March 2020

Review of RIS1 Major Scheme Scope Changes and Cost Impacts

Prepared for:

The Office of Rail and Road
25 Cabot Square
Canary Wharf
London
E14 4QZ
United Kingdom


CER

IMPORTANT NOTICE

The findings contained within this report are based on interviews with Highways England personnel and information provided by Highways England and the Office of Rail and Road. We have assumed that information provided to us is reliable and we have not sought to independently verify its accuracy.

Whilst every effort has been made to identify and obtain the relevant information, we cannot guarantee that we have been provided with all information relevant to the subject matter of this review. Should further relevant information come to light that was not provided to us, it may be necessary to update our findings and recommendations.

This review considered a sample of eight Highways England's schemes being developed within Road Period 1. These schemes were jointly selected by the Office of Rail and Road and Highways England and were selected as they demonstrated some of the largest cost variances within the portfolio. The findings and recommendations within this report should be taken in this context and they may not reflect the performance of the wider portfolio being developed in Road Period 1.

This review was conducted in accordance with the terms of our contract with the Office of Rail and Road, dated 27 September 2019.

The photographs used within this report are sourced from Highways England's official Flickr account (https://www.flickr.com/photos/highwaysengland/). These photographs contain public sector information licensed under the Open Government Licence v3. A link to this licence can be found at - http://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/.

Table of Contents

EXECUTIVE SUMMARY

1 EXECUTIVE SUMMARY

The Department for Transport's first Road Investment Strategy, known as RIS1, defined a five-year programme of capital investment into England's Strategic Road Network. Formed rapidly alongside the creation of Highways England, RIS1 marked a step change in the way in which capital works are planned and delivered. Prior to RIS1, capital investment was planned annually by the Highways Agency and budgets and volumes of schemes were considerably lower.

The estimated outturn cost of RIS1's major scheme portfolio has increased above the original baseline estimate. With RIS1 drawing to a close and the next Road Investment Strategy commencing in the first quarter of 2020, The Office of Rail and Road appointed Ankura to review the impact that scope change has had on the movement of RIS1 major scheme costs and the implications that this may have for the next Road Investment Strategy, RIS2.

Our review, which was based on a sample of schemes that had experienced significant cost variances, finds that:

- Immaturity in the assumptions on which schemes' estimates were calculated was the largest driver of scope change and cost variance, impacting all of the schemes within the sample and accounting for three quarters of the cost variance within the sample;
- Additional scope and cost arising from unforeseen site conditions was the second largest driver, impacting half of the schemes within the sample. The cost impact was more minimal accounting for less than 10% of the cost variance within the sample;
- Scope and cost changes arising from changes in requirements, conditions imposed by stakeholders, changes in standards and archaeological finds were minimal. There were also instances in which costs were reduced through value engineering and descoping exercises;
- There are several distinctions that reduce the likelihood of a recurrence of these issues for RIS2. The constituent schemes within RIS2 are at a greater level of maturity, reducing the reliance on budgeting assumptions. RIS2 has been developed over a number of years, in contrast with the comparatively short period of time available for the development of RIS1. Highways England is a more established organisation today and has had an opportunity to develop its corporate functions and processes. Furthermore, a new addition for RIS2 is the creation of a portfolio-level risk allocation pot, developed by The Department for Transport and Highways England. This provision is intended to support Highways England in managing the exposure of projects to unknown or unforeseen risks and scope change and additional process development will be required to ensure its appropriate allocation, with feedback into the estimating assumptions and processes;
- Processes and governance arrangements are in place to manage scope changes and their impacts on cost and our review did not reveal instances in which scope had changed in an uncontrolled manner. However, improvements could be made to the information that governance bodies receive to enable them to provide more effective challenge; and
- Improvements could be made to lessons learnt arrangements to increase consistency, objectivity and the use of data to focus improvement activity and enhance scheme performance.

