <li>• Maintain effective records and comply with contract obligations to minimise potential for contractor to pursue disputes to recover costs in the event of costs increasing</li> </ul>
Hybrid Option (Individual risks noted above apply proportionally to the Hybrid Option. Further risks unique to	Shorter MIM pipeline	<ul style="list-style-type: none"> <li>• Monitor market appetite in case reduced due to reduced number of MIM contract opportunities available</li> <li>• Consider whether other projects (e.g. A96) may be suitable candidates for procurement as MIM, and hence able to be added to pipeline</li> </ul>

Procurement Option	Risk	Mitigation Measures
the Hybrid Option are noted here)	Supply Chain	<ul style="list-style-type: none"> <li>• Monitor whether availability of D&amp;B contract opportunities reduces market appetite for contractors to seek sub-contract opportunities on MIM contracts</li> </ul>

### Overall Assessment

In overall terms, and subject to consideration of affordability issues, it is considered that any of the three Options could be selected by Ministers, based on the grounds outlined below:

- **D&B Option** – may be selected if Ministers prioritise proceeding on the basis of capital funding, the lower NPV and nominal costs, accepting a later completion date and increased risk of exposure to additional costs due to the relatively lower extent of risk transfer;
- **MIM Option** – may be selected if Ministers prioritise proceeding on the basis of the earliest completion date and reduced exposure to additional costs due to the relatively higher extent of risk transfer, accepting the higher NPV and nominal costs and recognising that the expected performance of the MIM contracts lies out with the SFT guideline ratios; or
- **Hybrid Option** – may be selected if Ministers prioritise proceeding on the basis of providing a range of contracting opportunities to the market and reducing the resource funding demand of the MIM Option through the allocation of capital funding, while achieving the earliest completion date, accepting the higher NPV and nominal costs and recognising that the expected performance of the MIM contracts lies out with the SFT guideline ratios.

## **Financial and Legal Considerations**

### Initial Comments on Affordability Issues

Decisions on the timetable for the remainder of the Programme have significant financial implications, and at present no future allocation of capital and/or resource funding has been confirmed. The future outlook for both resource and capital budget is challenging, with the costs of progressing the remainder of the Programme to completion currently unaffordable from indicative Transport Scotland/TNZJT budget allocation. A pathway to affordability therefore depends on Ministers prioritising completion of the Programme ahead of other projects or programmes within its overall capital and/or resource spending plans, and allocating sufficient funding to support the completion timetable Ministers wish to achieve.

Adoption of any new timetable for completion of the Programme would require certainty of the funding required to support achievement of that timetable. This is the case for both the capital and resource financed options. For capital, there is a need for short to medium term assurances on the availability and prioritisation of capital funding. For the MIM model, longer term consideration of resource funding across all

of Scottish Government would be required as there is no potential for the transport budget to absorb in-year resource requirements in the region of £290 million.

Progress of the Programme towards either of the earliest achievable completion dates will require a multi-year allocation of funding, irrespective of the procurement/funding option selected. This would entail additional injections of funding from the SG and/or current commitments such as increases in Active Travel, new ferry procurement or critical (statutory) trunk road operation and maintenance being scaled back. Ministers will want to consider the impact on transport investment priorities in the round.

In addition to the funding required by Transport Scotland, under the terms of the MIM contract, each contract would require a public sector equity investment by the Scottish Government. As Transport Scotland would be the contracting party on behalf of Scottish Ministers for this model, this investment would have to be made via a separate entity, acting on behalf of Scottish Ministers and is therefore not included within Transport Scotland's AO responsibilities in relation to the Programme.

Further advice to Ministers will provide more detail on the affordability implications of the procurement options, to inform decision making by Ministers.

#### Retention of Government Spending

Given the value of the procurement, certain measures to provide community benefits will be specified irrespective of the procurement option selected, such as the provision of particular employment and training opportunities and the need to publicise sub-contracting opportunities via Public Contracts Scotland. Achieving these outcomes is therefore not considered to be a significant differentiator between the procurement options, although the longer duration contracts may provide more scope for investment in workforce training and development, in respect of both construction and operation and maintenance activities.

Consideration of the scope for retention of Government spending has focused on the anticipated distribution of monies paid to corporate entities, taking into account the likely nature of the corporate entities involved and the contracting arrangements they are expected to make to deliver their obligations under the contracts required by each of the procurement approaches. An assessment has been undertaken on a qualitative basis, drawing on experience of recent contracts and feedback from market consultations undertaken in respect of the Programme.

Due to the scale of the D&B contracts, it is not anticipated that Scottish domiciled contractors would be typically capable of contracting on an individual basis for these contracts. While some Scottish domiciled contractors may be able to participate in joint ventures for these contracts, it is more likely that, in order to meet the financial standing tests, UK domiciled corporate entities would be the contracting counterparty, either individually or in joint venture. Under this option Operation and Maintenance (O&M) activities in respect of the completed works would be undertaken by Transport Scotland's appointed term maintenance contractor.

