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Evaluation of Roads Reform: the changes made to the management and operation of England's Strategic Road Network since 2014

Final report

Ipsos MORI and Risk Solutions



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Executive summary

The reforms

The 2014/15 Roads Reform was a combination of major changes, or reforms, to the management and operation of England's motorways and major A roads, the Strategic Road Network (SRN). The reforms aimed to improve road users' experience, provide value for money for taxpayers, and ultimately support economic growth via better road connections and faster, more reliable journeys¹. These changes have three main 'pillars':

- **Pillar 1:** The adoption of a longer-term strategic planning approach via periodic "Road Investment Strategies" (RIS) with approved funding covering five-year periods, known as 'road periods'. This was intended to provide the network operator with the long-term funding certainty it needs to plan its work effectively and work more efficiently, without the threat of funding being removed. The funding strategy was also intended to allow road industry businesses to invest for the longer term in skills and innovation.
- **Pillar 2:** The transformation of the Department for Transport agency (Highways Agency) responsible for operating, maintaining and improving the SRN, into a government-owned company (formerly called Highways England, now National Highways). National Highways was given more independence and accountability for the day-to-day management of the SRN; and more freedom to set its own internal policies (such as HR and pay policies), and adopt new approaches to procurement and contract management. This was expected to lead to a more commercial culture within National Highways, and enable the organisation to operate in a more efficient manner.
- **Pillar 3:** The creation of formal Highways Monitor and Watchdog roles (played by the Office of Rail and Road (ORR), and Transport Focus (TF), respectively). This was intended to contribute to more accountable, transparent and customer-focused management of the SRN.

Roads Reform took place alongside a significant increase in investment in the SRN, tripling annual investment on major roads to over £4.5bn per annum by 2020-21. For the purpose of this evaluation, the increased investment is seen as a complementary but separate intervention to the Roads Reform activities described above. This means that the evaluation concerns the three changes described above; as part of this, we have considered what effect the increased funding may have had in the absence of these reforms, to seek to understand the specific contribution made by the reforms themselves.

The evaluation

In May 2016, the Department for Transport (DfT) commissioned Ipsos MORI and Risk Solutions to undertake an evaluation of the Roads Reform programme, in order to inform future Road Investment Strategies and other policy decisions relating to the SRN.

This is the final evaluation report, following on from two earlier evaluation waves reported on in summer 2017 and spring/summer 2019.² This final wave of the evaluation focused on the reforms' longer-term impacts over the six years since they were introduced³ (which covers the delivery period of first Road

¹ <https://www.gov.uk/government/collections/roads-reform>

² <https://www.gov.uk/government/publications/evaluation-of-roads-reform-wave-1-and-wave-2-reports>

³ The Roads Reforms became law in 2015, and the research for the final wave of the evaluation took place in 2021, six years since the introduction.

Investment Strategy, April 2015 - March 2020, and the first two years of the delivery period of the second Road Investment Strategy, April 2020 – March 2025). It seeks to understand the extent to which the reforms have contributed, as intended, to a better experience for road users and better value for money for taxpayers. To do this, we explored the extent to which the changes the reforms were intended to bring about have in fact taken place; and investigated the influence of other factors which may also have had effects on road users' experience and efficiency, such as changes in demand for the network. As well as making comparisons with the pre-reform period, the evaluation looked at changes in relevant outcomes that have taken place during the course of the post-reform period, since some of the effects of the reforms were anticipated to take some time to fully materialise.

Whilst six years is sufficient time to be able to allow some judgements to be made about the reforms' longer-term impacts (a better experience for road users and better value for money for taxpayers), some of the effects of the reforms were expected to materialise over a longer time-frame and are therefore outside of the scope of this evaluation. For example, DfT documents at the outset of the reforms show that they were anticipated to deliver £2.6bn savings to the taxpayer over 10 years, and to save 46 million hours lost in traffic each year by 2030.

The findings for this third wave are based on evidence from:

- 20 interviews with relevant individuals from DfT, National Highways, ORR and Transport Focus ("internal stakeholders");
- ten interviews with representatives from other relevant organisations ("external stakeholders"), such as companies that conduct work on the SRN ("suppliers") and road user interest groups;
- a telephone survey of 95 businesses in National Highways' supply chain;
- case studies of road investment projects and other areas of National Highways' work, involving a document review, interviews with National Highways staff and other relevant parties; and
- a review of internal and publicly available documentation and data relating to the reforms.

This data collection took place between June 2021 and January 2022.

Key findings

Overall, the evidence gathered by this evaluation supports the conclusion that the reforms have been effective in improving how the SRN is managed, and that they have had positive effects on value for money and road users' experience.

The Road Investment Strategy

Internal and external stakeholders stated that the introduction of RIS has provided National Highways with greater funding certainty over longer periods. This was reported to have led to more stability in the enhancement programme with fewer projects being cancelled at short notice, and better planning and coordination of work, due to greater visibility of future work and the ability to plan across multiple years. Other supporting factors introduced as part of the reforms are also seen to have contributed to improved planning over the same time-period (such as an increased analytical capability at National Highways, and greater availability and use of information about the condition of the network and status of work). However, the greater funding certainty provided by the RIS was widely felt to have been the most

important factor in better planning and coordination (and the increased availability of information was partly attributed to new contracting approaches and therefore also an indirect result of funding certainty).

The five-year funding certainty provided by RIS was seen as allowing National Highways to make changes to its relationships with suppliers (such as offering longer-term contracts, and exploring new ways of working with the supply chain, such as contracting directly with smaller suppliers who would previously be subcontracted) which was reported to have resulted in greater efficiency in the management of the SRN. Survey evidence shows that supplier confidence in funding has improved, with the largest increase in confidence seen in the years immediately following the reforms. This increased confidence was thought to have encouraged the supply chain to invest in capabilities and infrastructure, and improve ways of working through innovation. An increased volume of work taking place on the SRN and in the construction sector more generally, and pressure to reduce costs, were suggested as other factors leading suppliers to invest in innovation. This means some innovations are very likely to have happened without the reforms.

Interview evidence suggests that the funding certainty has also encouraged and enabled National Highways to operate more strategically and take a longer-term view. Stakeholders explained that the organisation can identify and focus on the most important long-term priorities rather than frequently switching between issues attracting attention at a particular time, and has more scope to consider what will be needed in future. National Highways was also seen by stakeholders to have a broader understanding of its remit and responsibilities than the Highways Agency, and to consider the views of a wider range of people (which also relates to an improved approach to the organisation's customers, described below).

Some stakeholders believed that the significantly increased level of investment in the network would have demanded a different approach and better planning from the network operator, even in the absence of the reforms. This increased investment appears to be a factor which has complemented the effect of the reforms in this area.

The transformation of the Highways Agency into National Highways

The transformation of the Highways Agency into Highways England and now National Highways⁴, an arm's length government-owned company, means that the network operator now has more independence. Decision-making at the organisation was thought to have improved, partly attributed to the recruitment of a board and non-executives. Stakeholders described how new approaches to procurement, such as the Asset Delivery Model (introduced following the reforms but not as part of them), have meant that National Highways is taking more direct ownership of decisions and has more oversight over work taking place on the network. However, there was a view among both internal and external stakeholders that decision-making could continue to become more streamlined and efficient, for example in terms of how major projects are selected and prioritised.

There was widespread recognition of a pronounced cultural change during the transformation from Highways Agency to National Highways, towards better consideration of the needs and experiences of its customers (road users and others such as communities near the SRN). Interviewees described a change in mindset to prioritise customer needs, consider customers at an earlier stage when designing projects, and be more open to feedback. In practice, this increased customer focus has included appointing several Customer Service Director roles and developing a Customer Strategy and customer service plans. Most external stakeholders reported that customer engagement had improved significantly

⁴ Throughout this report, the company is referred to as National Highways

and highlighted a shift within National Highways towards being more engaged with external organisations. External stakeholders had also observed specific initiatives to improve customer experience in terms of signage and provision of information about roadworks. This perception of improved customer focus was corroborated by ORR in its most recent annual assessment, and by the supplier survey.

Another cultural change observed following the reforms at National Highways was a move towards a more outcome-focused culture, in terms of being pro-active about finding the best ways to meet the organisation's goals (such as improving safety or reducing journey times) and challenging existing ways of working to improve them, rather than more narrowly focusing on maintaining a physical asset or following processes. National Highways' relationship with the supply chain was also seen to have become more outcomes-focused and collaborative. ORR found that National Highways had met most of its Key Performance Indicators (KPIs), which suggests that this outcomes focus is working effectively.

Interviewees noted that the reforms were a significant driver in improving the capacity and capability of National Highways' workforce, in particular recruiting more staff with commercial, strategic, and data and analytical capabilities, and staff with specialist skills such as asset management, enabling this work to be done in-house rather than outsourced. These changes in the workforce were seen to have enabled both efficiency and customer service improvements.

These cultural changes were attributed to a combination of factors including the strategy of the Chief Executive, the recruitment of new staff from different backgrounds, and the influence of the Watchdog and the Monitor. Arguably, some of these outcomes such as a more outcome-focused culture could have happened while remaining the Highways Agency, had they been driven by the organisation's leadership; in fact, some stakeholders suggested that a certain amount of change in this direction was already happening in the years before the reforms. Nonetheless, the available evidence suggests that, while some cultural change could well have been achieved by the Highways Agency under the old arrangements, this would likely have been more limited (with fewer changes observed in the workforce and in the organisation's overall understanding of its role) and at a slower pace.

The monitor and watchdog

Evidence suggests that both ORR and Transport Focus have been effective in holding National Highways to account, influencing its priorities and, in some cases, modifying its behaviour.

ORR's existence was thought to have influenced National Highways' priorities towards a greater focus on improving day-to-day operations and performance (as opposed to major projects and enhancements). There is evidence that National Highways is directing its activity to meet the KPIs monitored by ORR, and specific examples of where ORR has influenced National Highways' activity. While some external stakeholders were concerned that the performance specification could have negative consequences if the focus on targets was too narrow, internal stakeholders believed that ORR's monitoring had overall led to a greater emphasis on the ultimate goal of delivering value for customers.

Stakeholders reported that ORR's public monitoring has led to greater transparency about National Highways' performance, and DfT and others value ORR's independence when holding National Highways to account. The channels through which ORR influences National Highways (including internal discussions, the publication of reports, and a formal escalation process) were thought to work well, and many internal stakeholders commented that the relationship between National Highways and the monitor had matured over time to become more collaborative.

Transport Focus provides National Highways with information on the needs, priorities, and satisfaction of a wide range of road users, and stakeholders commented that its independence means it is able to promote the issues that matter most to road users. In particular, the relationship was seen to have encouraged a greater focus on the needs of the freight industry. National Highways' response to Transport Focus' recommendations is documented publicly, and interviewees provided examples of how National Highways has taken different approaches as a result of Transport Focus' research. However, internal stakeholders noted that Transport Focus has no powers to ensure its recommendations are acted on, and National Highways is under no obligation to follow through with them.

More broadly, internal stakeholders described how Transport Focus influences National Highways' performance metrics and customer plans, often through internal channels such as committees, and the development of the RIS. This may not always be visible to external stakeholders: some were relatively unaware of the role of Transport Focus in developing the RIS and its input to performance metrics with others thinking that the watchdog should have more influence on National Highways. While external stakeholders who were aware of Transport Focus' role had generally positive views on the watchdog, some perceived overlap in the activities of Transport Focus and ORR and were concerned about the potential for duplication.

The effects of both ORR and Transport Focus on National Highways are complemented by the other elements of the reforms described above, such as the existence of a performance specification as part of the RIS and the greater customer focus at National Highways. Therefore, some internal stakeholders believed that accountability and transparency in the system would have improved regardless of the monitor and watchdog. However, the independence of both the monitor and watchdog, and the additional capacity and capability they bring, was seen to have influenced National Highways' priorities and made these changes happen more quickly than they would have otherwise.

The system overall

Overall, there was a consensus that the design of the system is working as intended; and that the relationships between the organisations involved were positive and constructive, which is key to the effective functioning of the system. The different elements of the reforms appear to complement and mutually reinforce each other, working together to make the system of SRN management more strategic, more transparent, and more focused on meaningful outcomes and customer experience.

The reforms have afforded National Highways a greater degree of independence than the Highways Agency, and this was seen as positive in reducing bureaucracy, in leading DfT to be clearer about its expectations, and in encouraging National Highways to take more responsibility for decision-making. However, interviewees observed that National Highways is not as arm's-length from the DfT as it was intended to be at the outset of the reforms: overall, most interviewees did not have concerns about this and thought it somewhat inevitable, although some external parties thought further independence for National Highways might lead to greater efficiency. The interdependency between National Highways, the Department for Transport and ORR needs to be managed carefully in the future to ensure that the impacts of the Roads Reforms are maintained.

Some external stakeholders perceived areas of duplication and overlap between the different organisations, and were unsure of which organisation held ultimate responsibility for some issues relating to the SRN. Internal stakeholders, however, believed roles and responsibilities had evolved well since the second wave of the evaluation and complemented each other. The existence of the monitor and watchdog was seen as strengthening the scrutiny of National Highways, and the combination of

information from ORR, Transport Focus and National Highways itself helped Government Ministers quickly assess National Highways' performance.

Longer-term impacts of the reforms

Findings from the research suggest that the reforms are beginning to generate benefits for road users. In particular, National Highways met its targets relating to network availability, incident clearance and the condition of the road surface, which are all important to road users.

Levels of road user satisfaction appear to have remained broadly the same since Roads Reform, through both an increase in traffic and major works (see below): according to the official measures used⁵, user satisfaction did not increase over the first road period (2015-2020) or compared to the two years prior to the reforms. Subsequently, customer satisfaction has also remained broadly stable over the first two years of the second road period (2020-2025), although there has been a change in the metric used to measure customer satisfaction. The disruption caused by the pandemic means that understanding trends in road user satisfaction in the near future will be challenging (both because of the pandemic's disruption to the relevant survey, and because of its effect on road use and traffic levels). Some interviewees raised potential issues with the method and sample size of the approved user satisfaction measure used in the first road period (the National Road Users' Satisfaction Survey, NRUSS: a door-to-door survey of 2,000 respondents, which may have under-represented freight users and commuters). These interviewees believed that, due to these issues, levels of user satisfaction may not have been accurately captured during the first road period.

In assessing the effect of the reforms on user satisfaction, we have considered what trends might have been observed in user satisfaction had the reforms not taken place. With significantly increased traffic over the course of the first road period, as well as an increase in major works taking place on the network (due to the increased levels of investment mentioned above), user satisfaction might have been expected to decrease. However, it is not possible to calculate this precisely in the absence of data on this alternative scenario.

There is evidence to support the view that the reforms have benefited road users. There is a widespread consensus that National Highways has become a more user-focused organisation, both in terms of developing and carrying out specific plans to improve customers' experience (such as the 60mph speed limit for roadworks), but also in terms of changes in general attitude and the importance placed on road user needs.

The evaluation has also identified several tangible effects of the reforms that would be expected to lead to increased user satisfaction, including work on the SRN being better coordinated, and the use of improved technology and materials. These changes were attributed to the influence of ORR and Transport Focus; to National Highways' leadership emphasising the importance of customer needs; to greater independence and new contracting models allowing the organisation more scope to try new approaches; and to changes in National Highways' workforce to bring in more managers with experience and skills in customer relationships, increasing its capabilities for customer relationship management.

Similarly, there are strong indications that all three pillars of the reforms have contributed to ORR's mostly positive assessment of National Highways' efficiency. National Highways met its key performance indicators for efficiency in the first road period, achieving £1.45 billion of capital efficiency savings over the first road period. The main reasons for these efficiency gains, as identified by ORR, were improved

⁵ [National Road Users' Satisfaction Survey until 2020 and Strategic Road Users' Satisfaction Survey from 2021.](#)

scheduling of major improvement schemes, adopting 'lean' management approaches, and changes in contracts and design. It should be noted that cost savings are challenging to quantify robustly, therefore a combination of data and stakeholder evidence has been used to form this conclusion.

There are some clear examples where these efficiency improvements can be related to the reforms. In particular, the longer-term funding cycle was seen to have led to an improved ability to plan and coordinate work, and this can be seen in a smaller proportion of work taking place in the winter period. National Highways has been able to develop new contracting and procurement arrangements due to the funding certainty provided by RIS and the flexibility afforded by its status as a government-owned company, which were reported to have improved efficiency through bringing work in-house. Stakeholders identified a stronger desire within National Highways to improve efficiency, which was attributed to the performance specification, the role of ORR, and the higher public profile of National Highways. The reforms were also intended to encourage greater innovation both by National Highways itself and the supply chain, leading to improvements in both user experience and efficiency.