INTRODUCTION

2 INTRODUCTION

Highways England is responsible for operating, maintaining and improving England's motorways and major trunk roads, collectively termed the Strategic Road Network ("SRN").

In December 2014 the Department for Transport ("DfT") set the first Road Investment Strategy, known as RIS1. RIS1 set a commitment for a five-year capital investment programme in the SRN and marked a step change in the way that Highways England planned and delivered its capital works, as its predecessor, The Highways Agency, operated within annual investment cycles.

RIS1 originally comprised 112 major improvement schemes and had an original budget, referred to as the Statement of Funds Available ("SoFA"), of £11.4bn[1]. It represented a considerable increase in the scale and volume of capital works being undertaken by the organisation: in 2014, the year before the creation of Highways England, the then Highways Agency delivered capital works of approximately £1.9bn and initiated the construction of seven major projects. Road Period 1 ("RP1") is the period between 2015/16 – 2019/20 and is covered by RIS1. RP1 was overprogrammed by approximately £650m[2] and, as such, there was pressure on the SoFA from the outset.

Highways England has reported to its monitor, the Office of Rail and Road ("ORR"), that the current estimated outturn costs of developing RIS1's major scheme portfolio has increased above the original baseline estimate. We were appointed by the ORR[3] to undertake a review into a number of these cost movements to understand the impact that scope changes have had and to identify lessons for the next Road Period, RP2, which commences in April 2020. This report sets out our findings.

Background

Highways England is the government company charged with operating, maintaining and improving England's motorways and major A roads. Formerly the Highways Agency, an executive agency of DfT, it became a government company in April 2015, operating with greater independence. As part of the transition from the Highways Agency to Highways England, changes were made to the way in which capital investment in the SRN is planned. Under the previous arrangement, the Highways Agency received its capital funding on an annual basis. Major highways projects, like any other large construction project, generally span several years and therefore an annual funding cycle provided minimal opportunity for long term planning. Under the new RIS and SoFA, capital investment was to be budgeted in five-year cycles, similar to those used in the railway sector.

The first Road Period ("RP1"), covered the period from April 2015 to March 2020. RIS1 is the strategy that covers RP1. RIS1 was prepared in parallel with the establishment of Highways England and within a relatively short period of time, preventing the rigour that is currently exercised in the estimation of scheme budgets. Furthermore, approximately two thirds of the constituent schemes were at a low level of maturity when the SoFA for RIS1 was developed and had not yet reached a stage of scope development that would enable reliable cost estimates to be determined. In the absence of the requisite levels of scope maturity, scoping assumptions were used extensively to enable high level costings to be prepared within the available time period.

[1] Highways England Delivery Plan 2015-2020. The number of projects was subsequently reduced following changes to drive greater value for money, address stakeholder needs and minimise disruption to motorists.
[2] Progress with the Road Investment Strategy, National Audit Office, 22 March 2017
[3] Contract reference ORR/CT/19-33, 27 September 2019

3 TERMS OF REFERENCE

We were appointed by the ORR to review the impact that scope change has had on the movement of RIS1 major scheme costs in RP1 and the implications that this may have for RIS2.

We were instructed to undertake the following:

- Using a sample of RIS1 schemes proposed by ORR, review whether scope changes were the primary driver of cost change and, if not, what the reasons were;
- Where scope change was the primary driver for cost variations on the sample schemes, categorise the drivers of change;
- Establish what the scope change was, at what point it was identified and by whom;
- Consider how Highways England's processes control the risk of scope creep; and
- Establish whether there is evidence that Highways England has captured the lessons learnt from the reasons scope has changed in its processes.

In the next section of our report, we set out our methodology.

4 REVIEW METHODOLOGY

Our methodology comprised three distinct phases, as set out below.