Due to the nature and scale of the MIM contracts and the current attitude of large UK contractors to all forms of DBFO contracts (including MIM), it is anticipated that the contractual counter-parties would consist of European domiciled entities, typically in joint ventures. The contracting structure and underlying financial arrangements differ significantly between the MIM Option and the D&B Option. Under the MIM Option a single contract is formed with a Special Purpose Vehicle (SPV). The SPV borrows money from funders, with additional equity investment from its members, to meet the up-front costs of its contractual obligations, and repays that money from payments made by Transport Scotland over a period of typically 30 years from the point at which the completed works are available for use. The SPV forms two primary sub-contracts, one for construction of the new works and the other for operation and maintenance of network. Funders will generally be large financial lending institutions, most of which are domiciled outside Scotland, as will the majority of equity investors (with the exception of the Scottish Government, assuming that it has participated as an equity investor).

There are significant areas of similarity between the options in relation to the onwards distribution of Government spending, as well as particular differences, particularly in respect of corporate profits, given the different contracting structures. The anticipated distributions of Government spending are summarised in Annex C.

[redacted] – out with scope

## **Conclusions and Next Steps**

It is recommended that the Cabinet Secretary:

- Notes the findings of the updated Case for Investment for the Programme, including the conclusions of the Accountable Officer in relation to Value for Money;
- Notes the findings of the assessment of options for procurement and delivery of the remaining elements of the Programme; and
- Notes the likely issues relating to the affordability of delivery of the remaining elements of the Programme, which will be the subject of separate further advice to be provided in due course.

Lawrence Shackman  
Director of Major Projects

[redacted] - out with scope



## ANNEX C – ASSESSMENT OF DISTRIBUTION OF GOVERNMENT SPENDING

Spending Category	Assessment of Likelihood of Retention of Spending in Scotland
Local Labour	<ul style="list-style-type: none"> <li>• All procurement options are expected to maximise the use of local labour.</li> <li>• Supply of local labour is not expected to meet the level of demand and would therefore require to be supplemented by non-local labour.</li> <li>• Although the total length of time over which construction would take place is shorter under the MIM and Hybrid Options than the D&amp;B Option, the longer individual duration of each MIM contract would provide greater security for individuals.</li> <li>• All options would facilitate delivery of training, educational and work experience community benefits.</li> </ul>
Local Supply Chains/ Sub-Contractors	<ul style="list-style-type: none"> <li>• Under all procurement options contractors are expected to maximise the use of local supply-chains/sub-contractors, the extent and scale of which are not expected to meet the level of demand in certain capacities, and would therefore require to be supplemented by non-local supply chains/sub-contractors.</li> <li>• Although the total length of time over which construction would take place is shorter under the MIM and Hybrid Options than the D&amp;B Option, the longer individual duration of each MIM contract would provide greater security for individual businesses and hence greater encouragement to investment in training and development.</li> </ul>
Non-Local Labour/ Supply Chains/ Sub-Contractors	<ul style="list-style-type: none"> <li>• Under all procurement options contractors would require to make use of non-local labour, supply-chains and sub-contractors to complete the required works.</li> <li>• The shorter programme applying to the MIM and Hybrid Options means that peak levels of work activity would be higher under that option than under the D&amp;B Option, this higher level of activity being supported by leveraging the larger resource pool and supply chain/sub-contractor networks available from contractors active in this market.</li> <li>• Non-local labour, supply chains members or sub-contractors domiciled in Scotland would have an equal opportunity of participating in delivery of these works, with the reduced travel to their place of residence/business likely to make them more disposed to seek such opportunities than parties domiciled outside Scotland, thus maximising the involvement of such parties domiciled within Scotland.</li> </ul>

<b>Spending Category</b>	<b>Assessment of Likelihood of Retention of Spending in Scotland</b>
Management Staff (Technical and Professional)	<ul style="list-style-type: none"> <li>• Under all procurement options it is expected that, due to the nature of the contracts, the technical and professional management staff supporting these contracts will be almost entirely non-local.</li> <li>• Under all procurement options contractors will typically seek to maximise the use of long-term technical and professional staff of all grades from existing resources, supplemented with additional recruitment/agency staff as necessary.</li> <li>• Due to the involvement of European contractors in the MIM contracts and the larger team needed to manage the shorter duration programme, it is likely that the MIM and Hybrid Options will require larger levels of recruitment/ agency involvement than the D&amp;B Option.</li> <li>• Under all procurement options, non-local suitably qualified and experienced staff domiciled in Scotland are likely to be more disposed to seek opportunities to participate in the management of the work, due to the reduced travel to their place of residence.</li> <li>• The larger number of roles likely to be available and the longer duration of the individual contracts mean that such opportunities are likely to be greater under the MIM and Hybrid Options than under the D&amp;B Option, providing greater security for individuals and maximising the involvement of such parties domiciled within Scotland.</li> </ul>
Profits earned by New Works Contractor	<ul style="list-style-type: none"> <li>• Due to the scale of the contracts, there is limited likelihood that corporate profits earned by contractors working on the D&amp;B Option would be retained within Scotland.</li> <li>• This position would only change if the scale of the individual contracts were to be significantly reduced and the overall delivery programme extended. In addition to delaying completion of the programme, such an approach would result in increased nominal costs, due to additional inflation accruing, and increased real costs, due to smaller contracts providing reduced efficiencies.</li> <li>• Due to the scale of the contracts, there is little likelihood that corporate profits earned by contractors working on the MIM contracts under the MIM and Hybrid Options would be retained in Scotland.</li> </ul>
Profits earned by O&M Contractor	<ul style="list-style-type: none"> <li>• Under the D&amp;B Option, O&amp;M activities would be undertaken by Transport Scotland's network maintenance contractors. There is therefore a high likelihood under this option that corporate profits associated with delivery of these works would be retained within Scotland.</li> <li>• Under the MIM Option, O&amp;M activities may be undertaken by partner contractors domiciled in Scotland or from within the</li> </ul>