Summary table of findings

As with the key findings presented above, these findings are based on evidence from a range of sources, including stakeholder perceptions. The source of evaluation findings, and their strength, is discussed in more detail in the main body of the report.

| Theme and chapter | Evaluation questions | Intended changes taken place by 2021 | Areas with slower pace of change |
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| 1. The Road Investment Strategy | 1.3 To what extent has the funding certainty RIS provides enabled National Highways to plan and operate more strategically and efficiently? | <p>Stakeholders reported that work on the SRN is better-coordinated and planned across multiple years. It was noted that fewer projects are cancelled at short notice, work is better spread throughout the year, the timing of projects can be improved and there is more time to secure resources for future projects.</p> <p>New procurement models and contracts were seen to be leading to better value for money, in particular being able to bring work in-house, offer longer-term contracts, and contract directly with smaller suppliers who would previously be subcontracted. This was seen to have resulted in greater efficiency in the management of the SRN and more opportunity for smaller suppliers to put forward suggested innovations and improved ways of working.</p> <p>The RIS was also seen to have led to more strategic thinking at National Highways, focusing on the most important long-term priorities and being able to look across a portfolio of projects. The organisation was seen to have a broader understanding of its remit and responsibilities than the Highways Agency and consider the views of a wider range of people.</p> <p>Some of these changes could also result from National Highways' responsibility to manage a much larger programme of investment. This factor is complementary to the reforms.</p> | <p>Some stakeholders are unsure of the exact roles and responsibilities of the organisations involved with developing the RIS, which could limit their engagement.</p> <p>Stakeholders reported that there is still some planning that needs to be done on an annual basis and that it can be difficult to move away from thinking about planning more generally in annual terms.</p> <p>The proportion of work taking place in the winter is still reported to be challenging, and some suppliers perceive that this has not changed.</p> |
| | 1.4 To what extent have the longer planning | Suppliers largely recognise greater funding certainty as a result of RIS: they report that funding is more stable, and that there is more of a programme of work rather than individual projects. | Survey evidence suggests that the biggest changes in supplier confidence were seen in the years immediately following the reforms. It was anticipated that suppliers would feel more able to predict their |

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| | <p>horizons led to the desired changes in the supply chain, in particular greater confidence and investment?</p> | <p>Some suppliers described how this had allowed them to invest in staff and infrastructure or identify better ways of working.</p> <p>Most suppliers surveyed report that investment in innovation is increasing, although there are many factors leading suppliers to innovate and most do not explicitly report confidence in future work on the SRN as providing impetus for this. However, other sources of evidence suggest that funding stability helps to encourage supplier innovation by lowering the risks involved.</p> | <p>income following the publication of the second RIS; however, this has not been observed in the survey data</p> <p>Around half of suppliers feel able to predict their income from SRN work over the next three years, this has not changed following the publication of RIS2.</p> <p>One in five companies working on the network is not aware of RIS, limiting its potential effect on the confidence of the supply chain, and more communication with the supply chain about RIS may help to resolve this.</p> |
| <p>2. National Highways Governance and Organisational Development</p> | <p>2.3 To what extent has National Highways adopted a more commercially-driven culture of efficiency, high performance and continuous improvement?</p> | <p>The network operator was thought to now have more independence and autonomy due to becoming an arm's-length organisation, and decision-making at the organisation was thought to have improved. Stakeholders reported that the new approaches to procurement, such as the Asset Delivery Model, have meant that National Highways is taking more direct ownership of decisions and have more oversight over work taking place on the network.</p> <p>There was widespread recognition of a pronounced cultural change within National Highways to prioritise customer needs, consider customers at an earlier stage when designing projects, and be more open to feedback, as well as developing and carrying out specific initiatives to improve customer experience.</p> <p>National Highways was seen to have moved towards a more outcome-focused culture, in terms of being proactive about finding the best ways to meet the organisation's goals and challenging existing ways of working to improve them. A higher proportion of staff understands how their role relates to National Highways' priorities and goals.</p> <p>The capacity and capability of National Highways' workforce was thought to have increased, with more</p> | <p>Stakeholders identified further improvements to be made in terms of customer focus, in particular further improvements to communication. Some local stakeholders perceived they had less of an opportunity to influence National Highways due to more centralised decision-making.</p> <p>Some interviewees reported that decision-making processes could be streamlined and made faster: for example, in terms of how major projects are selected and prioritised.</p> <p>Salary differences between National Highways and parts of the (private sector) construction industry were seen to have led to ongoing challenges in recruitment for some roles, such as senior project managers, especially in some areas of the country⁶.</p> <p>Some suppliers raised concerns that National Highways may not have sufficient resource allocated to the responsibilities that have now been brought in-house.</p> <p>Stakeholders commented that National Highways should continue to develop its analytical capabilities and consider whether more could be done to publish its data and commissioned research.</p> |

⁶ When setting salaries, National Highways operates to the principles outlined in its Framework Document and Remuneration Framework, and keeps within the pay envelope set for all strategic roads work agreed with DfT and HMT. Salaries above £142.5K require Secretary of State clearance.

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| | | <p>staff with commercial, strategic, data and analytical capabilities, and specialist skills such as asset management, enabling this work to be done in-house rather than outsourced. Stakeholders believed that these changes in the workforce have enabled both efficiency and customer service improvements.</p> <p>Arguably, some of these outcomes such as a more outcome-focused culture could have happened while remaining the Highways Agency, but the available evidence suggests that this would likely have been more limited and at a slower pace.</p> | |
| 3. The Effectiveness of the Monitor and Watchdog | 3.2 To what extent has the work of the Monitor effectively enabled and incentivised National Highways to improve its performance and efficiency? | <p>ORR's new role as monitor was seen to have influenced National Highways' priorities towards a greater focus on improving day-to-day operations and performance.</p> <p>There is evidence that National Highways is directing its activity to deliver the RIS and associated KPIs which are monitored by ORR. There are specific examples of where ORR has influenced National Highways' activity, for example to address an issue more promptly.</p> <p>ORR's public monitoring was reported to have led to greater transparency about National Highways' performance, and DfT and others value ORR's independence and additional perspective when holding National Highways to account.</p> <p>The channels through which ORR influences National Highways (including internal discussions, the publication of reports, and a formal escalation process) were thought to work well.</p> <p>The influence of ORR on National Highways is complemented by other elements of the reforms, such as the Performance Specification set out within the RIS. However, the independence of both the monitor and watchdog, and the additional capacity and capability they bring, was seen to have influenced National Highways' priorities and made these changes happen more quickly than they would have otherwise.</p> | <p>Some stakeholders were concerned that the performance specification could have negative consequences if the focus on targets were too narrow, but this appeared to be a theoretical risk rather than happening in practice. Some stakeholders were also unsure how flexible the specification could be to accommodate trade-offs between different outcomes.</p> <p>Some concerns were raised about the value of ORR's outsourced 'deep-dive' reports into specific aspects of National Highways' performance.</p> |

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| | <p>3.3 To what extent has the work of the Watchdog effectively ensured National Highways and DfT take decisions that are more focused on the needs of users / customers?</p> | <p>Transport Focus provides National Highways with information on the needs, priorities, and satisfaction of a wide range of road users. Stakeholders believed that its independence means it can promote the issues that matter most to road users.</p> <p>National Highways' response to Transport Focus' recommendations is documented publicly, and interviewees provided examples of how National Highways has taken different approaches due to Transport Focus' research.</p> <p>Stakeholders reported that Transport Focus influences National Highways' performance metrics and customer plans, often through internal channels such as committees.</p> <p>The influence of Transport Focus on National Highways is complemented by the other elements of the reforms, such as the greater customer focus at National Highways.</p> | <p>Some external stakeholders were relatively unaware of the role of Transport Focus, with others thinking that the watchdog should have more influence on National Highways or that National Highways should be obliged to act on Transport Focus' recommendations for change. Stakeholders should be made more aware of Transport Focus' role in developing RIS and acting as a watchdog for National Highways.</p> <p>Transport Focus identified areas of its recommendations where it felt National Highways had been slower to act, for example in improving roadside facilities for truck drivers or in maintaining signs. Transport Focus believe National Highways is less willing to accept some customer viewpoints than others, particularly those less related to the physical aspects of the road.</p> |
| <p>4. The functioning of the reformed system</p> | <p>4.2 To what extent is the reformed system, and the way the organisations relate to and interact with each other, facilitating more effective and efficient management of the SRN?</p> | <p>There was a consensus that the design of the system is working as intended; and that the relationships between the organisations involved were positive and constructive, which is key to the effective functioning of the system.</p> <p>The different elements of the reforms were seen to complement and mutually reinforce each other.</p> <p>The reforms were thought to have afforded National Highways a greater degree of independence than the Highways Agency, and this was seen as positive in reducing bureaucracy, in leading DfT to be clearer about its expectations, and for making National Highways responsible for decision-making and held to account for the delivery of the RIS.</p> <p>Internal stakeholders believed roles and responsibilities had evolved well and complemented each other. The existence of the monitor and watchdog was seen as strengthening the scrutiny of National Highways, and the combination of information from ORR, Transport Focus</p> | <p>National Highways was perceived as not as arms'-length from the DfT as it was intended to be at the outset of the reforms. Careful management of the interdependencies is required to ensure the impacts of the reforms are not lost.</p> <p>Some external stakeholders had concerns about duplication and overlap between the different organisations and were unsure of which organisation held ultimate responsibility for some issues relating to the SRN, such as the 2021 protests.</p> |

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|--|--|---|--|
| | | and National Highways itself helped ministers quickly assess National Highways' performance. | |
| 5. The Long-term impacts of Roads Reform | 5.1 Has the satisfaction of Strategic Road Network users increased as a result of Roads Reform? | <p>There is a consensus that National Highways have become more customer-focused and responsive.</p> <p>There are several tangible effects of the reforms that would be expected to lead to increased user satisfaction, including work on the SRN being better coordinated, and the use of improved technology and materials.</p> <p>National Highways met its targets relating to network availability, incident clearance and the condition of the road surface, which are all important to road users. Three of the five components of user satisfaction as measured in RP1 increased over this period, including signage and journey time increased very slightly, while roadworks management decreased at first, then saw a very notable increase in the final year.</p> <p>The first two waves of the new Logistics and Coach Survey suggest a recent improvement in satisfaction for those involved in freight.</p> | <p>Overall user satisfaction has not increased since the reforms, according to ORR analysis of Transport Focus data and the views of interviewed road user representatives. It is important to note that many of the factors affecting user satisfaction are beyond National Highways' control. Furthermore, levels of traffic and delays have increased, and these are important drivers of user dissatisfaction. More work taking place on the network may also have had a negative effect on user satisfaction.</p> <p>While road users have noticed some of the customer-focused initiatives, they have less awareness of better coordination or innovation.</p> |
| | 5.2 What level of efficiency and value for money improvements have been delivered by Roads Reform? | <p>National Highways met its key performance indicators for efficiency in the first road period, achieving £1.45 billion of capital efficiency savings over the first road period.</p> <p>There are some clear examples where these efficiency improvements can be related to the reforms, particularly in terms of better scheduling and planning and changes in contracts and procurement.</p> | <p>ORR notes that it is difficult to judge the extent to which efficiency increased during the first road period due to the differences between and changes in scope of major projects meaning it is challenging to measure efficiency. It was also noted that it was difficult to assess how challenging the efficiency target was for this period, since the evidence base is relatively under-developed.</p> <p>Some external factors affecting costs were reported to be relatively favourable during the first road period.</p> |

Introduction

The reforms

The 2014/15 Roads Reform includes major changes, or reforms, to the management and operation of England's Strategic Road Network (SRN). The reforms began in 2014, and became law as part of the Infrastructure Act on 12 February 2015. The reforms have been designed to create an SRN that gives road users the best quality of service (such as faster and more reliable journeys), in turn supporting economic growth, and creating efficiency savings for taxpayers.

The SRN consists of England's motorways and trunk roads, and although it makes up only 3% of the total roads in England, it carries nearly a third of total motor vehicle traffic and two-thirds of large goods vehicle traffic. The reforms were intended to address the problem detailed in a 2013 command paper [Action for Roads: A network for the 21st century](#), which built on the main findings of the 2011 [Cook Review](#): that the UK was falling behind comparator countries on roads infrastructure. In 2011, the UK ranked 26th for roads infrastructure on the World Economic Forum's Global Competitiveness Report⁷, while nearly 90% of UK businesses in a 2008 CBI survey reported that poor reliability of the road network was having an impact on their productivity⁸. There are many economic benefits to having a better-managed SRN: for example, a road network that is efficient may lead to lower business costs, and improve access to markets and labour mobility⁹.

The three pillars of the reforms were:

- the adoption of a longer-term strategic planning approach via periodic "Road Investment Strategies" (RIS), with approved funding covering five-year periods;
- the creation of a government-owned company to operate, maintain and enhance the SRN (National Highways – known as Highways England until 2021); and
- the creation of a formal Highways Monitor and Watchdog role.

Roads Reform took place alongside a significant increase in investment in the SRN, more than tripling annual investment on major roads to over £4bn pa by 2020 ([Transforming England's Strategic Road Network](#), 2014). For the purpose of this evaluation, the increased investment is seen as a complementary but separate intervention to the reforms described below.

Adoption of longer-term planning via Road Investment Strategies

The introduction of a longer-term (five-year) strategic investment framework was intended to address one of the key challenges faced by both the network manager and the supply chain in the years prior to the reforms, namely the fact that funding was determined on an annual basis, and the resulting need to "adapt to an unpredictable 'stop-start' investment climate and a range of changing political priorities" ([A fresh start for the Strategic Road Network](#), 2011). This new investment strategy was intended to provide National Highways (known as Highways England until 2021) with the long-term funding certainty it needs to plan and deliver its work effectively, and allow the organisation to work more efficiently, without the threat of "funding being removed at a critical stage in development". A longer-term funding strategy was

⁷ Global Competitiveness Report 2011–12, World Economic Forum, September 2011. The UK was ranked 26th out of 142 countries.

⁸ Tackling congestion, driving growth, Confederation of British Industry, March 2010

⁹ *A fresh start for the Strategic Road Network*, Alan Cook, published by DfT in 2011. Available at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/4378/strategic-road-network.pdf

also intended to allow suppliers to invest in recruitment, training, plant and equipment for the longer term, and “commit to innovative working methods” ([Action for Roads](#), 2013).

The transformation of the Highways Agency into a government-owned company

The legal separation of central government and the SRN operator was seen as “vital to the credibility of the long-term financial settlement” ([Case for creation of a new public body in place of the Highways Agency](#), 2014), making it more difficult for the Government to revise the funding commitment. At the same time, the designation of National Highways (then Highways England) as a government-owned company, rather than an agency of the Department for Transport (DfT), was intended to allow the organisation to work in a more commercial environment better aligned to that of the supply market in which it operates. This has allowed the company to adopt new approaches to procurement and contract management, and more freedom to set its own policies (including HR policies and pay structures¹⁰ not tied to the civil service). As well as this, changes to its assurance and governance arrangements are intended to give National Highways more independence and accountability for the day-to-day management of the SRN. Taken together, these changes were expected to lead towards a more commercial culture within National Highways, and enable the organisation to operate in a more flexible and efficient manner.

The creation of a formal Highways Monitor and Watchdog role

The reforms leading to the new roles for the now Office of Rail and Road (ORR) and Transport Focus were intended to contribute to a more accountable, transparent, and customer-focused management of the SRN. In the pre-reform period, DfT was responsible for assessing the performance of the Highways Agency as its executive agency. However, the 2011 Cook Review identified a lack of central government resources to do so adequately. As part of the reforms, an independent organisation was proposed to monitor the performance of the new company (Highways England, now National Highways): the Office of Rail Regulation was legally given this role and became known as the Office of Rail and Road (ORR).

ORR now has a role to monitor National Highways’ performance and efficiency, and thereby provide independent assurance that National Highways delivers on its performance specification as defined in the RIS. ORR is also responsible for advising the Secretary of State on the proposed future RIS, and whether the company’s draft Strategic Business Plan is sufficiently challenging and deliverable within the proposed funding. These new processes have been put in place to ensure good use of public funding while supporting the enhanced decision-making capacity of National Highways.

Transport Focus, the road user watchdog, has a duty to protect and promote the interests of users of the Strategic Road Network. It generates evidence on SRN user needs and levels of satisfaction among SRN users, including a survey with results published monthly, and provides this to National Highways and other relevant stakeholders. Both ORR and Transport Focus communicate their findings through formalised outputs (such as reports on National Highways’ annual performance, and publications presenting research findings on views of SRN users) and through engagement with National Highways and DfT staff.

The evaluation

In May 2016, the DfT commissioned Ipsos MORI and Risk Solutions to undertake an evaluation of the Roads Reform programme. The key aims of the evaluation were to provide learning as to how the

¹⁰ As noted earlier, when setting salaries, National Highways operates to the principles outlined in its Framework Document and Remuneration Framework, and keeps within the pay envelope set for all strategic roads work agreed with DfT and HMT. Salaries above £142.5K require Secretary of State clearance

reforms are working and to improve understanding of their effects, to inform future Road Investment Strategies and other policy decisions relating to the SRN.

The evaluation has already produced [two reports](#), representing the culmination of two “waves” of research in 2017 and 2018-19. These focused on the implementation of the reforms, whether the design of the new system appeared to be working effectively, and early indications of whether the reforms were having their intended effects. This final wave of the evaluation is intended to build on these findings by focusing on the contribution of the reforms to longer-term changes in road user satisfaction and efficiency of delivery, effects which were not anticipated to have materialised until nearer to the end of the first RIS period in 2020. Taken together, these three waves provide a comprehensive evaluation of Roads Reform.

The ultimate aim of the reforms is to create improvements in user satisfaction and efficiency of delivery. These outcomes are being measured and reported annually by ORR (drawing on data provided by National Highways, Transport Focus and others). Our role is to add value to this observation by assessing the extent to which any changes in these outcomes can be attributed to the reforms, as opposed to other factors. To do this, we have explored the extent to which the reforms have produced the changes that they were anticipated to result in, and the ways in which these changes have happened: the scope of this assessment is summarised by the evaluation questions in the table below. We have also identified external factors that may have affected the outcomes of the reforms, user satisfaction and efficiency of delivery, in order to interpret what contribution the reforms have made overall.

We have used this approach to judge the difference made by the reforms since we are unable to measure this by means of a comparison to a counterfactual situation where the reforms did not take place. However, as part of our assessment of the contribution of the reforms, we asked interviewees to consider what might have happened had the reforms not taken place, and to make comparisons with the pre-reform system of SRN management. As well as making comparisons with the pre-reform period, the evaluation looked at changes in relevant outcomes that have taken place during the course of the post-reform period, since some of the effects of the reforms were anticipated to take some time to fully materialise.