Prepare	Analyse	Report
• Familiarisation with previous relevant reviews • Agree sample schemes • Document request	• Desktop review and analysis of scheme documents • Interviews with key personnel	• Consolidation of findings • Fact checking with Highways England • Report production and verification

Prepare

Prior to commencing our fieldwork, we undertook a desktop review of previous reviews undertaken by other parties that were relevant to our scope of work. These were as follows:

- “Progress with the Road Investment Strategy”, National Audit Office, March 2017;
- “Review of Highways England’s Portfolio and Programme Management Capability”, commissioned by the Office of Rail and Road, October 2017; and
- “Assessment of Highways England’s Cost Estimation Approach for RIS2”, commissioned by the Office of Rail and Road, June 2019.

Our review has been undertaken on a sample basis. We attended meetings with the Office of Rail and Road and Highways England, who jointly agreed the sample schemes that our review would be based upon. The schemes provided to us, which had all encountered cost variances from their initial funding allocation, are set out overleaf.

Analyse

We undertook interviews with key members of each scheme's project team and reviewed project records to understand the chronologies of each scheme, identify the issues relating to scope changes and the respective cost impact, which we then classified as follows:

Category	Description
Immature assumptions	Immature scope or costing assumptions on which a scheme's estimate was calculated, which were identified after the SoFA had been approved.
Unforeseen site conditions	Additional costs arising from site conditions being different from those that were assumed when the scheme's estimate was developed.
Stakeholder conditions & requirements	Conditions imposed or a change in the scheme's requirements, following a stakeholder consultation or completion of a planning process.
Change in client requirements	A change in the client's requirements for the scheme resulting in an increase in the scheme's estimated or actual costs.
Change in standards	A change in the standards to which schemes must adhere following the development of the scheme's estimate.
Archaeological finds	Additional costs arising from archaeological finds within the project site.
Value for money	A change in the scheme's requirements to reduce cost or drive a higher Benefit Cost Ratio.
Integration of other works	The incorporation of other works into the scheme's scope of works.

For each scope change, we sought to establish:

- Its context and background;
- When it arose and who identified it; and
- Its impact, where possible.

Report

We tested our analysis with Highways England for factual accuracy, before consolidating our findings.

The impact of scope change on scheme costs are presented in aggregate, relative terms in recognition of the commercial sensitivity of scheme financials, particularly those that have yet to reach commercial settlement.