<b>Spending Category</b>	<b>Assessment of Likelihood of Retention of Spending in Scotland</b>
	<p>corporate organisation of the parties bidding for the contract. There is therefore a possibility under this option that corporate profits associated with delivery of these works may be retained within Scotland, but there is also a possibility that this would not be the case.</p>
Profits earned by SPV/ Lenders	<ul style="list-style-type: none"> <li>• This category is not applicable to the D&amp;B Option.</li> <li>• Under the MIM contracts in the MIM and Hybrid Options there is little likelihood that corporate profits in this category would be retained within Scotland.</li> </ul>
Indirect Benefits to Local Economies	<ul style="list-style-type: none"> <li>• Under all procurement options it is expected that the temporary residence of both labour and management staff within the corridor will result in indirect benefits to local economies.</li> <li>• The overall scale of such indirect benefits is considered to be similar between the options, however, the shorter overall duration of the MIM and Hybrid Option is likely to result in a higher peak level of indirect benefit and the larger number of D&amp;B contracts is likely to result in a wider geographic spread of indirect benefits.</li> </ul>

## **Extract of Note of Meeting on 16 November 2023**

### **A9 Dualling Programme: Joint Ministerial Meeting with Officials Discussion on procurement options and approach to decision making Minute of Meeting**

Thursday 16 November 2023 10:30-11:15

#### **Attendees**

Shona Robinson MSP (SR) - Deputy First Minister and Cabinet Secretary for Finance

Màiri McAllan MSP (MM) – Cabinet Secretary Transport, Net Zero and Just Transition

Fiona Hyslop MSP (FH) – Minister for Transport

Kieran Lumsden (KL) – Deputy Private Secretary (DFM and Cab Sec Finance)

[redacted] – Private Secretary (Cab Sec TNZJT)

[redacted] – Private Secretary (MfT)

Alison Irvine (AI) – Interim Chief Executive Transport Scotland

Lawrence Shackman (LS) – Director Major Projects Transport Scotland

[redacted] – Deputy Director Infrastructure and Investment Scottish Exchequer (SE)

[redacted] – Head of Project Delivery TS

[redacted] – Head of the A9 Dualling Programme TS

[redacted] – A9 Dualling Team member TS

[redacted] – A9 Dualling Communications Lead TS

[redacted] – Head of National Infrastructure Policy Unit SE

[redacted] – Finance Business Partner SE

[redacted] – Head of Design Team 1 and 3 TS

[redacted] – Special Advisor

#### **Apologies: None**

#### **Discussion Points**

1. MM summarised the purpose of the meeting to discuss the procurement options and costs thereof for the remainder of the A9 Dualling Programme and confirmation of the approach to decision making; and noted that an update to Parliament is to be provided following receipt of advice from Officials.
2. SR confirmed that the decision for the A9 Programme will be a Cabinet Decision.
3. Officials (TS) summarised the findings of the update to the Business Case and that this presents a positive Value for Money assessment for the A9 Programme, and provided a summary of the three potential delivery options (Design & Build (D&B), Mutual Investment Model (MIM), and Hybrid (using both D&B and MIM)) described in the Information Note dated 1 November 2023. This covered programme timelines, risks and costs of the options, and

included the recently updated financial analysis of costs based on financial market forecasts as at end of September 2023.

4. Officials ([redacted]) summarised the current fiscal position and the comparative financial consequences of the funding options, via D&B, MIM or a combination thereof, and the challenges that funding the A9 Programme would present for either the short-medium term Capital budget or the long-term resource budget, with reprioritising of other SG investment required. Officials ([redacted]) confirmed that advice on funding options will be provided to DFM/Cab Sec Finance shortly.
5. SR acknowledged the information provided and the relative consequences, potentially conflicting demands and challenges that all of these factors present, which were then subject to general discussion.
6. SR highlighted that Officials' advice requires to clearly set out what is possible to address these issues and the consequences of doing so to provide certainty of the timetable for delivery of the completed A9 Programme and to support propriety of decision making.
7. [redact] – out with scope

#### **Actions**

1. **ACTION** – Officials ([redacted]) to issue advice on funding options to DFM/Cab Sec Finance.
2. **ACTION** – Officials (TS and [redacted]) to liaise on preparation of paper for decision making by the Cabinet.
3. **ACTION** – [redact] – out with scope

## **Extract of Information Note and Value for Money Summary – 6 October 2023**

From: **Lawrence Shackman**  
**Transport Scotland, Major Projects**  
06 October 2023

Cabinet Secretary for Transport, Net Zero and Just Transition  
Minister for Transport

### **A9 DUALLING PROGRAMME: INFORMATION NOTE**

#### **Priority and Purpose**

**Routine** – This note provides information regarding issues relating to the procurement of the remaining elements of the A9 Dualling Programme (“the Programme”), including work to update the Case for Investment, findings of the assessment of procurement options and an initial indication of affordability issues relating to completion of the Programme.