The final wave of the evaluation has focused on the following key questions (with more formative questions, about how the reforms were being implemented, being covered in previous waves).

Table 1.1: Themes and questions for final wave of Roads Reform evaluation

| Theme/chapter | Evaluation question |
|--|--|
| 1. The Road Investment Strategy | 1.3 To what extent has the funding certainty RIS provides enabled National Highways to plan and operate more strategically and efficiently ? 1.4 To what extent have the longer planning horizons led to the desired changes in the supply chain, in particular greater confidence and investment ? |
| 2. National Highways Governance and Organisational Development | 2.3 To what extent has National Highways adopted a more commercially-driven culture¹¹ of efficiency, high performance and continuous improvement ? |

¹¹ In this context, a more commercial culture was anticipated to involve an increased focus on customers, delivery and costs rather than political priorities, more efficient and less bureaucratic decision-making, improved ability to negotiate with suppliers, and clear expectations and performance indicators which have to be met to receive reward.

| Theme/chapter | Evaluation question |
|--|---|
| 3. The Effectiveness of the Monitor and Watchdog | 3.2 To what extent has the work of the Monitor effectively enabled and incentivised National Highways to improve its performance and efficiency ? 3.3 To what extent has the work of the Watchdog effectively ensured National Highways and DfT take decisions that are more focused on the needs of users / customers ? |
| 4. The functioning of the reformed system | 4.2 To what extent is the reformed system, and the way the organisations relate to and interact with each other, facilitating more effective and efficient management of the SRN ? |
| 5. The Long-term impacts of Roads Reform | 5.1 Has the satisfaction of Strategic Road Network users increased as a result of Roads Reform? 5.2 What level of efficiency and value for money improvements have been delivered by Roads Reform? |

Evaluation methodology

The evaluation is based on data collected from five main sources (more detail and the purpose of each follows):

- a review of internal (DfT, National Highways, Transport Focus and ORR) and publicly available documentation and data relating to the reforms and their effects;
- depth interviews with internal stakeholders from these four organisations, typically senior directors in areas relevant to the reforms and their outcomes;
- depth interviews with external stakeholders, such as representatives of organisations that conduct work on the SRN (“suppliers”), road user interest groups, and other organisations with an interest in the SRN;
- a telephone survey of suppliers, both those directly contracted to National Highways and those further along the supply chain;
- a set of case studies about specific elements of National Highways’ work, each comprising a document review and interviews with individuals from National Highways, suppliers, and other relevant parties such as local authorities.

Document and monitoring Information review

The evaluation team began this wave of the evaluation by reviewing the evidence collected by the evaluation to date, and evidence from other sources such as published reports, in order to assess the extent and strength of the evidence already available. This allowed us to identify areas of uncertainty or gaps in the evidence, where more information would be particularly helpful. This process helped us guide our data collection plans, including our selection of case studies and interviewees, and the questions asked in the survey and in interviews.

The evaluation was also informed by an ongoing review of relevant documents and monitoring information to collect evidence relating to the anticipated effects of the reforms. This incorporated publicly available documents as well as internal monitoring information, such as data from National Highways on the lengths and value of contracts being placed and the number of different suppliers being

contracted between 2012 and June 2021, results from the National Highways staff survey, data showing the proportional level of works over the winter period, data itemising National Highways' responses to Transport Focus' recommendations and documents relating to ORR's escalation processes.

Publicly available documents reviewed included:

- The second [Road Investment Strategy and performance specification](#) (RIS2)
- DfT [reports to Parliament](#) on National Highways' performance
- ORR's [annual assessments](#) of National Highways' performance in the first road period and in 2020/21
- ORR's [RIS2 efficiency review](#)
- ORR's [monitoring framework and enforcement policy](#) for National Highways, and report into [benchmarking](#) National Highways
- National Highways' [annual report and accounts](#)
- National Highways publications on [improving efficiency](#), the [Asset Delivery model](#), its [customer service strategy](#) and [customer service plan](#)
- Reports commissioned by ORR into [customer satisfaction and learning from the Strategic Road User Survey](#), [the management of congestion and delay](#), the [deliverability of National Highways' plans for RIS2](#), National Highways' procurement and delivery models ([routes to market](#)), and the organisation's [readiness to deliver the Designated Funds programme](#) for RIS2
- Transport Focus research publications.

In-depth interviews with internal stakeholders

Ipsos MORI and Risk Solutions conducted 20 interviews with individuals at DfT, National Highways, Transport Focus and ORR. The sample of interviewees was based on our evaluation questions (see Table 1.1 above) and the more detailed assessment criteria we developed for these evaluation questions. We considered which individuals would be best placed to comment on each of the aspects of Roads Reform covered by the questions, whilst being of sufficient seniority to provide a strategic view. We included some individuals who had been interviewed in waves 1 and 2 who could comment on changes since then. Advice on the sample was sought from DfT and National Highways, with the final decision taken by the Ipsos MORI evaluation team. It cannot be guaranteed that those interviewed were able to represent the views of everyone within their organisation.

The interviews covered the evaluation themes identified above, with the focus of the interview adapted to each individual's knowledge and experience. Interviews took place between June and October 2021, and were around an hour long each, with most conducted via Microsoft Teams due to the pandemic (in previous waves they were largely carried out face-to-face).

Table 1.2: Interviewees from each of the four key organisations

| Organisation | Number of interviewees |
|-------------------|------------------------|
| DfT | 3 |
| National Highways | 12 |
| ORR | 3 |
| Transport Focus | 2 |

Depth interviews with external stakeholders

Ipsos MORI conducted 10 interviews with organisations representing suppliers (such as trade associations), representatives of motorists and commercial road users, and other organisations affected by the reforms such as local authorities and pressure groups (“external stakeholders”). The purpose of these interviews was to obtain wider perspectives on the reforms and their effects. Stakeholders were asked for their views on the impact of the Road Investment Strategies; organisational developments at National Highways, including (where relevant) interactions with the supply chain; the effectiveness of the Monitor and Watchdog; and wider developments that may have affected road user satisfaction or efficiency of delivery, such as demand for the network or changes in labour market conditions. Interviews took place between August 2021 and November 2021, and were around an hour long each, conducted via Microsoft Teams or telephone (as in previous waves).

Supply chain survey

Ipsos MORI conducted a telephone survey of companies that delivered projects or services relating to the SRN. The survey provided a further external perspective and was intended to understand the prevalence of views among a wide range of suppliers, to complement the evidence gathered from the document and monitoring information review, and the qualitative supplier interviews carried out as part of the external stakeholder interviews and case studies. Questionnaire topics covered included suppliers’ experience of working with National Highways, their awareness of the reforms, their perceptions of funding levels and stability, their levels of confidence about future work on the SRN, and actions they may have taken as a result (e.g. investment in staff). Fieldwork was carried out between July and September 2021.

The sample frame for the survey was a list of suppliers provided by National Highways. For the purposes of the survey, this means businesses that were involved in delivering any project or service on the SRN in England over the past two years; this included maintenance, capital improvements, design, consultancy and emergency response, and included both prime suppliers and their supply chain. In this wave, National Highways provided Ipsos MORI with details of 498 companies, of which 409 met the criteria for inclusion¹². In this final wave, Ipsos MORI attempted to gather responses from a minimum of 120 businesses to provide a comparable sample size to previous waves (120 in 2017 and 119 in 2018). However, as with other business surveys conducted during the Covid-19 pandemic, it proved challenging to achieve the desired level of response. Our survey team sought to maximise response rates by calling repeatedly at different times of day and evening over seven weeks, and by offering businesses a charity donation as a thank you for taking part. At the end of the fieldwork period, 95 businesses had taken part. A sample size lower than that in previous waves means that it is more difficult to identify changes

¹² To be eligible for the survey, businesses needed to have delivered projects or services on the SRN in England in the last two years.

between different waves of the survey. In reporting survey findings, we only discuss changes between waves that are statistically significant¹³.

Case studies

Ipsos MORI and Risk Solutions undertook six case studies on three different themes relating to National Highways' management of the SRN. The purpose of these case studies was to obtain further external perspectives on the reforms, and to provide detailed evidence about the effects of the reforms on the ground. Two case studies were related to individual enhancement projects, two were related to maintenance and renewals work in particular areas of England, and two were related to aspects of National Highways' day-to-day operations.

Each case study explored how work on the SRN is delivered and contracted, and how this has evolved over time, with a focus on user satisfaction and efficiency of delivery and the factors behind achieving these. Case studies were selected to provide different types and sizes of project, and to explore differences in context and timing in relation to the reforms. The two case studies related to day-to-day operations were selected with advice from the evaluation steering group¹⁴, and represent areas of activity that are within National Highways' remit and were also carried out by the Highways Agency, so that we can observe and understand how these activities have changed over time and how this may be related to the reforms. These 'day-to-day' case studies are presented in standalone sections, whereas findings from the others have been incorporated into the main report to preserve the anonymity of the projects and areas concerned.

Each of the six case studies has involved depth interviews with around five individuals, comprising suppliers, local stakeholders and National Highways contacts for these projects or areas of work; and a review of relevant documents.

Analysis

As described above, the purpose of the evaluation is to assess the contribution of the reforms to any changes in user satisfaction and efficiency of delivery. To undertake this assessment robustly and in a way which makes best use of all the available evidence, we have used an evaluation method known as contribution analysis. This is a structured approach to gathering and analysing evidence to make a judgement about the contribution of certain activities to observed outcomes. Contribution analysis is appropriate because it is designed to address questions of attribution; provided an opportunity to review the evidence we have collected to date in previous waves; and allows for the triangulation of different kinds of qualitative and quantitative evidence.

Using the data collected, and reviewing it against the description of how the reforms are intended to create positive impacts (the theory of change), we have assembled a story that, based on the evidence, describes the ways in which the reforms have contributed to the outcomes observed, and the strength of this contribution. We have also looked for weaknesses in this story, in terms of where the evidence is weaker and where the explanation given by the theory of change may be less credible. Where this is the case, we have considered what alternative explanations there could be for the outcomes observed. We have thereby been able to assemble an assessment of the extent to which, and the ways in which, the reforms have influenced user satisfaction and efficiency of delivery.

¹³ Using a z-test of the difference between two proportions.

¹⁴ This group brought together key stakeholders from each of the organisations involved in Roads Reform (DfT, National Highways, Transport Focus and ORR) alongside representatives of Ipsos MORI and Risk Solutions. DfT and NH members included those from evaluation and analysis teams.

Whilst the analysis looks at each pillar of the reforms in turn, it is important to recognise that the influence of the different pillars overlap and the effect resulting from each cannot be controlled.

Limitations of the evaluation

As mentioned above, we are unable to measure the effect of the reforms by means of a comparison to a counterfactual situation where the reforms did not take place. We have therefore adopted contribution analysis as an alternative approach to determining the effect they may have had. As well as this, as part of our assessment of the contribution of the reforms, we asked interviewees to consider what might have happened had the reforms not taken place, and to make comparisons with the pre-reform system of SRN management.

This evaluation report draws heavily on qualitative information, in particular interviews with internal stakeholders (in other words, interviewees from DfT, National Highways, ORR and Transport Focus), supplemented by the additional sources mentioned above. The nature of many of our evaluation questions – for example, those which focus on relationships and culture change – means the best sources of evidence will be qualitative; it is difficult to assess culture change independently of people's perception of it, or relationships between different organisations other than by gathering the views of those who are directly involved in the interactions. Moreover, we have chosen our sample purposively and selected individuals whose perceptions are likely to give valuable insight.

We have carefully considered and triangulated information from different sources wherever possible, and are confident that the findings accurately reflect the weight of the evidence at our disposal (including the views of a balanced – but not necessarily representative – sample of key informants at a particular point in time). However, care needs to be taken when it comes to generalising or extrapolating from the findings of the research to date. Specific risks to bear in mind are:

- The sample of interviewees for the stakeholder interviews included individuals who had been closely involved with the design and implementation of the reforms. These individuals were chosen as they could provide strategic-level insight about the progress of the reforms; however, the nature of their involvement means that they may be more likely to present a positive view of the implementation of the reforms and their outcomes to date. Accordingly, we have sought to triangulate these views with data from other sources wherever possible, so that a balanced conclusion could be reached on the evaluation questions.
- As mentioned above, the number of suppliers taking part in the telephone survey was lower than in previous waves. Some 48 suppliers declined to take part in the survey, while many others were unavailable or could not be contacted. This means it is more difficult to identify changes in supplier attitudes over time, unless these changes are large. In reporting survey findings, we only discuss changes between waves that are statistically significant¹⁵. Moreover, it may be that the suppliers that did not take part hold different views from suppliers that did take part (for example, they might tend overall to have less favourable views), and therefore there is a risk that survey responses do not accurately represent the views of the supply chain as a whole. We have also obtained views from this group by interviewing representatives of supplier organisations (such as trade associations) and by interviewing individual suppliers as part of the case studies. This provides some opportunity for triangulation, although a similar consideration about representativeness applies here.

¹⁵ Using a z-test of the difference between two proportions.

- The reforms took place in 2014 and 2015, around six years before data was collected for this evaluation¹⁶. Whilst this is enough time to allow some judgements to be made about longer-term impacts, some stakeholders suggested that in the context of long-term infrastructure planning, and based on the experience of transforming other types of utility provision (such as water privatisation), six years was still a relatively short length of time and further longer-term changes resulting from the reforms may be seen as time goes on. This report therefore may not fully capture the long-term effects of the reforms.

Report structure

This report is structured around five themes:

- Themes 1-3: The first three are the three “pillars” of the reforms set out above:
 - the Road Investment Strategy;
 - National Highways’ governance and organisational development;
 - the effectiveness of the Monitor and Watchdog.
- Themes 4-5: The following two chapters consider:
 - the functioning of the reformed system
 - the long-term impacts of Roads Reform.

¹⁶ The Roads Reforms became law in 2015, and the research for the final wave of the evaluation took place in 2021, six years since the introduction.

1 The Road Investment Strategy

1.1 Introduction

This chapter discusses one of the three main ‘pillars’ of the Roads Reform programme, namely the Road Investment Strategy (RIS).

The first [Road Investment Strategy](#) (RIS1) outlined a long-term programme of investment for England’s motorways and major roads. The portfolio for RIS1 was developed by DfT (with some external engagement) and launched in 2015, representing the beginning of the first road period (RP1) which ran until 2020. Highways England (now National Highways) and DfT led the process of developing the second Road Investment Strategy (RIS2), beginning in 2017 with the publication of an initial report. This was followed by a public consultation and a draft RIS in 2018, with the [final version of RIS2](#) published by DfT in March 2020. This document covers the second road period (RP2), which commenced in April 2020 and will run into March 2025.

The introduction of longer-term (5 year) investment frameworks was intended to address one of the key challenges faced by both the network manager and the supply chain in the years prior to the reforms, specifically that the Highways Agency had often not been given a clear view of the Government’s long-term ambitions and policies, and its funding could vary from year to year ([Roads Reform: a summary, 2014](#)). An investment strategy was expected to provide National Highways with the long-term funding certainty (guaranteed with legislation) it needs to “plan its work for maximum effect” and to deliver it more effectively and efficiently. It was also intended to allow suppliers to “invest in skills, plant and equipment for the longer term”, and “commit to innovative working methods” ([Action for Roads](#), 2013).

As well as setting out an investment programme, the RIS also contains a performance specification. This reflects the Government’s high-level expectations for National Highways and the SRN over the period, and defines the measures against which National Highways’ performance will be assessed by ORR. This performance specification is intended to challenge National Highways and ensure it is aligned with the Government’s long-term vision for the road network.

This chapter considers the two evaluation questions related to the RIS:

To what extent has the funding certainty RIS provides enabled National Highways to plan and operate more strategically and efficiently?

To what extent have the longer planning horizons led to the desired changes in the supply chain, in particular greater confidence and investment?

1.2 Overall conclusions

The introduction of RIS has provided National Highways with greater funding certainty. This has had several positive effects:

- Interview evidence suggests that the funding certainty has encouraged and enabled National Highways to operate more strategically, in terms of having a broader understanding of its remit and responsibilities and being better able to take a longer-term view and plan for the future. The organisation was also seen by stakeholders to consider the views of a wider range of people.

- There has been more stability in the enhancement programme and this has led to fewer projects being cancelled at short notice, and better planning and coordination of work, due to greater visibility of future work and the ability to plan across multiple years. This has resulted in greater efficiency in the management of the SRN.
- Funding certainty has allowed National Highways to introduce new contracting models and make changes to its relationships with suppliers, in particular being able to offer longer-term contracts, and explore different ways of working with the supply chain such as contracting directly with smaller suppliers who would previously be subcontracted.
- Suppliers recognise this greater funding certainty as a result of RIS, and some described how this had allowed them to invest in staff and infrastructure or identify better ways of working. Around half of suppliers reported having made investments in skills and innovation in the last year. Although suppliers identified many reasons behind making these investments, stakeholders reported that more secure funding helps to make upfront investments in innovation less risky to suppliers, and therefore encourages them to do so.

Alternative explanations

We have considered what alternative explanations there could be for the outcomes observed, in order to assess the extent to which this pillar of the reforms, the Road Investment Strategy (as opposed to other factors) has contributed to these outcomes.

The greater funding certainty and longer-term planning enabled by the RIS was widely felt to have been the most important factor which has contributed to better planning and coordination of work. Other factors, related to other elements of Roads Reform, are an increased analytical capability at National Highways, and greater availability and use of information about the network (although the latter is partly a result of new contracting approaches and therefore an indirect result of the RIS).