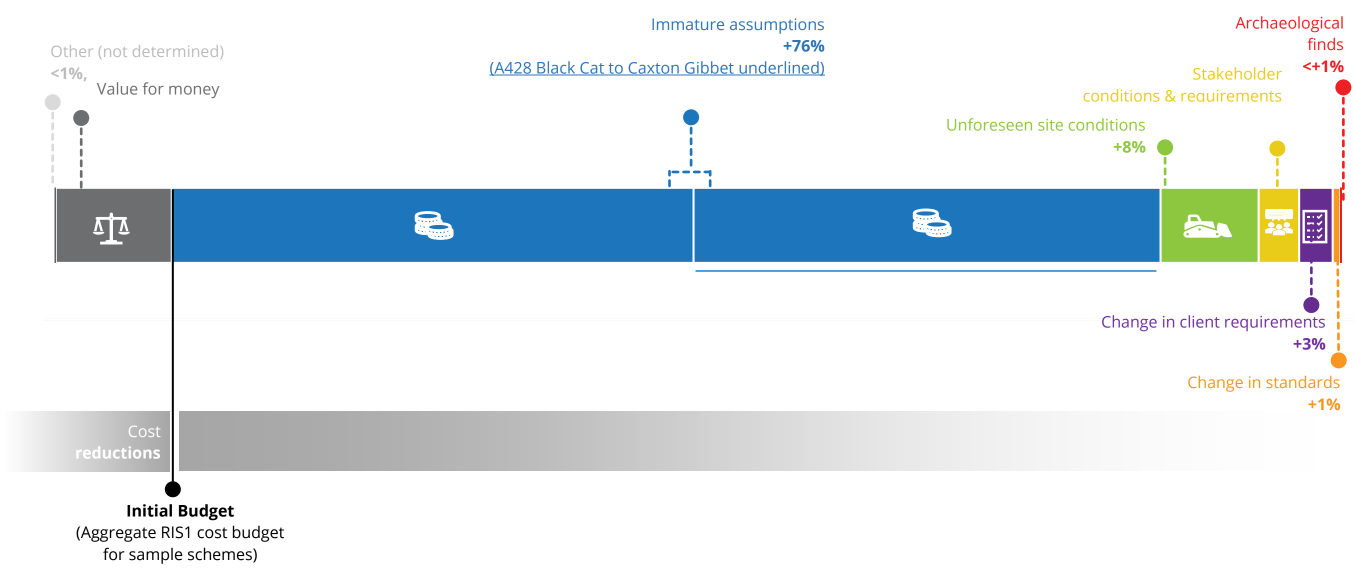
FINDINGS

5 FINDINGS

This section of our report sets out the findings from our analysis. The diagram below summarises the relative impact of each category of scope change across the eight sample schemes.

Relative impact across the sample schemes

Items to the right of the Initial Budget line are categories that relate to cost increases, items to the left relate to cost reductions



	A358 Taunton to Southfields	**M62** Junctions 20-25	**M20** Junction 10a	**M4** Junctions 3-12	**M60** Junction 8 - **M62** Junction 20	**A428** Black Cat to Caxton Gibbet	**A21** Tonbridge to Pembury	**M6** Junctions 16-19
Immature assumptions	●	●	●	●	●	●	●	●
Unforeseen site conditions			●		●		●	●
Stakeholder conditions & requirements	●			●			●	
Change in client requirements		●	●					●
Change in standards			●		●			
Archaeological finds							●	
Value for money	●	●						

Immature assumptions

Immature scope or costing assumptions on which a scheme's estimate was calculated represented the largest source of cost variance and impacted all eight schemes in the sample, accounting for 76% of the total cost variance across the eight sample schemes.

The theme that underpinned all of the schemes in our sample appeared to be one of estimates that had been developed rapidly due to the compressed timescales associated with the development of the capital portfolio for RP1. Several schemes were at a low level of maturity at this point and the timescales to develop scheme budgets necessitated the use of both high-level approaches to costing and reliance on scope assumptions where scopes of work had not yet been developed or approved. As a consequence of these constraints, schemes were unable to follow the established and more rigorous estimating process at a point in time that a stable and mature scope existed.

Following the formulation of RIS1, more realistic estimates were prepared as the schemes were "picked up" by project teams and further developed, at which point the immaturities in the original estimates were exposed.

Unforeseen site conditions

Additional scope and costs arising from unforeseen site conditions was the second most significant category, impacting four schemes in the sample and accounting for 8% of the total cost variance.

These generally related to schemes where construction commenced but limited surveying activity or site analysis had been undertaken beforehand, due to a combination of limited access, sensitivity to undertaking surveying activity before planning announcements were made or due to time constraints. Issues were subsequently uncovered once construction had begun.

Whilst there were instances in which surveying could not be undertaken, there remain several schemes in which more rigorous investigation and study prior to commencing on site could have revealed potential costs sooner or could have enabled issues to be resolved in a more cost-effective manner.

Stakeholder conditions & requirements

Stakeholder conditions & requirements accounted for 3% of the total cost change across the sample schemes, affecting three schemes.

Changes related to the necessary incorporation of requirements identified through statutory and public consultations. These included changes to the route of one scheme to address stakeholder feedback and to meet requirements identified through the Development Consent Order process for a second scheme.

Change in client scheme requirements

Change in client scheme requirements accounted for 3% of the total cost variance across the sample schemes, affecting three schemes.

Changes to client requirements generally related to the scheme's timescales and included new requirements to accelerate the commencement or completion of construction activity or changes to traffic management restrictions to limit the impact of construction activity on motorists.