#### **Recommendation**

It is recommended that the Cabinet Secretary:

- Notes the findings of the updated Case for Investment for the Programme, including the conclusions of the Accountable Officer in relation to Value for Money;
- Notes the findings of the assessment of options for procurement and delivery of the remaining elements of the Programme; and
- Notes the likely issues relating to the affordability of delivery of the remaining elements of the Programme, which will be the subject of separate further advice to be provided in due course.

#### **Context and Issues**

The Programme has been Scottish Government policy since 2007, with its Strategic Business Case completed in 2008 as part of the first Strategic Transport Projects Review (STPR1). It consists of eleven projects: two of which have been completed; one (Tomatin to Moy) is currently under procurement as a capital funded Design and Build contract and the remaining eight projects are the subject of this Information Note. Further details of the current status of individual projects that make up the Programme are set out in Annex A.

The then Minister for Transport (Ms Gilruth) updated Parliament on the Programme on 8 February 2023, confirming that the target date of 2025 for completion of the whole of the Programme was no longer achievable and that, following receipt of advice expected in Autumn 2023, a further update would be provided to Parliament on a new timescale for completion of the Programme.

Since the statement to Parliament on 8 February 2023 work has been underway to:

- Update cost estimates and programmes for procurement options, including an updated assessment of actual and forecast inflation rates, costs of borrowing, and risk costs;
- Prepare an Outline Business Case for the Programme, including the Strategic and Socio-Economic Cases that together form an update to the Case for Investment, which was originally published in 2016;
- Engage with colleagues from SG Exchequer's Infrastructure and Investment Division (IID) and Scottish Futures Trust (SFT) on wider issues relating to the potential use of the Mutual Investment Model (MIM) form of contract; and
- Engage further with Welsh Government on its experience of using the Welsh Government MIM model for the A465 Trunk Road contract (currently in construction), following previous engagement in 2020.

The outcomes of this work to date are set out in this note.

## **Options Considered and Advice**

### Case for Investment

The Case for Investment considers both the Strategic Case and the Socio-Economic Cases for the Programme. The Strategic Case sets out the assessment of how the Programme performs in respect of its specific Transport Planning Objectives as well as against wider Government policy. The Socio-Economic Case sets out the assessment of the performance of the Programme in terms of quantified costs and benefits. Together these cases establish whether the Programme is considered to represent an appropriate investment proposal, including whether it is expected to provide Value for Money.

Value for Money considers both the monetised and non-monetised benefits and disbenefits against the costs in line with HMT Green Book. This recognises that certain effects may be significant in terms of cost and/or benefit, particularly when they impact on the Government's policy position, although they may not be able to be monetised. Whilst this has always been the case within Scottish Transport Appraisal Guidance (STAG) it is an approach that is being increasingly adopted across UK Government, particularly in the context of rural areas and the levelling up agenda. There is also considerable academic research to support the approach of taking a wider view of value for money than focussing on benefits that can be accurately monetised.

A summary of the Value for Money assessment reported in the Strategic and Socio-Economic Cases prepared as part of the Outline Business Case for the Programme is included in Annex B to this paper. That assessment concludes that the combination of quantified and unquantified costs and benefits of the Programme can be considered to represent a Value for Money case for the Programme.

The Value for Money assessment of the Programme made by Transport Scotland's Accountable Officer was endorsed by Executive Team in Investment Assurance mode on 22 August.

### Procurement Options

Three procurement options have been considered:

- **Design & Build (D&B) Option** – This option entails the procurement of eight individual D&B contracts, with funding primarily from the capital budget;
- **Mutual Investment Model (MIM) Option** – This option entails the procurement of three individual MIM contracts, with funding primarily from the resource budget: and
- **Hybrid Option** – This options entails the procurement of two individual MIM contracts and three D&B contracts, with significant funding from both capital and resource budgets.

The assessment of each option is based on the implications of seeking to achieve an earliest practicable completion date deliverable by that option, balancing factors such as market appetite, market capacity and levels of disruption to the travelling public during construction. These are presented below for illustrative purposes, however it is worth noting that other options, for example based on capital availability, managing impact of the works, transport investment priorities or finance market conditions can also be considered before decisions are made.

### Assessment of Options

Key findings of the assessment of the procurement options are summarised in Table 1.