Some stakeholders believed that the significantly increased level of investment in the network would have demanded a different approach and better planning from the network operator, even in the absence of the reforms. This increased investment appears to be a factor which has complemented the effect of the reforms in this area.

1.3 Certainty of funding for the SRN

There was widespread agreement among both internal and external stakeholders who were interviewed for this evaluation that, as intended, the funding settlement for the SRN is much more certain as a result of the RIS. Although longer-term planning has always been necessary for major projects on the SRN, stakeholders recalled that in the pre-reform days projects would sometimes be cancelled at short notice, creating substantial inefficiency, and that there was now less of a risk that this would happen. Stakeholders believed that government was discouraged from making short-term changes to the RIS because it is in the public domain and is the result of a visible engagement and prioritisation process. As a result, National Highways, suppliers, and other parties can be more confident that work on the SRN will take place as planned. As in the second wave of the evaluation, most suppliers surveyed believe that funding for the SRN is stable, and of those holding this opinion the majority think this more stable funding is due to the RIS.

Interviewees also commented that the move into the second road period was likely to give additional confidence to suppliers and other parties, since they could see that allocated funding was not “raided” in the first road period and this new process for agreeing funding had continued beyond a single five-year

settlement. Some stakeholders commented that the second RIS better represents this new way of working than the first. RIS1 was developed largely by DfT at the time the reforms were taking effect. Now National Highways is a more established organisation it has more of a role in shaping the strategy and stakeholders commented that it appears to be less politically influenced than the first. However, concerns were also raised that funding can never be entirely certain, and there remains a risk of short-term changes to the RIS being made should government wish to do this. Some felt that this risk was particularly high currently due to funding challenges in other parts of the transport budget (such as the high levels of subsidy needed for the rail network due to Covid-19).

1.4 Effect of the RIS on National Highways

Increased transparency

The introduction of the RIS process was thought to have increased transparency in terms of the planning and management of work on the SRN. This was welcomed by external stakeholders, who commented that it provides a clearer and more structured engagement process for them to contribute their views, although some external stakeholders still felt unsure of the exact roles and responsibilities of DfT, National Highways and ORR in the process of developing the RIS.

"It was a way of councils being able to influence investment into the SRN, but also there was scope for getting joint investment in and then having a conversation with [National Highways] about shared issues... prior to that, it felt like it didn't really exist, so it's a good process." – External stakeholder

Internal stakeholders commented that the publication of the RIS, and of ORR's independent assessments of the RIS, allows the public a clearer picture of when and where work will be taking place in their area and how this is progressing, and allows representatives such as MPs and councillors to provide better-informed responses to their constituents' queries and demands.

More strategic thinking

The nature of the Road Investment Strategies as strategic planning documents, and the greater certainty of funding over a longer period, was thought by stakeholders to have given rise to more strategic and longer-term thinking at National Highways. This effect of the RIS on National Highways' outlook was complemented by the organisation's changed role and responsibilities since becoming a government-owned company, and increased capability within the organisation (see chapter 2). External and internal stakeholders commented that the performance specification contained in the RIS fostered a related cultural change at National Highways: to focus more on overall outcomes (such as better customer experience) rather than processes, and be more pro-active in identifying ways to achieve these outcomes.

"I think it has brought a real focus to it... the RIS is structured around the performance of the network essentially for road users" – External stakeholder interview

"That sort of culture of caring about what you actually deliver, rather than just being able to count something is really coming through." – National Highways interviewee

Moreover, the fact that performance indicators are fixed for five years was seen as helpful in requiring DfT to provide clearer guidance to National Highways on expectations, and allowing National Highways to identify and focus on the most important long-term priorities rather than frequently switching between issues attracting attention at a particular time. However, some external stakeholders believed that the

current specification could go further in reflecting the increasing importance of environmental issues to SRN management and user satisfaction.

DfT and National Highways interviewees explained that this more strategic approach allows National Highways more scope to think about environmental and customer strategies ([Net Zero Highways](#) and [Customer Service Strategy](#)) as well as likely future developments on the network, such as changes in demand and technological developments such as autonomous and connected vehicles, and what emerging innovations and technology might address these. At the same time, the five-year funding certainty provides a more stable basis on which to work with others on this. A longer-term approach fits better with the timescales needed to develop innovations, and allows National Highways to develop its own innovation activity, as well as encourage innovation activity among the supply chain.

"We can then communicate with academic bodies, catapults, manufacturing technology centres, suppliers, and say, 'We've got a 5-year funding guarantee here, so we're not going to be saying after a year, that's it.' That creates a sense of confidence across industry that we are going to back ourselves on the medium and longer-term stuff." – National Highways interviewee

A more strategic approach was also described as allowing a broader view of the organisation's role, and a greater willingness to consider new ideas or input from new groups, which relates to findings about customer focus reported on in chapter 2. National Highways was seen by its stakeholders to be focusing more on topics that might not previously have been considered in depth pre-reforms, such as the experience of equestrians and cyclists who make journeys that interact with the network, or the environment and carbon reduction. The introduction of the designated funds, funding streams for areas not traditionally funded by the network operator, was also seen as key in creating a sense that the organisation was responsible for overall stewardship of the network beyond its previous narrower remit.

"[RIS has enabled National Highways to] follow through on things that may be slightly less fashionable but are important... to making the whole thing work and achieving their overall targets. Broadly speaking I think the organisation not only has moved forward but it's been more open to new ideas, you could argue that it ought to go further but there are much less entrenched attitudes and so on." – Transport Focus interviewee

"It's not a case of just trying to cover up the [environmental] damage that you've caused, it's actually going above and beyond and making it better. Leaving it in a better position that we found it." – National Highways interviewee

1.5 Effect of the RIS on planning and coordination of work

Both internal and external stakeholders reported that the greater certainty of funding has allowed National Highways to plan and coordinate work more effectively, in several ways:

- Greater certainty about future projects helps to secure resources which are scarce and need a long lead-in time to obtain, such as specialist tunnelling teams and equipment.
- Having better oversight of work planned for the future, and thinking in five-year rather than annual periods, means it is easier to review the timing of work and change it, for example to bring forward work if there is an opportunity to do so (in particular during the pandemic when large public events were cancelled and traffic levels were lower in general), or to delay work in order to coordinate it with other work happening in the same location. The process for changing the timing of work has also become more straightforward.

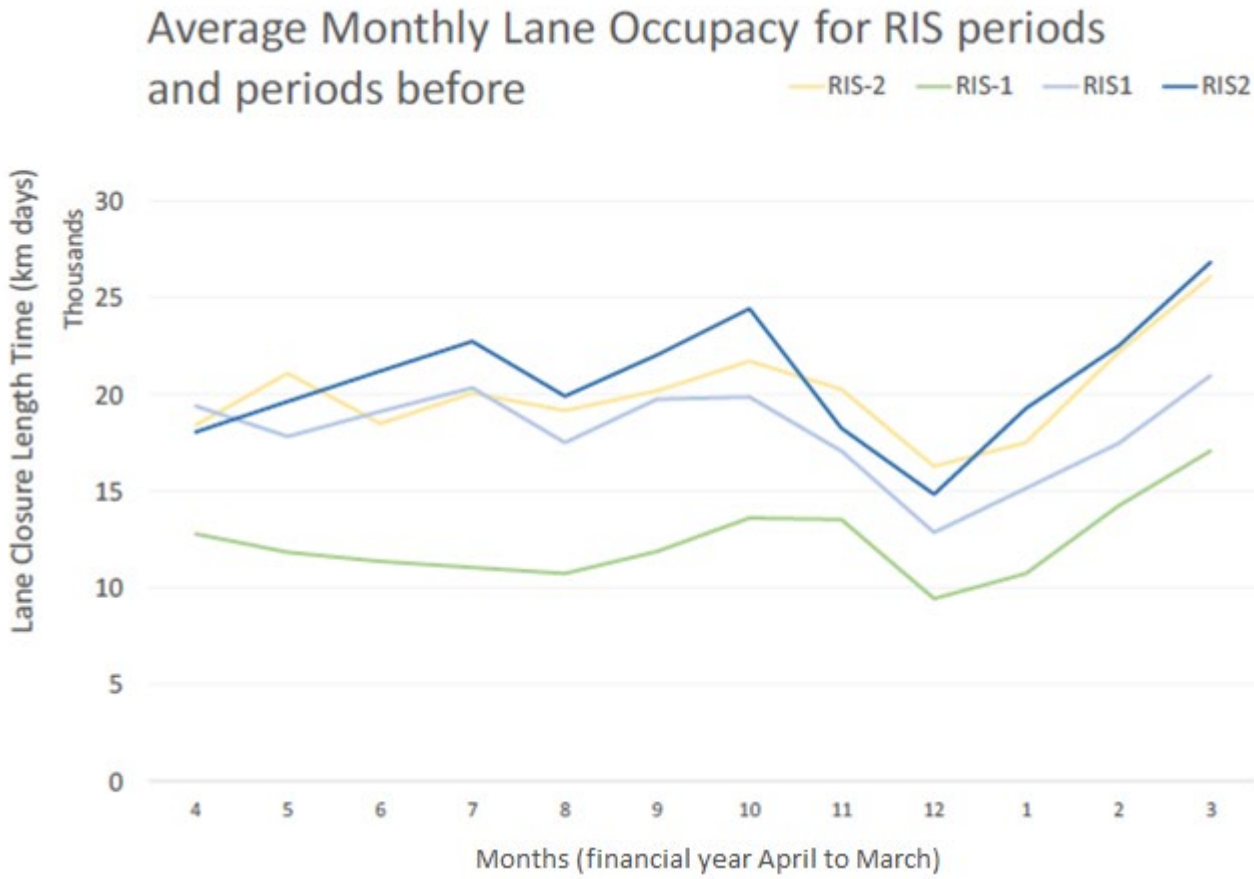
- Having a fixed budget for the whole period, removing any opportunity to be able to ask for more funding in the next year, forces projects to deliver efficiently.
- As well as this, the funding certainty reduces inefficiencies caused by projects stopping and starting due to short-term changes in priorities.

"The least efficient way of doing things is stop-start, because each time, you can never pick up at a point from where you paused it, you always have to go back one or two stages and start again. These aren't cheap, we're talking about millions of pounds... There are far fewer schemes which are stopped or paused, and where they are stopped or paused they're done for pragmatic, value for money and deliverability reasons rather than budget constraint reasons." – National Highways interviewee

DfT, ORR and National Highways interviewees commented that National Highways is now better able to manage budgets and risks across a portfolio of projects, rather than individually, which means that delays or problems can be dealt with more easily, and leads to greater efficiency. Since the last wave of the evaluation, one external stakeholder reported that National Highways had learned more about applying its portfolio management approach, in particular that the organisation had recognised while this was an effective way of managing projects overall, a different approach is required for the very largest and most complex projects which still need to be ring-fenced.

One way in which improved planning is visible is the decline in the proportion of work taking place during the winter months and at the end of the financial year. Prior to the reforms, being constrained to year-long planning and budgets meant that the Highways Agency was more likely to rely on all months of the year for construction, despite the fact that winter construction is less efficient. The reforms have afforded National Highways more flexibility with the introduction of the five-year planning cycle, and the guarantee of carrying over 10% of the annual budget from one year to another (as necessary and with sufficient notice given to DfT). Data provided by National Highways shows that while there is still an increase in activity at the end of each year, there is now a smaller proportion of work taking place in the winter months. The chart below shows the volume of lane closures by the months of the year for the first road period (RIS1), the first year of the second road period (RIS2) and the two five-year periods before Roads Reform (RIS-1 and RIS-2).

Figure 1.1: Chart from National Highways showing lane occupancy by month between 2005 and 2021



Source: National Highways

ORR’s annual assessment for 2020 also contains this finding, reporting that “the RP1 spend profile shows a significant improvement, where the spend profile is mostly consistent across the whole year. There is still a small peak in spend for March, however this is no longer to the same extent as was seen before roads reform.”

National Highways report that this will continue to improve as the culture is changing and that suppliers are also working to avoid a year-end peak due to the challenges it presents them with. However, most suppliers themselves have not observed a change in recent years, with 56% saying the proportion of construction activity undertaken in the winter months has stayed the same compared with pre-pandemic levels and 26% thinking it has increased.

Case studies provided further specific examples of improved planning and coordination, such as bringing budgets forward to complete work on a major project more quickly, doing more work at an early stage to gather information to inform the design of renewals projects, and undertaking several maintenance and renewals activities together during a single road closure (see case study on ‘bundling’ in chapter 2).

“[In the past] we were going to be delivering projects over a three-year period and it just didn't make sense. It may not be that you're digging up exactly the same bit of road, but you're working within the same bit of road space. From a customer's perspective, that doesn't make sense, and from an efficiency perspective it doesn't make sense because you're mobilising three times, three lots of traffic management. It costs us a lot of money to do that, so if we can just pragmatically look at our programme, pragmatically look at the risks, and make sensible decisions, then we can deliver efficiently and more safely.” – National Highways interviewee

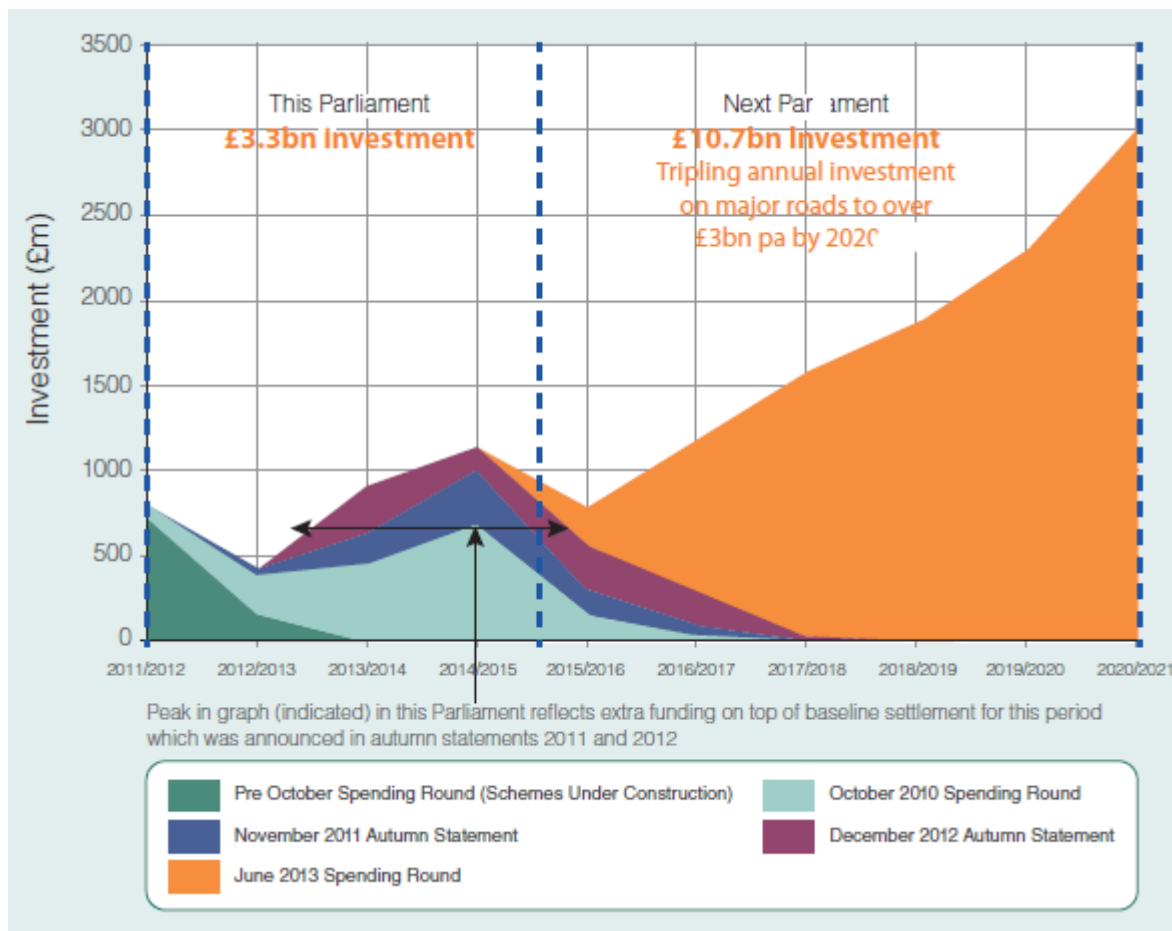
The effect of improved certainty of funding on planning and coordination has been complemented by increased capability as a result of the transformation of National Highways: the organisation has invested in people with skills to carry out economic analysis (including but not limited to cost-benefit analysis; see section 2.5). Another complementary factor is the increase in information available to National Highways about the condition of the network due to the introduction of the Asset Delivery Model (see below). On these contracts, National Highways collects data on network assets during routine maintenance and maintains it in-house.

At the same time, there are several factors that have limited improvements in planning and coordination to date, although some of these will become less important over time:

- There is still some planning that needs to be done on an annual basis (for example, maintenance and renewals needs to go through a process of annual programme approval) and stakeholders reported that partly because of this, and partly due to habit, it can be difficult to move away from thinking about planning more generally in annual terms. There is also a need to coordinate work with local authorities responsible for non-strategic roads, who plan on an annual basis.
- Whilst there has been a strategy at National Highways to move to new contracts, some maintenance and renewals contracts were put in place before the reforms, and due to their length have only recently come to an end. Whilst these older contracts remained in place, there were limited opportunities to introduce more flexible ways of working.
- One supplier commented that the nature of maintenance and renewals work makes it more difficult to make changes to how work is planned, because work is often either reactive and urgent, or needs to be done at specified regular intervals. However, under the Asset Delivery Model, National Highways reported that since it was now planning maintenance and renewals work itself (rather than using a contractor) it was able to be more flexible when determining the optimal time for work to take place.