Change in standards

Changes in standards had a limited impact on the sample schemes, accounting for 1% of the total cost change across the sample, affecting two schemes. We consider that there is limited scope for Highways England to control this.

These changes included a corporate decision to install Remotely Operated Temporary Traffic Management Signs across all Smart Motorway schemes to improve the safety of operational personnel and motorists, the financial impact of which was greater on schemes that were already in construction. A change in the traffic modelling methodology also impacted a particular scheme in the sample and resulted in the requirement for further modelling and consultation.

Archaeological Finds

The impact of archaeological finds within our sample was relatively limited, with one scheme experiencing a cost increase as a result. This category of scope change accounted for less than 1% of the total cost variance across the sample.

Value for money

Value for money accounted for 9% of the total cost variance in the sample. This category of scope change resulted in a reduction of the estimated outturn cost across two schemes[4].

Project teams were able to drive greater value for money by value engineering or descoping the schemes within the sample, which is positive. The delivery of these savings will need to be monitored closely to ensure that they are realised, particularly for schemes in which savings have been banked but where construction has yet to start.

[4] For the purposes of calculating the total cost variance and percentage contributions by category, cost reductions were considered in absolute terms and were added to the total cost increase, rather than being netted off against it.

Controlling the risk of scope creep

We were also instructed to consider how Highways England's processes control the risk of scope creep. In this section of our report we outline the control processes that were in place during RIS1 and provide a narrative on their effectiveness in the context of the scope change and the associated cost variances observed in our sample.

For the purposes of our assessment, we have considered scope creep to be the incremental and uncontrolled growth in schemes' scopes of work, generally over a period of time. It is distinct from scope change, in which an active decision to change a scheme's scope of work is taken and the appropriate control and governance mechanisms are applied at the time.

Highways England and the DfT has an established change control system and system of governance that applies to the management of scope. Decisions on change are made at different levels of the organisation, depending on the significance of individual changes and their impacts. Changes of a minor nature may be authorised at individual contract level. Approvals of a larger nature escalate through Highways England's hierarchy and management committees, up to and including DfT and Ministers for larger and more significant changes typically involving scope, funding, schedule or value for money. Scheme cost forecasts are subject to scrutiny as they progress through the development lifecycle as part of Highway's England's Stage Gate Assessment Review process ("SGAR"). Additional funding may be requested between development stage gates and decisions of this nature are made by the relevant investment committees.

We have reviewed a selection of project investment governance papers relating to the schemes within our sample. These papers are scheme specific and their purpose can be to provide scheme updates, seek a decision, provide information and seek approval for cost variances by the appropriate committee within Highways England or Government. The papers we reviewed showed variability in the level of detail provided and the way in which that information is presented. For example:

- The investment governance paper for one scheme provided a detailed assessment of the underlying causes of the scope change and associated cost variance, making it straightforward for committee members to understand and challenge.
- Conversely, the paper for another scheme, which requested approval for an increase in the total outturn cost, contained much less detail; whilst it provided a breakdown of the increase, its narratives were limited to comparatively high-level descriptions, for example "Increase to main works costs" and "additional statutory diversion works", making it difficult for reviewers to identify potential scope creep.

We note that assurance reviews of investment governance papers are undertaken prior to their submission, which involves reviews of their contents by various subject matter advisors (e.g. Strategic, Economic, Commercial, Financial and Management), and we were made aware of guidance for reviewers in this regard. This is positive, although we note that, despite this, there is a relative degree of inconsistency across investment committee papers in relation to the presentation and level of detail that supports requests for additional funding. Therefore, the level of challenge that committee members are able to provide could be inconsistent across schemes.

The consistency and quality of information has also improved in more recent papers, when compared to those prepared earlier in RP1. However, we believe that there are opportunities for further improvement to provide greater clarity and traceability of scope changes and associated cost impacts.