Table 1: Summary of assessment of the procurement options for the remainder of the Programme

Option	Overview	Est. completion Timetable	Net Present Value of Cost (Apr 23 prices)
<b>Design and Build (D&amp;B)</b>	Procurement and construction of eight D&B contracts, predominantly supported by capital funding	2035	£2,256m
<b>Mutual Investment Model (MIM)*</b>	Procurement and construction of three MIM contracts, predominantly supported by resource funding	2033	£2,364m*
<b>Hybrid of D&amp;B and MIM*</b>	Procurement and construction of two MIM contracts and three D&B Contracts, supported by a combination of capital and resource funding	2033	£2,352m*

\* The viability of options involving use of MIM contracts is the subject of a current Exchequer assurance process, and the Net Present Value figures reported above are subject to revision based on updated financial modelling in progress at present.



## Completion Timetables

The earlier completion date for the MIM and Hybrid Options is considered practically achievable due to the additional resources that the largely European-based contractors leading delivery of MIM contracts are capable of deploying, compared to the resources that the largely Scottish/UK-based contractors leading delivery of the D&B contracts would be capable of deploying.

While earlier dates than are noted above are not considered practically achievable, the speed of implementation of the D&B Option could be reduced. This would result in a later completion date and hence lower the annual levels of capital funding required across the period concerned. This may be considered desirable, whether it is to align with available capital, to reduce the extent of disruption on the route, or to develop a pipeline of work that could build contractor confidence in Scotland. This would, however, increase the nominal cost of this option by extending the period over which inflation would apply.

The MIM Option is not considered suitable for implementation at a reduced speed, as market consultation has highlighted the importance of providing a continuous 'pipeline' of MIM contract opportunities, to encourage and maintain market appetite and hence competition.

The speed of implementation of the Hybrid Option could also be reduced by programming the delivery of the D&B contracts to later dates. This would result in a later overall completion date but would not significantly reduce the levels of annual capital funding required. This would, however, increase the nominal cost of this option by extending the period over which inflation would apply.

## Estimated Costs

The estimated costs of each of the options are summarised in Table 2. These costs are based on forward market rates of cost of borrowing forecast at 31 March 2023. Work is underway to update these estimated costs based on forward market rates of cost of borrowing forecast at 28 September 2023. These updated estimates will be reported in further advice to Ministers.

Table 2: Estimated Costs of Remaining Elements of the Programme

Option	Nominal Costs			Net Present Value of Cost (Apr 23 prices)
	Capital	Resource	Total	
D&B Option	£3,030m	£1,450m	£4,480m	£2,256m
MIM Option	£297m*	£7,534m**	£7,831m	£2,364m
Hybrid Option	£1,067m*	£5,698m**	£6,765m	£2,352m

\* Inclusive of SG equity investment costs and returns

\*\* Inclusive of SPV corporation tax benefits

The figures above for the MIM contracts in the MIM and Hybrid Options are net of corporation tax receipts from the MIM company and inclusive of estimated public sector equity investment costs and returns based on a modelled equity investment of 15% by the Public Sector. Public sector equity investment of up to a maximum of 20% is currently permitted with a MIM model to maintain an off balance sheet classification, with the reduced investment of 15% having been adopted by the Welsh Government in its procurements.

Although the nominal cost of the MIM and Hybrid Options are considerably higher than the nominal cost of the D&B Option, in terms of Net Present Value (NPV) of Cost, the scale of the difference is less significant. The D&B Option is estimated to result in the lowest Net Present Value (NPV) of Cost, being 4.1% lower than the Hybrid Option and 4.6% lower than the MIM Option respectively.

The principal annualised funding requirements of each option are summarised in Table 3.

Table 3: Annualised funding requirement for Programme delivery options

<b>Option</b>	<b>Period over which highest levels of funding are required</b>	<b>Min. and Max. funding requirement per annum</b>	<b>Average funding requirement per annum</b>
D&B Option (capital funding)	11 Years	Min. £125m Max. £432m	£269m
MIM Option (resource funding)	26 years	Min. £228m Max. £252m	£240m
Hybrid Option (Capital and resource funding)	D&B - 8 years	Min. £47m Max. £262m	£125m
	MIM – 26 years	Min. £160m Max. £177m	£168m

### Procurement Option Risks

Although the D&B Option is estimated to result in a lower NPV of Cost based on an “expected” level of risk materialisation, it should be noted that the MIM Option provides an appreciably greater level of risk transfer to the private sector and hence protection for the Scottish Ministers from exposure to increased costs during the contract term in the event of occurrence of low likelihood/high value risk events such as delays to critical utility diversions and unexpected ground conditions being encountered.

Key risks and mitigation measures associated with each of the procurement options are summarised in Table 4.