1.6 Alternative explanations for improved strategic planning and coordination

In the second wave of the evaluation, we acknowledged another potential explanation for the changing nature of National Highways' role and improved planning and coordination: the significantly increased level of investment in the network, with funding for the network being tripled between 2014 and 2020. The graph below from 2014 shows levels of investment in the network were predicted to reach £3bn in 2020-21; in fact National Highways spent £4.5 billion in 2020-21 on operating, maintaining and improving the network, and a similar figure in 2019-20. This compares to £1.9bn spent by the Highways Agency in 2014-15.

Figure 1.2: Level of government investment in the SRN, 2011-14 (actual) and 2015-21 (predicted)

Source: 'Transforming England's strategic road network' leaflet, DfT, 2014

A budget increase on this scale may have demanded a different approach from the network operator to manage, even in the absence of the reforms. Some stakeholders raised this as a factor which has complemented the effect of the reforms.

"I think the big obvious difference is money, as in Highways Agency never commanded the same level of budget, and that budget is allowing [National Highways] to invest in ways that probably Highways Agency could only have dreamt of. So, I feel that Highways Agency was probably doing the best it could at the time with the resources it had available to it, but the whole point of roads reform was acknowledging that probably Highways Agency wasn't properly set up or wasn't fully equipped to be the operator and builder of the network that DfT needed." – ORR interviewee

However, one National Highways interviewee argued that the rapid growth in the organisation's size and budget in the first few years of the reforms had, in fact, slowed the organisation's move to a more strategic role, due to the need to prioritise meeting ambitious delivery commitments.

As we noted in the second wave of the evaluation, it is difficult to separate the effects of these two factors (the reforms and the increased funding). Some stakeholders have suggested that they were intended to be complementary in that the network operator would not have been able to deliver such a substantially increased volume of work without reforms being made to how work on the SRN is planned and managed. Action for Roads, the 2013 paper in which DfT set out the case for the reforms, considered them alongside the increased investment and argued that the reforms would allow DfT to "deliver more with the money we spend".

1.7 Effect of the RIS on supplier relationships

Interviewees from National Highways and DfT, as well as external stakeholders, explained that the longer-term funding certainty provided by RIS has allowed the use of new and different contracts with suppliers based on longer-term partnerships. Being able to offer suppliers a guaranteed programme of work, rather than individual contracts, and the use of new framework contracts, has also led to better relationships with suppliers.

“Everybody you speak to [in the private sector] is very supportive of the Regional Delivery Partnership approach and partnership working. They will say from their point of view being able to engage early on projects, and to actually have a dialogue about what drives value, is beneficial to them as well as to National Highways. There does seem to have been some genuine gains from that partnership working... National Highways are confident, overall, it’s a better way of working and will drive efficiencies in terms of cost... They have been very good at building relationships with the supply market at different levels... they do seem to have built good contacts, good knowledge, regular dialogue with the market and all of that, I think, is a positive, going forward.” – External stakeholder

Example of new contracting models: the Asset Delivery Model

The Asset Delivery Model, a type of contract used by National Highways for maintenance and renewals first introduced in 2016, provides an example of how the organisation is able to work differently with suppliers. Under this model, National Highways directly manages maintenance, renewal and improvement works, rather than contracting out these management responsibilities. The model also means that National Highways has direct contracts with smaller firms that would previously have been sub-contractors to a lead supplier.

The Asset Delivery Model was not introduced as part of Roads Reform – however, stakeholders stated that without the changes made through the Roads Reforms it would not have been possible to introduce the Asset Delivery Model. National Highways’ [introduction to the model](#) explains that it was developed in response to the brief provided in RIS 1. Internal stakeholders attributed the ability to use this type of contract, and to explore new types of contracting more generally, to the organisation having greater certainty about its funding over multiple years and National Highways’ greater autonomy from DfT. Interviewees commented that the move to Asset Delivery was also enabled by the arrival of a number of senior managers with experience in very large-scale asset management processes in sectors such as rail and water.

National Highways interviewees and suppliers explained that this model had several advantages:

- National Highways now has more data on the condition of the roads and the status of work being undertaken, because it (rather than a contractor) directly manages the work. This means it can make better-informed decisions, in particular having oversight of all the works being carried out rather than looking at different kinds of maintenance individually. This means that work can be coordinated, for example routine maintenance tasks being built into renewal projects (see case study in chapter 2 on bundling). National Highways interviewees thought that under the previous system, lead contractors would have less flexibility to do this because they are more risk averse and so prefer to stick to a planned schedule. This also means that staff with the same role in different regions can be coordinated as a team with shared goals and share best practice with one another (see case study in chapter 2 on roadworks data). Suppliers also pointed out that under the previous system their contracts were shorter, giving them less time to build up their own knowledge of the network.

“We've got a better understanding of every single [asset] that's out there on the network... a counterfort drain in [county] is very different to a counterfort drain in [county] because they were designed by entirely different companies, people, different technologies. And [we're] finding the resource based on that rather than incorrectly resourcing or incorrectly planning and having to repeat visits because of those mistakes, and I'm sure that's happened in the past.” -- Supplier

- The model creates savings and efficiencies because there is less sub-contracting, avoiding long supply chains with profits being added on at each step, and reducing the need to check (and therefore somewhat duplicate) the work done by contractors to manage and oversee work.
- Having direct relationships with suppliers means that National Highways can speak directly to different layers of the supply chain. This allows smaller suppliers to put forward suggestions of better products and ways of working. For example, a National Highways interviewee in one area explained that they now deal directly with the lining (road marking) contractor rather than via the surfacing contractor. This allowed the lining contractor to recommend more permanent materials for road marking that cost more up-front but would ultimately save money due to reduced maintenance costs. Another interviewee gave the example of using in-situ recycling of pavement surfaces for the first time in the UK, as a result of engagement with SME specialists. This technique reduces carbon emissions and vehicle movements, is more efficient, and produces a longer-lasting surface.

“That came about as a very specific example of having the relationships and having that engagement with the SMEs. [Pre-reform] it may have been possible, but we wouldn't have had the control over it, and one of the issues... has been that plants and quarries exist to use lots of product. For some of our suppliers, protecting that as a business model was an element we'd identified as a risk. Why would they champion this sort of [recycling] activity? That's why engaging with the SMEs was a very good way of doing it.” – National Highways interviewee

- The model encourages suppliers to collaborate with one another. Typically, there will be several suppliers working for National Highways on a project and they are contractually obliged to collaborate (for example, to have achieved the ISO standard for collaborative business relationships). Moreover, the longer-term nature of the contracts means that suppliers are more open to collaborating with one another, as they are competing less often and thus spend less resource on competitive processes. Suppliers in areas using the Asset Delivery Model described having set up “supplier communities” to share resources (such as accommodation and staff welfare blocks), and discuss issues such as health and safety and customer satisfaction.

“[Asset delivery model] takes away that competition between contractors because they're then fairly comfortable that they've got that work and they've got it for however long. Therefore, they can focus on actually making sure that it's done properly and collaboratively. Collaboration is the big thing that's come out of it.” – Supplier

- Other procurement approaches such as the Regional Development Partnership were seen to have a similar effect. Internal and external stakeholders explained that these partnerships made planning more efficient since suppliers had more opportunity to discuss the elements of the work they would be asked to deliver: for example, traffic management businesses could input at design stage and help to create a more efficient design.

"The existence of RIS and the programme of projects, and on top of that the framework, means that the private sector can ensure teams of different sizes that get on those frameworks are essentially guaranteed their share of the work. I think that has helped promote that partnership working in terms of private sector side planning their responses to the requirements." – External stakeholder

Overall, both suppliers and National Highways generally felt the model was working well and an improvement on the previous system of contracts. However, the model presents some challenges, related to the changing roles of each organisation:

- The model demands more of National Highways, who have to take on more management responsibilities. Some suppliers questioned whether National Highways had sufficient resource to manage a large number of contractors directly. One National Highways interviewee explained that since the introduction of this model they no longer conduct on-site supervision (instead having a team to audit and assure sites), which can reportedly lead to decisions being delayed, or opportunities to discuss problems and solutions being missed.
- Because National Highways now holds more information and has more responsibilities to manage work, the larger suppliers who formerly carried out this work now report that they have correspondingly less information and responsibility under their new contracting arrangements with National Highways. Some of these suppliers felt they had less insight into the reasons behind work taking place, or received less feedback on their work, compared to the previous model, and that this might lead to missed opportunities to improve their work.
- Some suppliers felt that there were too many firms contracted to National Highways in their area, which meant that there was not enough work to go round, somewhat undermining the model. However, this had improved in the subsequent round of contracts.
- While the level of bidding activity and churn in the previous system was seen as inefficiently high, there was also a concern that contracts should not be so long as to prevent new companies entering the market. The first asset delivery contract was 15 years, but subsequent contracts have been shortened to eight years.

National Highways' engagement with suppliers

Several stakeholders thought the more certain pipeline of work provided by RIS had allowed National Highways to engage with suppliers with more confidence. In particular, National Highways' engagement with smaller, lower-tier suppliers had increased both due to this increased confidence in future work and new procurement models. This increase in direct engagement with the supply chain is reflected in the number of individual suppliers contracting with National Highways, which has increased over time from 198 in 2016 to 319 in 2020.

Some supplier representatives reported that while the relationship between National Highways and the supply chain had improved, more could be done to work with suppliers rather than dictate requirements to them, and more could be done to engage the very smallest suppliers.

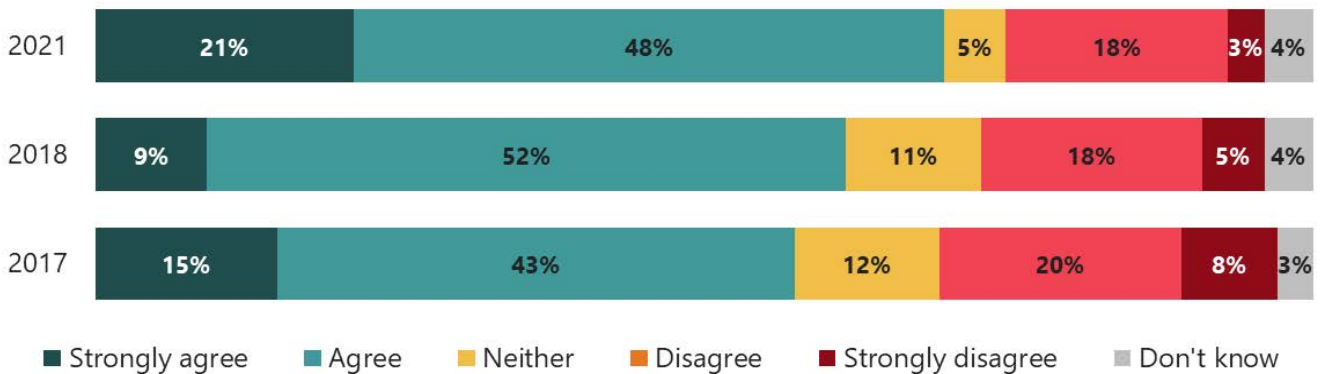
"There's still a feeling in the sector that how smaller organisations get involved with [National Highways] work continues to be not as easy as it might have been" – External stakeholder

Supplier views on funding stability

Suppliers working on the SRN generally recognise the increase in funding stability described above, and attribute it to the introduction of RIS. The proportion of suppliers thinking that funding for the SRN is stable is now at over two-thirds. A similar proportion (69%) of suppliers that are aware of the RIS say that its introduction has led to greater stability. Fewer than one in ten say that the RIS has had no positive effect on stability.

Figure 1.3: Supplier views on funding stability

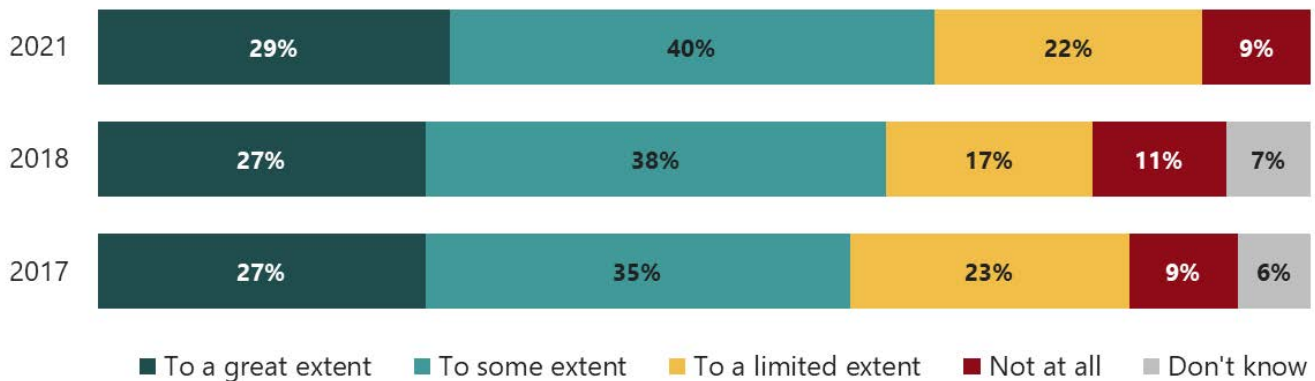
The level of funding for work on the motorways and trunk roads in England has remained stable



Source: Survey of suppliers delivering projects or services relating to the SRN. Base: All responses 2021: (95); 2018 (119); 2017 (120); Fieldwork dates: 28 July - 17 Sep 2021, 19 November - 25 January 2019, 30 March – 24 April 2017

Figure 1.4: Supplier perception of effect of RIS on funding stability

To what extent, if at all, do you perceive that the introduction of the RIS has resulted in a more stable funding environment for the SRN?



Base: All responses aware of the Road Investment Strategy 2021: (77); 2018 (88); 2017 (82); Fieldwork dates: 28 July - 17 Sep 2021, 19 November - 25 January 2019, 30 March – 24 April 2017

Qualitative interviews with suppliers and supplier representatives support this finding, with suppliers reporting that funding is both more stable, and that there is more of a programme of work rather than individual projects. Supplier representatives also suggested that confidence would be boosted by the relative consistency of funding levels in RIS1 and RIS2. In the survey, just under half of suppliers believe investment in the SRN will increase over the next three years, with 36% predicting that it will stay the

same¹⁷. Although there was a budget increase between RIS1 (£15.2bn) and RIS2 (£27.4bn)¹⁸, this interviewee felt reassured by the consistency in spend from their perspective:

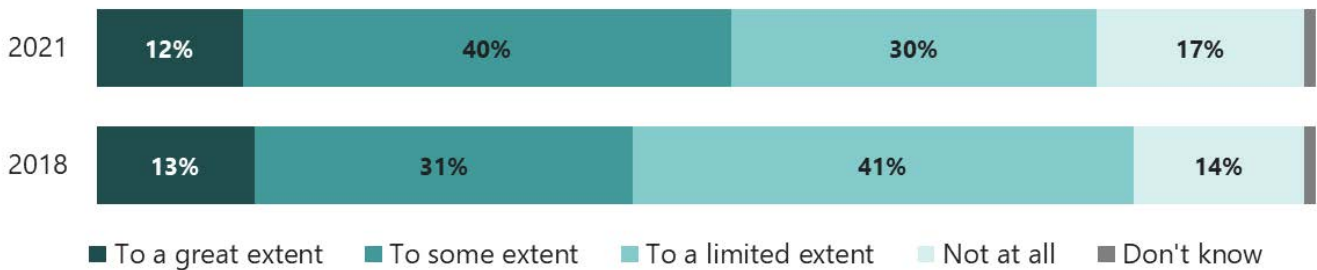
"I think the way that it's moved to a 5-year cycle gives certainty to the market in terms of what's coming up and it's also been very reassuring to note that the budget for RIS1 and RIS2 have remained broadly similar, and there hasn't been some sort of massive, dramatic change in spending, so that's demonstrated consistency" – External stakeholder

In terms of income for their business for work on the SRN, around half of suppliers feel able to predict this, with suppliers not directly contracted by National Highways more likely to report being unable to predict their future income. In wave two, it was predicted that suppliers' ability to predict future income might increase following the publication of RIS2 (the previous survey took place just prior to this), but in fact this proportion has not changed in a statistically significant way.

Likewise, around half of suppliers think the location and schedule of work is predictable and survey data suggests this has also stayed the same over time. Some concerns remain about delays to projects, with over a third of suppliers reporting that changes to the pipeline of work had negatively affected their business (32%). Suppliers contracted directly by National Highways were more likely to report that these changes had had a negative effect (41%, compared to 21% of suppliers not directly contracted).

Figure 1.5: Supplier views on ability to predict their income for work on the SRN

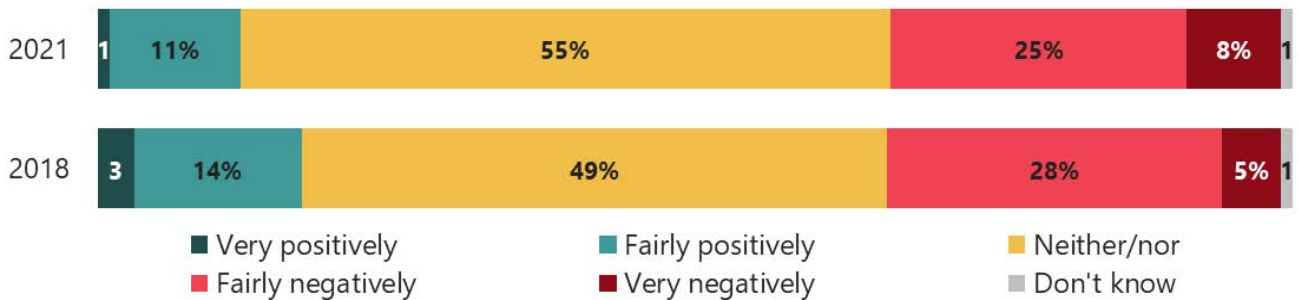
Thinking about the next three years, to what extent do you feel able to predict what income will be available to your business for work on the SRN?