Lessons Learnt

In this section of the report we set out our assessment of the extent to which Highways England has captured and embedded lessons learnt in its processes.

Lessons learnt reviews are conducted at certain junctures in the lifecycle of schemes, as well as on completion. These are formal exercises involving the scheme's design and delivery partners, the outputs of which are signed off. In our assessment, there are improvements that could be made to the process to enhance the value that Highways England derives from its knowledge base. These should build on the knowledge management strategy that is in development and are as follows.

The use of standard proformas for capturing lessons and developing standard guidance on the information that should be recorded would drive greater consistency in knowledge capture and allow it to be assimilated. *The granularity of analysis into lessons varied across our sample of schemes. Some captured the time and cost impacts of issues that occurred, whereas others did not. The format of the outputs also varied; in most cases a lessons learnt log was prepared in an Excel workbook but in one instance the output was a PowerPoint slide pack. Whilst these tools are effective in capturing lessons on an individual scheme basis, they make it difficult to assimilate themes across the RIS1 portfolio.*

An independent project team should lead lessons learnt reviews to increase objectivity, which would also serve to enhance the dissemination of knowledge across the organisation. *Lessons learnt workshops are led by the relevant scheme's project committee, which may introduce bias into their assessment, whether unintentional or otherwise. The likelihood of bias is increased by way in which the workshops are conducted: they rely extensively on discussion and, whilst it is important that issues are debated, there is a risk that bias is unintentionally introduced.*

Lessons learnt reviews should be data-led. Standard analyses should be introduced to allow projects to be compared and a systemised approach adopted for retention that allows trends to be monitored, processes to be optimised and insight to be applied at the front end of projects to challenge planning assumptions. *The analysis and capture of project data within lessons learnt reviews appears to be limited, with most lessons identified through discussion. The absence of data and analytics in the lessons learnt process increases the risk of subjectivity and limits the ability of Highways England to accurately quantify the impact and frequency of issues at a corporate level and therefore prioritise remedial action effectively.*

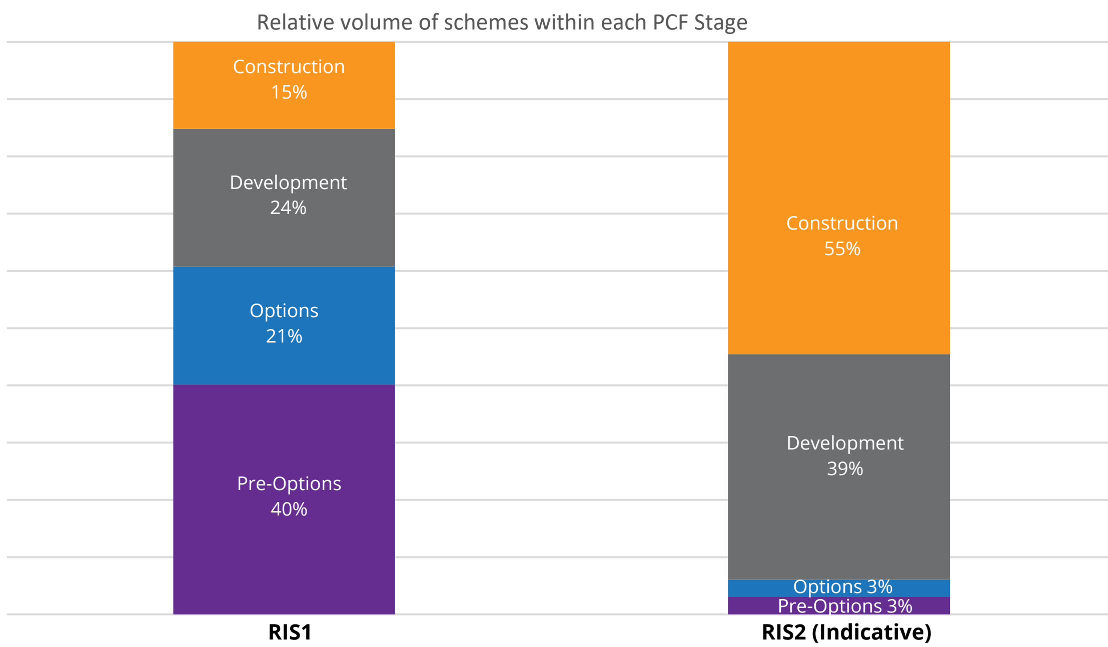
We support the creation of "Heads of Profession" within Highways England Major Project Directorate, which should drive know-how across project teams. This could be strengthened by formalising handovers between project managers and enhancing the analysis that is undertaken as part of the Stage Gate Assessment Review process so that the underlying causes and quantification of performance issues are objectively assessed at each stage. *As a projects organisation that is geographically dispersed, dissemination of lessons learnt within Highways England is challenging. Furthermore, many of the projects within RIS1 have long timetables and there is a risk that knowledge is lost. We observed several instances in which project managers and sponsors were able to provide only limited insight into issues that had affected their schemes before their tenure and were unable to readily provide the relevant project records to us.*