Table 4: Summary of Key Risks and Mitigation Measures

<b>Procurement Option</b>	<b>Risk</b>	<b>Mitigation Measures</b>
D&B Option	Multiple procurements/ Contracts	<ul style="list-style-type: none"> <li>• Sequence procurements to limit concurrency</li> <li>• Deploy sufficient resources to manage concurrent procurements/contracts</li> </ul>
	Lack of Market Appetite	<ul style="list-style-type: none"> <li>• Adopt NEC4 contract</li> <li>• Establish clear pipeline of procurement opportunities</li> </ul>
	Multiple Contract interfaces	<ul style="list-style-type: none"> <li>• Sequence procurements to limit interfaces</li> <li>• Include obligations not to obstruct other contractors in contract requirements</li> </ul>
	Co-ordination across Programme	<ul style="list-style-type: none"> <li>• Deploy sufficient resources to maintain effective co-ordination across Programme</li> </ul>
	Cost Increases due to lower level of risk transfer and uncapped liabilities	<ul style="list-style-type: none"> <li>• Undertake comprehensive risk assessment prior to procurement</li> <li>• Implement risk management/mitigation strategies to eliminate or reduce risk where possible</li> </ul>
MIM Option	Balance Sheet Classification Status	<ul style="list-style-type: none"> <li>• Seek pre-procurement indication of likely classification status</li> <li>• Assess effects on classification status of potential changes to contract emerging during procurement</li> <li>• Do not proceed with award where classification status considered uncertain</li> </ul>
	Market Appetite/ Finance Availability for Contract Scale	<ul style="list-style-type: none"> <li>• Monitor market appetite for contracts of the scale envisaged to see if it deteriorates from current strong appetite</li> <li>• Monitor value for money expected on borrowing for contracts of the scale envisaged</li> </ul>
	Interfaces	<ul style="list-style-type: none"> <li>• Include obligations not to obstruct other contractors in contract requirements</li> </ul>

Procurement Option	Risk	Mitigation Measures
	Supply Chain	<ul style="list-style-type: none"> <li>Explore robustness of supply-chain arrangements during procurement</li> </ul>
	Higher levels of risk transfer may encourage Contractors to pursue disputes if losses arise	<ul style="list-style-type: none"> <li>Maintain effective records and comply with contract obligations to minimise potential for contractor to pursue disputes to recover costs in the event of costs increasing</li> </ul>
Hybrid Option (Individual risks noted above apply proportionally to the Hybrid Option. Further risks unique to the Hybrid Option are noted here)	Shorter MIM pipeline	<ul style="list-style-type: none"> <li>Monitor market appetite in case reduced due to reduced number of MIM contract opportunities available</li> <li>Consider whether other projects (e.g. A96) may be suitable candidates for procurement as MIM, and hence able to be added to pipeline</li> </ul>
	Supply Chain	<ul style="list-style-type: none"> <li>Monitor whether availability of D&amp;B contract opportunities reduces market appetite for contractors to seek sub-contract opportunities on MIM contracts</li> </ul>

### Overall Assessment

In overall terms, and subject to consideration of affordability issues, it is considered that any of the three Options could be selected by Ministers, based on the grounds outlined below:

- **D&B Option** – may be selected if Ministers prioritise proceeding on the basis of capital funding, the lower NPV and nominal costs, accepting a later completion date and increased risk of exposure to additional costs due to the relatively lower extent of risk transfer;
- **MIM Option** – may be selected if Ministers prioritise proceeding on the basis of the earliest completion date and reduced exposure to additional costs due to the relatively higher extent of risk transfer, accepting the higher NPV and nominal costs; or
- **Hybrid Option** – may be selected if Ministers prioritise proceeding on the basis of providing a range of contracting opportunities to the market and reducing the resource funding demand of the MIM Option through the allocation of capital funding, while achieving the earliest completion date.

### **Financial and Legal Considerations**

#### Initial Comments on Affordability Issues

Decisions on the timetable for the remainder of the Programme have significant financial implications, and at present no future allocation of capital and/or resource funding has been confirmed. The future outlook for both resource and capital budget is challenging, with the costs of progressing the remainder of the Programme to completion currently unaffordable from indicative Transport Scotland/TNZJT budget allocation. A pathway to affordability therefore depends on Ministers prioritising completion of the Programme ahead of other projects or programmes within its overall capital and/or resource spending plans, and allocating sufficient funding to support the completion timetable Ministers wish to achieve.

Adoption of any new timetable for completion of the Programme would require certainty of the funding required to support achievement of that timetable. This is the case for both the capital and resource financed options. For capital, there is a need for short to medium term assurances on the availability and prioritisation of capital funding. For the MIM model, longer term consideration of resource funding across all of Scottish Government would be required as there is no potential for the transport budget to absorb in-year resource requirements in the region of £250 million.

Progress of the Programme towards either of the earliest achievable completion dates will require a multi-year allocation of funding, irrespective of the procurement/funding option selected. This would entail additional injections of funding from the SG and/or current commitments such as increases in Active Travel, new ferry procurement or critical (statutory) trunk road operation and maintenance being scaled back. Ministers will want to consider the impact on transport investment priorities in the round.

In addition to the funding required by Transport Scotland, under the terms of the MIM contract, each contract would require a public sector equity investment by the Scottish Government. As Transport Scotland would be the contracting party on behalf of Scottish Ministers for this model, this investment would have to be made via a separate entity, acting on behalf of Scottish Ministers and is therefore not included within Transport Scotland's AO responsibilities in relation to the Programme.

Further advice to Ministers will provide more detail on the affordability implications of the procurement options, to inform decision making by Ministers.

### Retention of Government Spending

Given the value of the procurement, certain measures to provide community benefits will be specified irrespective of the procurement option selected, such as the provision of particular employment and training opportunities and the need to publicise sub-contracting opportunities via Public Contracts Scotland. Achieving these outcomes is therefore not considered to be a significant differentiator between the procurement options, although the longer duration contracts may provide more scope for investment in workforce training and development, in respect of both construction and operation and maintenance activities.