Source: Survey of suppliers delivering projects or services relating to the SRN. Base: All responses 2021: (95); 2018 (119): Fieldwork dates: 28 July - 17 Sep 2021, 19 November - 25 January 2019

Figure 1.6: Supplier views on impact of changes to the pipeline of works on the SRN

Thinking about any changes made to the pipeline of works on the SRN, how have these changes affected your business?



¹⁷ Question wording: "Do you expect investment in the SRN over the next three years to increase, decrease or stay the same?"

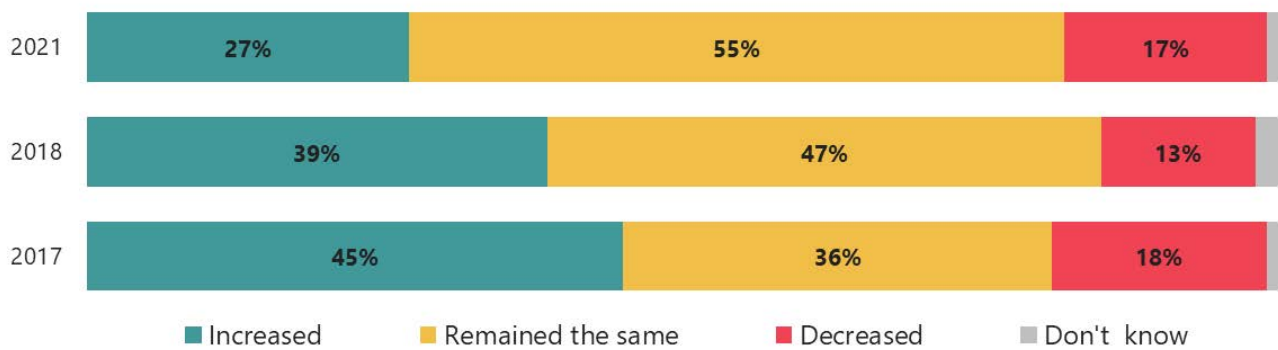
¹⁸ Dropping to £24bn SR2021 to reflect delays to some large projects.

Base: All responses 2021: (93); 2018 (118); Fieldwork dates: 28 July - 17 Sep 2021, 19 November - 25 January 2019

The survey also asked suppliers about their confidence in the availability of future income and how this has changed over the last 12 months. In 2017, nearly half of suppliers said their confidence about future income had increased over the last year (45%), whereas in 2021 around a quarter (27%) said confidence had increased over the past 12 months, and the majority of suppliers (55%) now say their level of confidence has stayed the same. This may suggest that the biggest increases in supplier confidence were seen in the years immediately following the reforms and this trend has since stabilised, although survey sample sizes are relatively small and some of the trends may reflect wider economic conditions (such as impacts from the Covid19 pandemic). Because the survey question asks about the last 12 months, it also may not have picked up changes in confidence that happened at the very beginning of the second road period in spring 2020.

Figure 1.7: Supplier self-reported changes in confidence about future income

Considering the last 12 months has your confidence about the availability of future income for work on the SRN ...

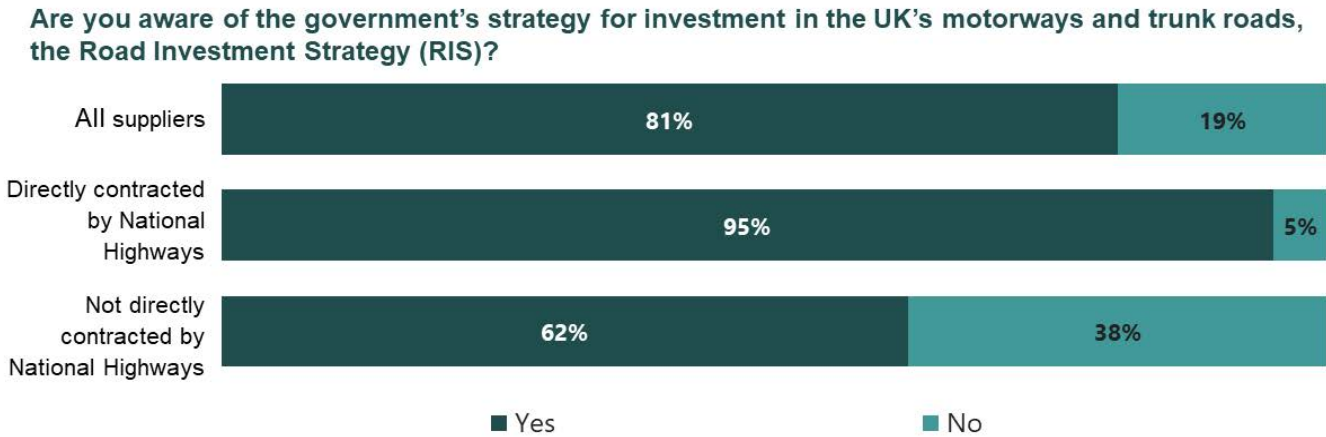


getting mail from client yeah yeah look at he was fine with that I haven't spoken in spoken to us

Base: All responses 2021 (95), all responses 2018 (119); 2017 All respondents who have been involved in SRN work since before April 2015 (98); Fieldwork dates: 28 July - 17 Sep 2021, 19 November - 25 January 2019, 30 March – 24 April 2017

Those suppliers whose confidence has increased often attribute this to greater visibility of work. Supplier confidence may have been affected by several factors, including the pandemic and labour shortages within the construction industry, which were identified as an increasing problem by some National Highways interviewees (and were predicted in wave 2 of the evaluation). However, this finding may indicate that the transition into the second road period may not have had as much of an impact on supplier confidence as some stakeholders expected. Four in five respondents were aware of the RIS (81%), leaving 19% who were not. Most (95%) respondents who were directly contracted by National Highways were aware. Awareness of the RIS was lower for respondents who were not directly contracted to National Highways, with three in five (62%) claiming to be aware. This may have limited the potential benefits of RIS in raising supplier confidence, since if suppliers are not aware of the RIS it will not factor in to their plans and expectations of future work.

Figure 1.8: Supplier awareness of the Road Investment Strategy



Base: All responses 2021 (95). Fieldwork dates: 28 July - 17 Sep 2021

Increased stability of funding and longer-term contracts were intended to lead to suppliers making more investments in their workforce and innovative technology. Interviewees from DfT, National Highways and ORR all reported that this was happening: these interviewees reported that suppliers felt more secure in the volume of work coming through and that this led them to make investments in skills and in innovation – for example, in low-carbon technologies.

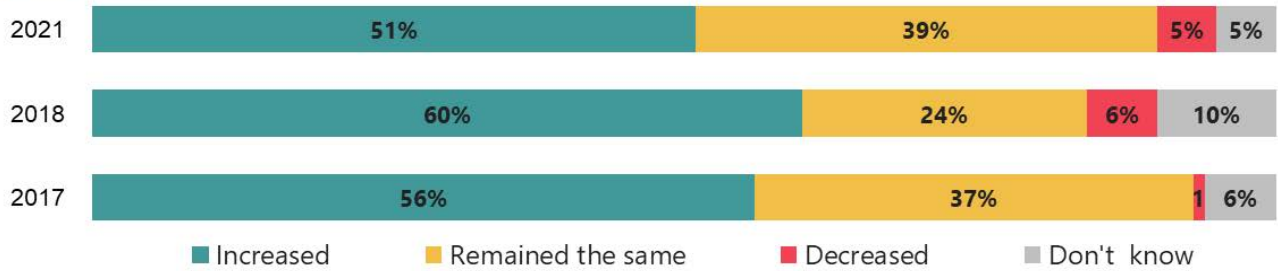
The survey shows that around half of suppliers say they have increased investment in skills over the last 12 months. This is a similar proportion as in previous years of the survey, despite the period in question coinciding with the Covid-19 pandemic, which was a disruptive year for the construction industry¹⁹. Of those suppliers that felt more confident about the availability of future income, nearly all (92%) planned to hire new staff, an increase from 2018 when only 72% of this group planned to do so.

Findings about innovation are similar, with again around half of suppliers saying they have increased investment in innovation. When asked about the industry as a whole, the majority of suppliers think that the use of innovative practices has increased (51%) and will increase next year (74%). Interviews with suppliers and survey responses provided examples of improved use of technology, such as larger gully tankers, smart tablets, geospatial mapping, offsite prefabrication and the use of more environmentally friendly materials and methods.

¹⁹ <https://blog.ons.gov.uk/2021/10/19/how-has-uk-construction-performed-over-the-pandemic/>

Figure 1.9: Supplier views on the pursuit of innovation by SRN supply chain

Thinking about the past 12 months and comparing with the previous 12 months, would you say that the pursuit of innovative practices by SRN contractors for planning design or construction has increased, remained the same, or decreased?



Thinking about the next year, compared with 2019, do you expect the pursuit of innovative practices pursued by contractors for planning, design or construction to...



Base: All responses 2021 (95), all responses 2018 (119); 2017 All respondents who were involved in SRN work before April 2015 (98); Fieldwork dates: 28 July - 17 Sep 2021, 19 November - 25 January 2019, 30 March – 24 April 2017

Suppliers have adopted or developed innovations for a variety of reasons, not all attributable to RIS or related to the SRN. For example, one large construction firm described a business-wide initiative to improve their processes and procedures across all areas of work including highways, and another supplier interviewee explained how they had pushed for better use of data on projects in order to make the most of current technology. Stakeholders also noted that suppliers, like other businesses, are under societal pressure to reduce their carbon emissions and adopt technology to help achieve this. In the survey, the most commonly selected reason for adopting new innovations was “efficiency of innovative approach”, with 15% mentioning environmental or carbon reduction pressures. Only 4% of suppliers selected funding certainty as a reason and 6% noted factors related to procurement²⁰, with 7% mentioning the effect of National Highways initiatives such as the innovation fund and setting efficiency targets. An increased volume of work taking place on the SRN and high demand for construction work in general may also be factors leading suppliers to invest. It therefore follows that some innovations are very likely to have happened without the reforms.

However, both the survey and interviews also provide some evidence that funding certainty encourages suppliers to make investments which might otherwise be too risky. National Highways interviewees believed that supplier businesses tended to be risk-averse due to low margins in the industry and were often unwilling to bring in new technology if there was a risk that this could delay projects or cost more. This suggests that increasing security will be key to encouraging businesses to innovate. The survey shows that four in five (81%) of suppliers that are more confident about future income have invested in innovation as a result, and nine in ten (92%) of these suppliers said they had hired new staff as a result of their increased confidence. Some supplier interviewees corroborated this and described how the security of longer-term contracts had allowed them to retain teams of staff, or invest money in adopting new technology.

²⁰ Suppliers could select more than one factor.

“Some of the small businesses are investing money to improve on what they're doing and come up with new technologies and ways of doing things, which is ultimately letting them expand their business and finding new, and not only more economical but greener, cleaner ways of doing things... because they've got that security, they know they can take that risk.”
– Supplier

“You know which schemes you're going to go onto next. We've got a lot of regionally based staff now whereas before, because we were travelling all over the country, you're from all over the place, where most of the people we take on now are from the North East because of where we are, and we know we've got other schemes on up here, as well... [the team] are now earmarked for either this scheme we're on now, or another scheme we've got in [county]. So, what you have is that you haven't got that resource issue.” - Supplier

Evidence from the case studies provides examples of better planning resulting from National Highways' improved ability to discuss broad plans for future years with suppliers. One example given was that a piece of work requiring a large quantity of quarry products might be pencilled in for a contractor with the nearest quarry, allowing that contractor to include this in their internal demand plans for that quarry. One interviewee noted that they had also seen contractors consider widening their skill base to that they could take on more elements of multi-disciplinary tasks. Likewise, National Highways interviewees gave examples of increased funding certainty allowing them to make upfront investments which would create efficiencies in the long run.

“Something that we've been able to do recently that we wouldn't have been able to do before... we agreed to invest in the depot of our servicing supplier. So, without having had them do any work for us yet, we paid them £4 million and they took that cash and they invested it in their local plant... what that did was that it enables them to provide materials to the project from their depot down the road and not the depot 50 miles away.” – National Highways interviewee

National Highways interviewees expected that ongoing funding certainty would have more of an effect on supplier behaviour in the future, noting that five years of stability is still a relatively short period of time compared to the timescales needed for developing and testing innovations in the construction industry, and that once the RIS process is more embedded confidence may increase further.

Stakeholders also noted barriers to supplier innovation, suggesting that National Highways themselves could be more willing to take risks in terms of how innovative suppliers can be. Some suppliers reported that National Highways' innovation funding took a long time to access and that the criteria to receive funding were not sufficiently clear. On the other hand, the direct relationships National Highways now has with smaller suppliers were seen to encourage a greater proliferation of innovation than the previous model, where tier 1 suppliers would coordinate innovation activity and filter new ideas.

“There are new ways of working coming through which wouldn't have made it previously.” -- Supplier

2 National Highways governance and organisational development

2.1 Introduction

The second pillar of the Roads Reform programme is the transformation of the network operator (the Highways Agency) into a government-owned Strategic Highways Company (National Highways, known as Highways England until 2021) and the effects of this. This evaluation theme covers a range of changes to the functioning of National Highways, both in terms of how it is structured, and the work National Highways carries out.

These changes were expected to lead towards a more commercial culture within National Highways, with regards to its interactions with the supply chain and ultimately its management of the SRN. In this context, a more commercial culture was anticipated to involve an increased focus on customers, delivery and costs rather than political priorities, more efficient and less bureaucratic decision-making, improved ability to negotiate with suppliers, and clear expectations and performance indicators which have to be met to receive reward.

The changes were also expected to enable National Highways to operate in a more flexible and efficient manner, striving for continuous improvement rather than rigidly following processes, to better meet the needs of customers and provide an improved service for road users. Additionally, the changes were intended to give the organisation more freedom to set HR policies (including pay outside the civil service bands) and the changes to the assurance and governance arrangements were expected to provide National Highways with more autonomy to carry out its responsibilities efficiently.

This chapter will provide an assessment of the extent to which the evaluation findings support the claim that the transformation of the Highways Agency into a government-owned company has led to positive cultural changes. Specifically, it addresses the evaluation question:

To what extent has HE adopted a more commercially-driven culture of efficiency, high performance and continuous improvement?

2.2 Overall conclusions

The transformation of the Highways Agency into a government-owned company has increased the independence (from DfT) and accountability of National Highways, which has led to a greater emphasis on being outcomes focused and improving efficiency. There is considerable evidence to support this finding, and evidence suggests that this outcome would not have been possible in the absence of the Roads Reform changes to the governance and organisational structure of the network operator.

- **National Highways was found to have more of an outcome-focused culture since its transformation from the Highways Agency.** Most stakeholders thought that National Highways had developed more of an outcome-focused culture, in terms of being pro-active about finding the best ways to meet the organisation's goals (such as improving safety or reducing journey times) and challenging existing ways of working to improve them. There was evidence that National Highway's relationship with the supply chain has also become more focused on outcomes and collaborative. Additionally, ORR found that National Highways has effectively met most of the KPIs, which suggests the established processes and structures are working effectively.

- **There is considerable evidence of changes within National Highways to embed more of a customer focus.** There are current targeted KPIs around customer needs within the performance framework, such as advertising 90% of roadworks a week in advance (see case study below). Three Customer Service Director roles have been created and a Customer Strategy and customer service plans have been developed. Most external stakeholders reported that customer engagement had improved significantly, and also highlighted that they have noticed a shift in the accessibility of National Highways in terms of being approachable and more engaged with external organisations compared to five years ago. External stakeholders also observed initiatives to improve customer experience in terms of signage and ensuring there is adequate information about roadworks. This was supported by the supplier survey where most suppliers agreed that National Highways focused on the needs of SRN users.
- **The reforms were perceived by many to be a significant driver in changing organisational capacity and capability of the workforce.** It was recognised by internal and external stakeholders that there had been a growth in capabilities at National Highways which had improved the efficiency of the workforce, with a specific focus on recruiting staff with commercial, strategic and data/analytical capabilities, as well as customer service experts.
- **Most internal stakeholders thought that National Highways had a lot more independence and autonomy which allowed for effective decision-making** compared to the Highways Agency. This was attributed to becoming an arms-length government organisation and the recruitment of a board and non-executives. The new approaches to procurement, such as the Asset Delivery Model, have meant that National Highways is taking more direct ownership of decisions and have more oversight over the condition of the network and the status of work taking place. However, there was a view among both internal and external stakeholders that decision-making could be improved in terms of streamlining processes to improve the efficiency.

Alternative explanations

We have considered what alternative explanations there could be for the outcomes observed, in order to assess the extent to which this pillar of the reforms, the transformation of the Highways Agency (as opposed to other factors) has contributed to these outcomes.