During this review we were made aware that a knowledge management strategy and a dedicated team to support the delivery of this strategy is under development. We have been informed that this will include guidance for standardising lessons learnt workshops and a knowledge management "bank" to collate, monitor identified trends and disseminate lessons between schemes. As this strategy and team are in development, we have been unable to provide any observations although we support its intention.

RIS2 context

This review has identified several issues that impacted all or the majority of schemes within the sample. Whilst the scope of our review did not include assessing the formulation of RIS2 and the extent to which these issues have been addressed, during our review we have identified a number of areas that have been developed. There are also a number of distinctions in the nature of RIS2 that make it less likely that similar issues will recur. These are as follows:

- The constituent schemes within the RIS2 business plan are, generally, at a greater level of maturity (see breakdown below[5]);
- RIS2 has been developed over a number of years, in contrast with the comparatively short period of time that was available for the development of RIS1;
- Highways England is a more established organisation today and has taken the opportunity to develop its corporate functions, processes and governance arrangements. Examples include the creation of a Capital Portfolio Management function, development of a specialist capability through the "Heads of Profession" operating model, ongoing formulation of "Integrated Project Controls" (which aim to provide tools to improve the management of major projects' risk, schedule and scope) and the enhancement of the estimating process[6]; and
- A new addition for RIS2 is the creation of a portfolio level risk allocation pot, developed by The Department for Transport and Highways England. It is understood this provision will be included within the RIS2 funding allocation and is intended to support Highways England in managing the exposure of projects to unknown or unforeseen risks and scope change. As this is a new concept it is expected that Highways England will need to develop its processes to ensure appropriate allocation of this contingency to projects, with feedback into the estimating process.



[7]

[5] RIS2 values are indicative and at the date of this report, RIS2 has not yet been finalised.
[6] A report commissioned by the Office of Rail and Road, entitled "Assessment of Highways England's Cost Estimation Approach for RIS2" (June 2019) referenced Highways England's estimating function, for example.
[7] At the time of writing, the proportion of schemes by PCF stage within RIS2 is indicative and has been taken from the ORR's Efficiency review of Highways England's Draft Strategic Business Plan.

CONCLUDING REMARKS

6 CONCLUDING REMARKS

Our review has provided an analysis of eight schemes within Highways England's RIS1 major scheme capital investment portfolio that have experienced scope change and an associated cost variance.