Consideration of the scope for retention of Government spending has focused on the anticipated distribution of monies paid to corporate entities, taking into account the

likely nature of the corporate entities involved and the contracting arrangements they are expected to make to deliver their obligations under the contracts required by each of the procurement approaches. An assessment has been undertaken on a qualitative basis, drawing on experience of recent contracts and feedback from market consultations undertaken in respect of the Programme.

Due to the scale of the D&B contracts, it is not anticipated that Scottish domiciled contractors would be typically capable of contracting on an individual basis for these contracts. While some Scottish domiciled contractors may be able to participate in joint ventures for these contracts, it is more likely that, in order to meet the financial standing tests, UK domiciled corporate entities would be the contracting counter-party, either individually or in joint venture. Under this option Operation and Maintenance (O&M) activities in respect of the completed works would be undertaken by Transport Scotland's appointed term maintenance contractor.

Due to the nature and scale of the MIM contracts and the current attitude of large UK contractors to all forms of DBFO contracts (including MIM), it is anticipated that the contractual counter-parties would consist of European domiciled entities, typically in joint ventures. The contracting structure and underlying financial arrangements differ significantly between the MIM Option and the D&B Option. Under the MIM Option a single contract is formed with a Special Purpose Vehicle (SPV). The SPV borrows money from funders, with additional equity investment from its members, to meet the up-front costs of its contractual obligations, and repays that money from payments made by Transport Scotland over a period of typically 30 years from the point at which the completed works are available for use. The SPV forms two primary sub-contracts, one for construction of the new works and the other for operation and maintenance of network. Funders will generally be large financial lending institutions, most of which are domiciled outside Scotland, as will the majority of equity investors (with the exception of the Scottish Government, assuming that it has participated as an equity investor).

There are significant areas of similarity between the options in relation to the onwards distribution of Government spending, as well as particular differences, particularly in respect of corporate profits, given the different contracting structures. The anticipated distributions of Government spending are summarised in Annex C.

[redacted] – out with scope

## **Conclusions and Next Steps**

It is recommended that the Cabinet Secretary:

- Notes the findings of the updated Case for Investment for the Programme, including the conclusions of the Accountable Officer in relation to Value for Money;
- Notes the findings of the assessment of options for procurement and delivery of the remaining elements of the Programme; and
- Notes the likely issues relating to the affordability of delivery of the remaining elements of the Programme, which will be the subject of separate further advice to be provided in due course.

Lawrence Shackman  
Director of Major Projects

## ANNEX C – ASSESSMENT OF DISTRIBUTION OF GOVERNMENT SPENDING

Spending Category	Assessment of Likelihood of Retention of Spending in Scotland
Local Labour	<ul style="list-style-type: none"> <li>• All procurement options are expected to maximise the use of local labour.</li> <li>• Supply of local labour is not expected to meet the level of demand and would therefore require to be supplemented by non-local labour.</li> <li>• Although the total length of time over which construction would take place is shorter under the MIM and Hybrid Options than the D&amp;B Option, the longer individual duration of each MIM contract would provide greater security for individuals.</li> <li>• All options would facilitate delivery of training, educational and work experience community benefits.</li> </ul>
Local Supply Chains/ Sub-Contractors	<ul style="list-style-type: none"> <li>• Under all procurement options contractors are expected to maximise the use of local supply-chains/sub-contractors, the extent and scale of which are not expected to meet the level of demand in certain capacities, and would therefore require to be supplemented by non-local supply chains/sub-contractors.</li> <li>• Although the total length of time over which construction would take place is shorter under the MIM and Hybrid Options than the D&amp;B Option, the longer individual duration of each MIM contract would provide greater security for individual businesses and hence greater encouragement to investment in training and development.</li> </ul>
Non-Local Labour/ Supply Chains/ Sub-Contractors	<ul style="list-style-type: none"> <li>• Under all procurement options contractors would require to make use of non-local labour, supply-chains and sub-contractors to complete the required works.</li> <li>• The shorter programme applying to the MIM and Hybrid Options means that peak levels of work activity would be higher under that option than under the D&amp;B Option, this higher level of activity being supported by leveraging the larger resource pool and supply chain/sub-contractor networks available from contractors active in this market.</li> <li>• Non-local labour, supply chains members or sub-contractors domiciled in Scotland would have an equal opportunity of participating in delivery of these works, with the reduced travel to their place of residence/business likely to make them more disposed to seek such opportunities than parties domiciled outside Scotland, thus maximising the involvement of such parties domiciled within Scotland.</li> </ul>