In view of the evidence summarised above (and discussed in greater detail in the remainder of this chapter), it seems clear that the network operator has adopted a more commercially-driven culture of efficiency, high performance and continuous improvement, as envisaged by the reforms (further room for improvement in certain areas, such as the decision-making processes within National Highways, notwithstanding). However, this is not necessarily to say that a similar evolution could not have been achieved without the transformation of the network operator into a government owned company. The evaluation has also considered other factors that might have led to organisational changes, in order to assess the potential for these changes to have occurred without the transformation to National Highways. For some of the outcomes, such as changes in the workforce and the company taking a broader and more strategic view of its role, the necessity of the Roads Reform programme for their achievement is clear. For other outcomes, such as a more outcome-focused culture, the role of the Roads Reform programme is less clear – arguably, these changes could have happened while remaining the Highways Agency, had they been driven by the organisation's leadership and/or central government. In fact, some stakeholders suggested that a certain amount of change in this direction was already happening in the last few years before the reforms. Nonetheless, the available evidence suggests that the new set-up and governance structure of National Highways was a significant

contributing factor to the changes that were observed, and that, while some progress in a similar direction could well have been achieved by the Highways Agency under the old arrangements, this is likely to have been more limited and at a slower pace.

2.3 Outcomes-focused culture

Overall, it was widely recognised that the transformation from the Highways Agency to Highways England (now National Highways) had led to a more outcome-focused culture. Internal stakeholders generally thought that National Highways had become more focused on outcomes such as improving safety or reducing journey times, and challenging existing ways of working to improve them, rather than more narrowly focusing on maintaining a physical asset or following processes. This change in mindset was observed across the workforce at more senior levels (directors and managers) and at project manager level. The National Highways employee survey found that staff have a better understanding of their own contribution to the organisation's strategic priorities than in previous years and compared with before the Roads Reform. There has been an increase in the proportion of staff that understand how their own job contributes to National Highways' strategic priorities and goals, which has increased 13 percentage points between 2016 and 2020 to 86% (which is 17 percentage points higher than the Highways Agency score in 2014).

External stakeholders had also observed a gradual change over the last few years to more of a commercial focus at National Highways, which they attributed to external pressure from suppliers and from ORR to increase efficiency, as well as a more sophisticated commercial set-up at the organisation, for example a more sophisticated approach to negotiating contracts and incentivising innovation and a greater focus on costs. Stakeholders also thought there had been an increase in the engagement with external organisations compared to the Highways Agency.

"I think it has become more dynamic and more business focused and more business minded. They're definitely far more externally focused and they're far more willing to engage on a huge amount of different issues, so there's definitely been an improvement." – External stakeholder

As the Highways Agency operated under an executive agency framework with central controls over its governance, the creation of National Highways and resulting increase in independence provided the opportunity to determine the optimal governance structure to allow for a more commercial culture. An external stakeholder added that the board and non-executives at National Highways ensure that the organisation is running effectively and performing well in terms of its outcomes.

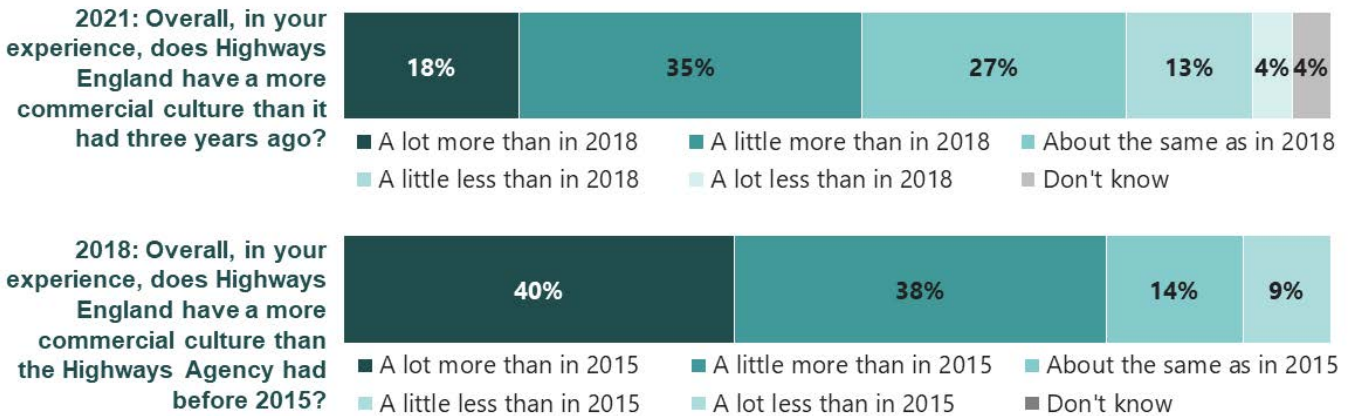
Internal stakeholders indicated that there has been more freedom to challenge ideas and structures in place within National Highways than previously, which is leading to improved ways of working (for example, see case study below on roadworks accuracy data, or the ability to test a 60mph speed limit through roadworks). The annual performance monitoring was also seen by external stakeholders as an effective way of promoting an outcomes focused culture.

"In [National Highways] there appears to be this really healthy culture of, let's challenge the way we're doing things to try to get better. Which must be more efficient, and should lead to some efficiency in financial terms." – ORR interviewee

This was also reflected in the supplier survey: most suppliers with experience of contracting directly with National Highways thought that the organisation had a more commercial culture compared to three years ago: 78% of suppliers in wave 2 and 53% in wave 3 reported that National Highways had a more commercial culture than it did three years before the respective wave of the survey was conducted. This

suggests that the changes in the early parts of RP1 were very clear and pronounced, while more recently, the improvements have been more marginal.

Figure 2.1: Supplier views on changes in National Highways’ commercial culture



Base: All responses from companies contracted by Highways England 2021 (55); 2018 (58): Fieldwork dates: 28 July - 17 Sep 2021, 19 November - 25 January 2019

Additionally, National Highways managers leading major projects reported a gradual shift toward a more outcomes focused culture. They attributed this to the new Regional Development Partnership (RDP) frameworks, a new type of contracting arrangement set up by National Highways. Under this framework, assessment of suppliers’ performance on projects has shifted towards outcomes (such as reducing the number of injuries or reducing journey time) rather than focusing on spending. There was evidence that this encouraged the use of more innovative methods, in collaboration with suppliers, to try and achieve the outcomes within the allocated budget.

“The high-level requirements [mirror] what National Highways sign up to with DfT, so you've that gold thread that runs all the way through, down to the guys on site who have the same objectives and, if there is a change, it's not a change to the budget.” – National Highways interviewee

Overall, the organisation appears to have shifted to a more outcomes-focused way of working, which is apparent in new approaches to procurement and improved understanding among staff of how their work contributes to the organisation’s priorities. This shift was attributed to the performance specification and changes in the organisation’s governance structure. However, it was also recognised that it was difficult to attribute all of these changes to the Roads Reform, and to some extent this culture change may have been possible without the transformation to National Highways, for example, if strongly driven by the organisation’s leadership.

2.4 Customer focused culture

Continuing the findings of the second wave of the evaluation, there is considerable evidence that National Highways has become a more customer-focused organisation (as well as road users, National Highways’ customers include other people and groups such as event organisers or communities living near major roads) and that this has continued to be a key priority. Three Customer Service Director roles have been created to ensure customer concerns are considered throughout National Highways operations, and a Customer Strategy has been developed. Regions have developed customer service plans which are embedded within the performance plans set up for the Regional Directors. Internal stakeholders thought there was a noticeable shift into more of a customer-focused culture at National

Highways in which staff are required to consider customer needs at design and delivery stage and have also increased their engagement with customers.

Most external stakeholders observed that customer engagement has improved significantly. National Highways has developed an insights survey, HighView, with a sample of 20,000 people, and the customer panel of 2,000 people to collect customers' views on projects – neither of which existed before 2015. External stakeholders described public consultation exercises which have influenced the design and delivery of specific capital enhancement projects. In many cases these were driven by National Highways to consider the needs of road users and build these into the delivery of the projects. External stakeholders thought that this engagement and focus on customer-outcomes had improved since the creation of National Highways.

“I think the use of insight has gradually got better, and it's helped deliver what customers actually want.” – National Highways interviewee

“But I think what [National Highways] did well is they sought to speak to various local access groups, various organisations such as [charity] and various other community based groups just to get a representation and even as the schemes progressed through to construction, they've embedded a community engagement team through their appointed contractor... So I think they have come full circle in terms of recognising the need to engage in the public and that has extended into when the scheme's into construction.” – Local authority stakeholder

Stakeholders identified evidence of approaches to respond to road users' priorities and improve customer experience, including various initiatives to improve communication with road users and improved signage on roads to explain traffic or reduced speed. Both internal and external stakeholders thought the transparency and communication with customers about upcoming construction work had improved significantly over the last few years, with examples of communication campaigns working effectively. In the roadworks accuracy case study (see below), a number of interviewees referred to improvement in communication with major customers (such as organisers of major events) about much longer-term plans for closures. Previously, there would have been some communication with these stakeholders, but it would have been more just 'informing them of the closure'. Now it takes place earlier and is viewed as a core part of the roadworks data and planning process; closure plans or diversionary routes might even be adjusted to help the customer.

Additionally, internal and external stakeholders recognised the increased customer focus in terms of social media presence and a shift in being more open and welcoming of feedback.

“We persuaded the [National Highways region] that were doing some work on the [major road] a year or so back to do a much more intensive pre-communications campaign, both the users of the [major road] but probably more importantly folk living along it, if you like, which they've not been particularly good at communicating with before. That produced very, very strong results in terms of people who are much less brassed off understood why they would be disrupted and so on for a lengthy period of time and what the end result would be. That is something now that is progressively being rolled out almost as a sort of template for how to get the users on side when you're about to disrupt their lives.” – Transport Focus interviewee

“Years ago, we would have never dreamed of having our front-line staff in a control room engaging directly with customers through social media.” – National Highways interviewee

There was also recognition that the focus on road users has been driven at a more strategic level, with examples of workshops delivered by National Highways on understanding the customer and how this feeds into the strategy development.

“If you think back to pre-2015, we were very much focused on assets and delivering an asset, which is still incredibly important, but it wasn't always considered or understood why we were doing that. So, in terms of customer insight, the needs of our users, that's improved immeasurably over the last 5 years. So, I think the culture has improved a lot. From the outside in, it might not look like it, but I think we are getting more pragmatic, we are getting more responsive.” – National Highways stakeholder

External assessments also support the view that National Highways is a more customer-focused organisation. CEPA²¹ was commissioned by ORR to support the review of National Highways' proposed efficiencies within the RIS2 programme. CEPA reported that National Highways has focused its strategy more around customers, to understand who its customers are and their needs, and integrate the customer voice into its planning.²² In the 2020-21 Annual Assessment, ORR found an increasingly strong culture of customer focus and that customer initiatives are progressing well. Of the 54 initiatives contained in National Highway's last customer service plan of the first Roads Period, Connecting Our Customers 2020-21, the organisation delivered 52 initiatives (two projects were delayed due to Covid-19 but are underway).²³ These included providing 'in-journey customer insight' across all major project schemes, with the use of mystery shoppers to audit the roadworks; working with roadside facilities operators to improve the experience of using roadside service areas; using real-time customer feedback to improve customer contact services; and improving the lighting used at incidents so incidents can be cleared more safely and quickly. Another example of a customer-focused initiative contained in the customer service plan is described in the following case study.

²¹ CEPA (<https://www.cepa.co.uk/>) is an economics, finance, competitions and regulation advisory organisation

²² Office for Rail and Road (2019) ORR's advice on Highways England's Draft Strategic Business Plan for the Second Road Investment Strategy. Available at: <https://www.orr.gov.uk/sites/default/files/om/ris2-efficiency-review-orr-advise-on-highways-englands-draft-strategic-business-plan.pdf>

²³ Office for Rail and Road (2021) Annual Assessment of Highways England's Performance: April 2020 to March 2021. Available at: <https://www.orr.gov.uk/sites/default/files/2021-07/annual-assessment-of-highways-englands-performance-2021-print.pdf>

Case study: Improving the accuracy of information about roadworks

National Highways undertook a major initiative starting in 2018 to improve the accuracy of on-the-day information about road closures.

Background

Much of the long-haul freight sector operates at night, coinciding with National Highways' major road closures. Freight customers who operate on tight planning and journey timetables need accurate data on whether planned routes will be open that night so they can replan or redirect vehicles if needed.

Analysis in early 2018 showed that the on-the-day (OTD) road space booking data was only around 30% accurate when compared to what happened. This led freight customers to fall back on more ad-hoc ways to obtain this information such as using real-time driver observations (of closure, or signage warning of closure) and Traffic Master data (to see congestion build-ups).

Improving the data

National Highways worked in partnership with a key logistics customer to improve the data provided. It appointed a single contact point in each region, responsible for collating the data by 1pm each day, and released the information on the website by 2pm or soon after. This role included directly contacting all project managers to obtain their actual plans for that night (or on a Friday, for the weekend) which was aggregated and published online as well as distributed by a free subscription email. The original 2018 aggregation process used to take some time, as it involved combining data from multiple spreadsheets. As RIS2 began National Highways moved to a single shared file on and the final version is now usually released by 1.15pm. The initiative also involved monitoring performance of predicted OTD road space bookings versus what happened, for each region, as a league table. The roadworks accuracy results are presented to the National Highways customer working group, which includes ORR, every month.

Outcomes

Following this initiative, there was a rapid improvement in data accuracy, from 30% measured in Feb-Apr 2018 to 75-85% in the rest of that year. The data for 2021 (to August) is 85-95% accurate²⁴. The mailshot now goes to about 400 recipients, largely in the freight sector, and the file is downloaded from the website about 13-14,000 times a month. National Highways report that it has received "phenomenal feedback" from freight users. The freight customer involved in the initiative reported that they now trust the National Highways data and have built internal systems around it. They greatly appreciated the new National Highways commitment to listen to their needs and respond, and were particularly pleased that National Highways had approached them to discuss what they needed.

Car users relying on real time data from sat-navs, roadside information boards, media bulletins or service areas also benefit from these improvements, since these services all gather their road closure data from National Highways systems.

Reasons for the initiative taking place, and influence of the reforms

²⁴ Source: National Highways internal data systems.

Some of this improvement may also be due to the fixing of an error in the system which had previously led to some data inaccuracies being counted twice.

Interviewees reported that the main driver for this initiative was a cultural change at National Highways, resulting from Roads Reform, towards making more effort to understand customer needs and minimise disruption for customers. In particular, National Highways was thought to now place a greater importance on the needs of freight users of the network. This led to a change in attitude from a perception that “it’s hard” to provide accurate information, to treating this as a serious customer issue that needed solving.

“Why can’t we get the information more accurate? The answer that came back from inside the organisation a lot of the time was, ‘Well, it’s just roadworks, isn’t it. That’s the nature of them, they change, things happen and we don’t go ahead.’ Whereas actually, by fronting up and actually saying that’s not appropriate, that’s not the right behaviour, we were able to start addressing it.”— National Highways interviewee

National Highways had also been prompted to address the issue by both ORR and Transport Focus stating that the low level of data accuracy was not acceptable.

Structural changes also played a part in enabling the initiative to happen, specifically staff being transferred from tier 1 contractors to National Highways as part of the move to the Asset Delivery model. This moved the individual regional contacts for roadworks data from individual Tier 1 contractor teams, into effectively a single team (albeit dispersed across regions). Interviewees in those roles noted that although the task they had to undertake was much the same, they felt more like a single team: sharing best practice, with a clearer goal (improved customer service) and more consistent communications. This in turn meant that both project managers and regional teams understood this was not a “passing fad” but a permanent change with direct connection to both customer value and the RIS targets. Moreover, one interviewee noted that at National Highways, they had much more time within their role dedicated to collating roadworks accuracy data, rather than it being a small “add-on” to their main role as it had been at the contractor. If this is the case across regions, this suggests that these changes have led to an increase in the overall time allocated to providing roadworks accuracy data. These three factors (customer focus, the influence of the monitor and watchdog, and changes in roles due to new procurement models) show the influence of Roads Reform on enabling this initiative to happen. When asked whether this change to data accuracy could have happened without Roads Reform, the response from most interviewees was that it could have – in that the data could be generated – but it did not happen. The logistics customer involved in the initiative reported that **in the past** they had made numerous approaches to the Highways Agency and Highways England to try and obtain improved data, without success. The changes in culture and priorities arising from Roads Reform were seen as enabler for National Highways (then called Highways England) to take the initiative to make the improvement in the end.

However, more than one interviewee, while acknowledging the recent success, did note that taking a longer view reveals an additional perspective: prior to the creation of the previous contracting arrangements, the accuracy of road closure plan data in earlier years was reported to be much better than the 30% figure from 2018 used as a baseline. In the past at the Highways Agency, there was a rigorous process to approve closures involving a road space booking board. The 30% level of accuracy could therefore be seen as an adverse consequence of the original action to outsource the majority of the planning functions to a set of Tier 1 contractors, who had limited motivation to do better on road space booking accuracy, and the removal of a layer of rigour inside Highways England. This view is supported by reports from interviewees who had worked in the Tier 1 contractors, where they regularly saw cases of road space closures for non-emergency work being booked in the day before or even on the day. Nevertheless, today’s system was still viewed as an improvement on both of the previous systems due to the communication of the data outside the organisation and to new IT functionality, which enables visualisation and optimisation to be done much more easily.

Next steps: the seven-day data challenge and beyond

The success of this initiative led to a challenge from ORR to National Highways to improve the accuracy of data provided 7 days ahead of closures. RIS2 contains a target of 90% accuracy for this data by March 2025, from a starting-point of 40% in April 2020. As of October 2021 the data is 60-70% accurate.