The primary driver for the majority of the scope change and associated cost increases identified within the sample schemes was immaturity in the assumptions on which the original scheme funding allocation was developed rather than scope changes. These deficiencies were subsequently revealed when schemes design options were clarified and their cost estimates reappraised. The underlying cause appears to have its origins in the rapid formulation and limited available time for establishing and agreeing the content and funding of the capital investment portfolio for RIS1: a recurring issue that emerged from our interviews with project teams was that the timing of RIS1 necessitated the rapid development of scheme estimates and that the usual rigour was compromised. We were also informed that some schemes had not yet progressed to a level of maturity that would enable a reliable cost estimate to be prepared.

Highways England should nevertheless ensure that the estimating allocation and subsequent processes for future Road Periods allows sufficient time for estimates to be prepared and scrutinised and should ensure that any schemes that are early in the development lifecycle have an appropriate risk provision to account for uncertainty. For RIS2 it is expected this will be improved as a consequence of the additional processes and capabilities, as detailed earlier in this report, which Highways England has developed since the beginning of RIS1 and is planning to apply to RIS2.

Unforeseen site conditions also contributed to scope changes with associated cost increases. These issues generally arose where construction commenced but limited surveying activity or site analysis had been undertaken beforehand, with issues being uncovered only once construction had begun. Within our sample schemes we identified instances in which surveying was not undertaken due to third party constraints or due to an assumption that existing survey data would be sufficient. Several sample schemes would have benefited from more rigorous investigation and study prior to commencing on site, which could have revealed potential impacts on costs sooner.

Whilst we acknowledge that there will be situations in which it is not possible or practical to undertake surveys beforehand, for example due to timescales or access restrictions, the risk process needs to allow these trade-offs to be evaluated and appropriate contingency provisioned.

Project teams were able to drive greater value for money by value engineering or descoping elements of schemes, which is positive.

The delivery of these savings will need to be monitored closely to ensure that they are realised, particularly for schemes in which savings have been incorporated into the baseline estimate and are yet to complete.

Processes are in place to manage scope and its impact on cost and our review did not identify any material issues of scope creep.

Whilst we observed that scope decisions were brought to the relevant investment committees, we consider that improvements could be made to the information that investment committee members receive to enable them to provide more effective challenge and isolate potential instances of scope creep.

Lessons learnt reviews are routinely undertaken at an individual scheme level, which facilitates the identification of improvements to future schemes and wider business processes.

We consider that further changes could be made to increase consistency, objectivity and the use of data to focus improvement activity and drive better scheme performance.

In the course of this review we have been provided with evidence that Highways England has implemented, or is implementing, management actions to address issues identified in this report. Since the beginning of RP1, Highways England has improved its processes and capabilities with plans for further developments for RP2.

It is important to recognise that the conditions for the development of RP2 are distinctly different from those in which RP1 was developed. Highways England has had a significantly greater period of time to develop RP2 and the portfolio is considerably more mature, reducing the need to make, or rely on, scoping assumptions that were the source of the majority of changes and cost variance within the sample of schemes we reviewed.

ABOUT ANKURA

Ankura's Capital Project Advisory specialists work with public and private sector organisations to plan and deliver their most important projects. We help them plan for success, execute with confidence and secure better project outcomes.

Ankura is a business advisory and expert services firm defined by HOW we solve challenges. Whether a client is facing an immediate business challenge, trying to increase the value of their company or protect against future risks, Ankura designs, develops, and executes tailored solutions by assembling the right combination of expertise. We build on this experience with every case, client, and situation, collaborating to create innovative, customised solutions, and strategies designed for today's ever-changing business environment. This gives our clients unparalleled insight and experience across a wide range of economic, governance, and regulatory challenges. At Ankura, we know that **collaboration drives results.**

We have over 1,600 professionals with locations in more than 30 cities throughout the world. Our 200 infrastructure and capital project specialists work with project owners, infrastructure operators, investors, financiers and contractors to solve their most complex challenges. We combine deep industry experience with practical know-how to help our clients address the complex challenges that capital projects present. Our international, multi-disciplinary team advises private and public sector clients, bringing the knowledge and insight they need throughout the project lifecycle.