<b>Spending Category</b>	<b>Assessment of Likelihood of Retention of Spending in Scotland</b>
Management Staff (Technical and Professional)	<ul style="list-style-type: none"> <li>• Under all procurement options it is expected that, due to the nature of the contracts, the technical and professional management staff supporting these contracts will be almost entirely non-local.</li> <li>• Under all procurement options contractors will typically seek to maximise the use of long-term technical and professional staff of all grades from existing resources, supplemented with additional recruitment/agency staff as necessary.</li> <li>• Due to the involvement of European contractors in the MIM contracts and the larger team needed to manage the shorter duration programme, it is likely that the MIM and Hybrid Options will require larger levels of recruitment/ agency involvement than the D&amp;B Option.</li> <li>• Under all procurement options, non-local suitably qualified and experienced staff domiciled in Scotland are likely to be more disposed to seek opportunities to participate in the management of the work, due to the reduced travel to their place of residence.</li> <li>• The larger number of roles likely to be available and the longer duration of the individual contracts mean that such opportunities are likely to be greater under the MIM and Hybrid Options than under the D&amp;B Option, providing greater security for individuals and maximising the involvement of such parties domiciled within Scotland.</li> </ul>
Profits earned by New Works Contractor	<ul style="list-style-type: none"> <li>• Due to the scale of the contracts, there is limited likelihood that corporate profits earned by contractors working on the D&amp;B Option would be retained within Scotland.</li> <li>• This position would only change if the scale of the individual contracts were to be significantly reduced and the overall delivery programme extended. In addition to delaying completion of the programme, such an approach would result in increased nominal costs, due to additional inflation accruing, and increased real costs, due to smaller contracts providing reduced efficiencies.</li> <li>• Due to the scale of the contracts, there is little likelihood that corporate profits earned by contractors working on the MIM contracts under the MIM and Hybrid Options would be retained in Scotland.</li> </ul>
Profits earned by O&M Contractor	<ul style="list-style-type: none"> <li>• Under the D&amp;B Option, O&amp;M activities would be undertaken by Transport Scotland's network maintenance contractors. There is therefore a high likelihood under this option that corporate profits associated with delivery of these works would be retained within Scotland.</li> <li>• Under the MIM Option, O&amp;M activities may be undertaken by partner contractors domiciled in Scotland or from within the</li> </ul>

<b>Spending Category</b>	<b>Assessment of Likelihood of Retention of Spending in Scotland</b>
	<p>corporate organisation of the parties bidding for the contract. There is therefore a possibility under this option that corporate profits associated with delivery of these works may be retained within Scotland, but there is also a possibility that this would not be the case.</p>
Profits earned by SPV/ Lenders	<ul style="list-style-type: none"> <li>• This category is not applicable to the D&amp;B Option.</li> <li>• Under the MIM contracts in the MIM and Hybrid Options there is little likelihood that corporate profits in this category would be retained within Scotland.</li> </ul>
Indirect Benefits to Local Economies	<ul style="list-style-type: none"> <li>• Under all procurement options it is expected that the temporary residence of both labour and management staff within the corridor will result in indirect benefits to local economies.</li> <li>• The overall scale of such indirect benefits is considered to be similar between the options, however, the shorter overall duration of the MIM and Hybrid Option is likely to result in a higher peak level of indirect benefit and the larger number of D&amp;B contracts is likely to result in a wider geographic spread of indirect benefits.</li> </ul>

## **Extract of Note of Meeting on 18 October 2023**

### **A9 Dualling Programme: Ministerial Information Note - Discussion Minute of Meeting**

Wednesday 18 October 2023 – 15:00 – 15:45

#### **Attendees**

Màiri McAllan MSP (MM) – Cabinet Secretary for Transport, Net Zero and Just Transition

[redacted] – Private Secretary

[redacted] – Deputy Private Secretary

Lawrence Shackman (LS) – Director of Major Projects, Transport Scotland (TS)

[redacted] – Head of Project Delivery

[redacted] - Head of A9 Dualling Programme

[redacted] - A9 Dualling Programme Delivery Team

[redacted] - A9 Dualling Programme Delivery Team (minutes)

[redacted] - Deputy Director for Infrastructure and Investment, Scottish Exchequer (SE)

**Apologies:** Alison Irvine – Interim Chief Executive Transport Scotland, due to disruption to return travel from a business commitment.

#### **Discussion Points**

1. Officials provided a summary of the three potential delivery options (Design & Build (D&B) Option, Mutual Investment Model (MIM) Option, and Hybrid Option (using both D&B and MIM)) described in the Information Note issued on 6 October 2023. This covered programme timelines, risks and costs of the options, and included an outline of the emerging findings from recently updated financial analysis of costs based on financial market forecasts as at end of September 2023.
2. Officials noted that work to finalise the updated financial analysis was ongoing, and a general discussion followed on the issues set out in the Information Note and the implications of the emerging findings of the updated financial analysis.
3. [redacted] confirmed SE's work on overall affordability and assurance around the use of the MIM model was ongoing. MM acknowledged the joint interests and noted that a joint meeting with MM and the Deputy First Minister/Cabinet Secretary for Finance should be arranged for an early date to consider the issues and confirm the approach to decision making. [redacted] took an action for Private Office to seek a suitable diary slot for this meeting.
4. [redacted] – out with scope
5. [redacted] – out with scope

## **Actions**

1. **ACTION** - Private Office to seek a suitable diary slot for a meeting with Cab Sec TNZJT and DFM/Cab Sec Finance at an early date to confirm approach to decision making.