To date, National Highways has been undertaking a range of data analysis to work out how to meet this target, and has been upgrading their internal information systems to track performance by region and overall. The organisation is also seeking to change the culture to push back on project managers who seek road space less than 7 days in advance for non-emergency works. This is happening by means of communication campaigns, data on repeated late applications being provided to line managers, or (in one region) applications for road space less than 7 days in advance needing approval from regional directors. Some interviewees believed that this had “tightened up” the system and driven the improvements seen to date, but that this was “low hanging fruit” and the 90% target would be more difficult to achieve.

Improving the accuracy of 7-day data is more difficult than improving OTD data, because there are many more reasons why the forecast 7 days in advance might not match what happens. Up to 10% of inaccuracies relate to emergency closures on the day, which makes a 90% target overall extremely challenging. Furthermore, many of the closures cancelled inside the 7 days are weather-related. However, rather than treating weather closures as inevitable and unavoidable, National Highways reported that it is starting to ask questions much further up the chain of planning, such as “Why are we planning major closures in the months where we know the weather will be bad? Can we change that?”. Meanwhile, the data team are seeking to communicate the importance of gathering reasons for each late application and each cancellation.

A large majority (85%) of the suppliers surveyed as part of wave 3 agreed that National Highways focuses on the needs and experience of SRN users (compared to 84% in wave 1 and 95% in wave 2). Even though overall user satisfaction (as measured by the NRUSS)²⁵ stayed constant in RP1 (for details see chapter 5), Transport Focus recognised progress with regards to National Highways becoming more customer focused in its review to measure National Highway’s performance.²⁶

However, despite significant progress, it was also recognised that there was still room for improvement. A minority of external stakeholders thought that the culture felt the same as before and that further improvements could be made in communicating with road users about the SRN.

²⁵ The National Road User Satisfaction Survey has now been superseded by the Strategic Roads User Survey, but during RP1 NRUSS was used to measure satisfaction levels in relation to the KPI. See chapter 5 for further discussion of this.

²⁶ Transport Focus (2019) Measuring Highways England’s Performance 2020-25 the Road User View. Available at: <https://www.transportfocus.org.uk/publication/measuring-highways-englands-performance-2020-25-road-user-view/>

“Some of the big issues around smart motorways were because there wasn't a clear communication about what they were there for. Road users didn't understand what they were there for and there was not enough consistency of approach, which points to the not being joined up internally enough. I think communication is a huge area for [National Highways] and I think they've not quite moved yet into the customer operation space. They've made huge strides on it and I wouldn't want to say they haven't made any moves at all because I know there's a lot of work going on and I know it's a really difficult piece, but I think that's one area that they still need to improve.” – External stakeholder

There were several explanations provided for the increase in customer focus evidenced above. Stakeholders reported that this was heavily influenced by the Chief Executive who determined the three imperatives of safety, delivery and customer service, suggesting that to some extent an increase in customer focus could have taken place without the reforms if strongly driven by the organisation's leadership.

“Taking the 60mph in roadworks initiative as an example, this was able to happen because they'd named the three imperatives and can use them as a justification to push back on objections to doing things differently. For example, supply chain wanted to stay at 50mph, but [National Highways] were able to push back because of internal ambition to be more customer focused and challenge objections to this, and also because of research showing drivers are calmer at 60mph because they can overtake HGVs.” – National Highways interviewee

As well as changes related to National Highways' independence, such as the recruitment of new staff with different experience and from a wide range of sectors (see section 2.5), the independent Watchdog and Monitor have also had an important role in driving an increase in customer focus. There are customer metrics embedded within the performance framework, for example, responding to a customer within 10 days, reducing delay times and improving road user safety, and ORR is responsible for monitoring whether the Customer Strategy and Customer Service Plan are being delivered as intended. ORR has continued to meet with the company's Customer Service Directors to review progress, discuss priorities and future strategy. For RP2, the customer satisfaction KPI is based on the new Strategic Roads User Survey (SRUS) delivered by Transport Focus, which replaces the NRUSS.

Overall, some opportunities for further improvement notwithstanding, the changes had resulted in an increased customer-focus at National Highways, with more targeted KPIs around customer needs (such as safety, journey times, etc.) and customer-centred approaches to improve road user experience in terms of signage and communication about roadworks. The customer metrics embedded within the performance framework, the customer service plans, the creation of Customer Service Director roles and the development of a Customer Strategy provide evidence of significant progress towards more of a customer-focus at National Highways. The reasons for these changes were a combination of contributing factors including the strategy of the Chief Executive, changes in mindset among the workforce to consider customer needs at design and delivery stage, the recruitment of new staff from different backgrounds and the reviews of the Watchdog and the Monitor.

2.5 Workforce organisational capacity and capability

Roads Reform – and specifically the transformation of the Highways Agency into National Highways – was perceived by many stakeholders to be a significant driver in changing organisational capacity and capability of the workforce, due to the recruitment of new staff with a range wide of skills and the focus

on expanding key areas within the organisation, such as analytical capabilities. National Highways grew from 3,700 full-time staff to over 6,000 over the first road period.²⁷

It was recognised by internal and external stakeholders that there had been a growth in capabilities which had improved the efficiency of the workforce, with a specific focus on recruiting staff with commercial, strategic, customer service and data/analytical capabilities (see below), and from different backgrounds, in particular the private sector and other areas of infrastructure management. These changes were thought by most stakeholders to be a result of the Roads Reform, in particular because of National Highways' increased responsibility to be more proactive regarding strategic-level matters and have more ownership of the management of the SRN.

“I felt that over time as people have moved out and new people have come in, gradually the whole atmosphere has changed and the openness to try things differently.” – National Highways interviewee

Stakeholders identified some specific changes in the workforce which had led to greater efficiency. The management of the Asset Delivery model was said to have brought in more specialist skills around asset needs, structural inspections, data analysis and programme development, which was seen to be more effective in terms of saving time and reducing costs compared to outsourcing this type of work. External stakeholders thought the creation of Service Delivery Managers was beneficial to support the operational side of the business. The establishment of an efficiency team and recruitment of an Efficiency Director was also seen as contributing to a greater focus on improving efficiency within the organisation. The creation of the Capital Portfolio Management team to support the increased management of work as a result of the longer-term funding and planning, was seen as hugely beneficial in providing senior support to effectively deliver more complex schemes.

Some of the external stakeholders highlighted that they have noticed a shift in the accessibility of National Highways in terms of being approachable and more engaged externally compared to five years ago when the organisation was thought to be more “invisible”. The organisation has created stakeholder engagement managers so that external organisations know who to approach, and is more likely to approach external organisations and ask for their opinion. For example, in the initiative to improve roadworks data described above National Highways proactively approached one of its major customers to understand what they needed. This was echoed by internal stakeholders working in National Highways who thought there had been a gradual shift in transparency – for example, the publication of annual delivery plan updates. Related to this, the new procurement and delivery structures have allowed a more collaborative approach between suppliers, National Highways and local stakeholders, which has improved gradually over recent years; and the organisation has more direct contracts with individual suppliers, again increasing visibility.

“If you went back ten years, it was very much us and them, and I think as that relationship has developed, I think it has gotten better.” – Supplier

“There was a traffic management strategy that we came up with – which ended up saving us a lot of time and a lot of money – that was done between us, National Highways, the key stakeholders at [Supplier], as well as the supply chain, which was, like I said, the closure of the road that wasn't previously due to be closed, and we managed to agree it between us all, and did it, and it gave everyone benefits.” – Supplier

²⁷ Highways England (2020) Annual Report and Accounts, 2020. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/915999/Highways_England_Web_0709.pdf

As noted in the wave 2 evaluation report²⁸, analytical capability was highlighted as a key area of workforce growth with only 10 staff in 2015 to now over 70 within the analytics team. The Chief Analyst role was created shortly after the reforms, initially focusing primarily on the measurement of value for money/ benefit-cost ratios, but more recently broadening the scope of analysis to include wider metrics, such as those to measure improvements for road users, and an expanded team that includes not only economists but also other professions and expertise, including evaluators. It was reported that at the start of RP1 there was a lot of analysis which was outsourced, compared to the capabilities now, which allow analysis to be undertaken internally within National Highways.

Some external stakeholders thought that data was being used more effectively to inform decisions compared to five years ago. There was evidence of increased use of modelling and the development of analytical approaches to improve value for money assessments: for example, going beyond traditional cost-benefit analysis to understand the full range of potential benefits to road users (not all of which can be monetised) and therefore assess the true value of a proposed project. Both external and internal stakeholders generally thought analytical capability had improved because of the greater autonomy and responsibility of National Highways.

“We’re really much more rigorous in our analytical approach to things, and that allows us to start building the databases of different schemes and different types so we can very quickly interrogate our data, and understand what’s happening with projects, and why we think certain projects are outliers on that, and to support those outliers quicker and easier.” – National Highways stakeholder

Similarly, National Highways project managers described positive changes in using data to inform decision-making compared to five years ago.

“I think the maturity around the use of data to inform decisions has come on leaps and bounds over the last 5 years and, when it comes to the day-to-day management of projects, we’re using the data and we are analysing the trends to help inform decisions that are made for future stages of the project, whereas previously, we just made it up as we went along or followed the very prescriptive project control framework.” – National Highways project manager

Some of the internal and external stakeholders thought that further work could be done to publish the outcomes and impacts of National Highway’s research more widely and that the analytical capacity was not yet being used to its full potential. Others thought improvements could be made to ensure work was less siloed within National Highways. As mentioned in the quote below, an external stakeholder thought there had been significant changes in terms of recruitment from external organisations into National Highways to improve its capability, but also added that further progress is required to ensure the organisation has brought in enough external capacity to allow for diversity from different organisations and backgrounds.

“There have been significant changes. I think there’s still a way to go to be honest. There’s been different moves to bring people in who previously were working for suppliers into [National Highways]. I know [National Highways] have done and are doing an awful lot of work around improving their capability. I think, anecdotally speaking...there is still a way to go.” – External stakeholder

²⁸ Evaluation of Roads Reform: the changes made to the management and operation of England’s Strategic Road Network since 2014, Wave 2 Report (Ipsos MORI and Risk Solutions). Available at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/816555/roads-reform-wave-two.pdf

Stakeholders thought that greater pay and recruitment flexibility had improved recruitment and retention across National Highways (including at the mid to lower positions). Increasing numbers of staff report that their pay is fair considering the pay of people doing similar work in other companies (42% in 2020 compared to 28% in 2017). Some stakeholders thought the removal of the restrictions to recruitment and specialist pay had enabled National Highways to recruit the right calibre of staff across all positions and compete with other sectors.

“We are able to make the case for specialist pay, and if you look at some of our divisional directors or execs, coming from what you would normally class as competitors in the customer service arena, so the water industry, TfL, normally where we would lose people to them, we're now getting people from them, and I think that's a really good sign.” – National Highways stakeholder

In 2020, there was a large increase in staff pride in the organisation and in staff motivation, with 23 and 24 percentage point increases from 2016. Both measures have gradually increased since 2016, with 44% feeling proud of working at then Highways England and 28% feeling motivated to do more than required. In 2019, one-third of staff (38%) reported being motivated to do more than is required, increasing to 52% in 2020 and over half (56%) reported feeling proud of working at National Highways, increasing to 67% in 2020. It should be noted that the Covid-19 pandemic is likely to have contributed to these trends (rather than the Roads Reform alone), as stakeholders commented that National Highways' role in responding to the pandemic boosted staff morale.

However, some internal and external stakeholders raised concerns that the pay scales within National Highways were still not competitive with the private sector and that there were ongoing challenges in terms of recruiting senior project managers for both maintenance²⁹ and renewals and for major projects²⁹. There were reportedly additional barriers such as location, where it was thought to be more difficult to recruit in rural areas and areas with high demand for construction work such as the southeast.

“I think one of the issues, this is a general issue from National Highways, for the very largest projects ... to get the right project leaders on that can be difficult, you're competing in the market against the private sector, doing projects of a similar scale and one of the issues is being still within the public sector pay structures, there is sometimes an issue for National Highways in being able to recruit at an appropriate level for the sort of expertise they need for these bigger projects.” – External stakeholder

In summary, the National Highways workforce has grown and diversified in terms of capabilities, leading to greater efficiencies and cost savings (due to in-house specialists). Greater pay and recruitment flexibility was seen as a significant factor in changes in the workforce, but there were still challenges in terms of recruitment and retention of staff at senior project management levels due to differences in pay in different sectors.

2.6 National Highways decision-making

Most internal stakeholders thought that National Highways had significantly more independence and autonomy compared to the Highways Agency as a result of being an arms-length government organisation and with the recruitment of a board of executive and non-executive directors. They reported that this has allowed National Highways more of a role in strategic planning in terms of areas which may not have been possible when it was the Highways Agency (for example on carbon emissions,

²⁹ As noted earlier, when setting salaries, National Highways operates to the principles outlined in its Framework Document and Remuneration Framework, and keeps within the pay envelope set for all strategic roads work agreed with DfT and HMT. Salaries above £142.5K require Secretary of State clearance.

biodiversity, and the digital agenda). Before the creation of Highways England/National Highways, there was more of a focus and responsibility on the delivery, whereas National Highways has been able to develop its strategic thinking, such as publishing a [route map to net zero](#) to work with the supply chain and minimise and eradicate carbon from the roads.

“They’re an organisation that now tell us what they think the right answer is, rather than us telling them what we want them to deliver.... because as a company, rather than as an agency, I think they feel a stronger responsibility and a stronger desire to shape their own destiny...for example, some of the longer term thinking they may not have been done when they were an agency.” – DfT interviewee

National Highways also has more oversight and ownership of decisions on the network due to new approaches to procurement, such as the Asset Delivery Model described in chapter 1.

The reforms were anticipated to lead to more efficient decision-making processes at National Highways due to the organisation having greater autonomy. The findings from the wave 3 supplier survey showed that over half of suppliers surveyed thought that National Highways was good at communicating decisions, plans and changes to plans (which has implications for efficiency): 55% of respondents in wave 3 thought that National Highways was good at communicating decisions, plans and changes to plans, while 24% rated it as poor. There was also some evidence among both internal and external stakeholders that decision-making processes could be improved further to allow for more efficient decision-making within National Highways.

“There’s an overall corporate view that we’re a bit clunky and that we need to be a bit quicker, and a bit more streamlined, and I think there’s a little bit of political pressure as to why do things always take so long. We’ve got a pilot project which is project speed, which is about how we can improve delivery times, that’s one of our major latest schemes. To be better at it we need to streamline our processes and consider how we can take those processes out.” – National Highways interviewee

Additionally, only 27% of suppliers surveyed in wave 3 thought that the speed of decision-making was good and 40% of suppliers rated decision making speed as poor. This aligns with some of the feedback from the external stakeholder interviews where suppliers thought the decision-making at the project level was efficient, but that there was too much red tape when decisions had to be made by more senior staff, for example, in terms of how major projects are selected and prioritised. Some external stakeholders thought that elements of the governance and processes could be streamlined to enable more effective decision-making within National Highways.

“It varies scheme to scheme. So, the project manager on [project]...was pretty good at making project-level decisions, and then it came to a grinding halt the minute it went back to the office. I suppose, here, we’re experiencing it since they were struggling at site-level as well as the office. So, yes. They’re not a decision-making machine, really. You get an answer whenever you get an answer, whereas we’re very much driven by time. Time is money to us, so we make lots of decisions on an hour-by-hour, day-by-day basis. They don’t, is the brutal honesty of it.” – Supplier

Despite the recognition that processes could be improved further to allow for more efficient – in particular faster – decision-making, overall, stakeholders thought that the enhanced independence and autonomy of National Highways allowed for more effective decision-making compared to the Highways Agency, as a result of being an arms-length government organisation and the role and work of the board. The new approaches to procurement, such as the Asset Delivery Model, have meant that National Highways is taking more direct ownership of decisions and have more oversight. This has enabled progress to be

made on initiatives such as “bundling” works planned for the same area to take place within a single road closure, described in more detail in the case study below.

Case study: bundling roadworks to take place at the same time

National Highways has been looking at ways of identifying opportunities to undertake two or more planned pieces of work on the same section of the SRN at the same time, rather than as two separate events. If works can be ‘bundled’ in this way, road users experience any resulting congestion or inconvenience only once and do not have the frustration of seeing roadworks completed, only to restart again a few weeks later in the same place.

Background

It is not clear from case study interviews whether bundling took place inside the Highways Agency extensively prior to Roads Reform. However, there is no evidence from interviews of an intentional, widespread attempt to bundle works.

There are challenges to bundling which means it sometimes is not possible or needs additional planning, especially if the bundled works are being undertaken by separate contractors. These include conflicts related to accessing the same physical area of the road, risks to one group of workers from the activities of the other set of works, the need for a single point of responsibility, and the potential for penalties in the event one set of works causes another to be delayed or to overrun.

Actions taken

National Highways’ focus on bundling forms part of its Organisational Effectiveness 2020-25 programme, specifically the “Planning and Programme Optimisation” strand. This programme seeks to take the long view of improving value for money and road user experience, including looking at whether bundling some works means that the road user does not experience a second closure of the same section later, even if the first closure is more extensive (perhaps a full closure instead of just some lanes); or that the total cost of the works is less than it would have been if unbundled; or that the total closure time is shorter.

Although this programme relates to RIS2, the groundwork to make it possible started in RIS1, when activity took place to develop better systems for planning work across both capital investment in new assets or renewals, and day-to-day maintenance. As more areas moved to the Asset Delivery model and teams moved in-house from the Tier 1 contractors, they brought with them their existing approaches to collating work plans; National Highways discussed the strengths and weaknesses of these approaches with the aim of creating a ‘best option’ (or a hybrid) which is then standardised across all areas.

National Highways programme designers – especially for major projects, which will often form the anchor for a set of bundled works – are now actively encouraged to seek out potential bundling opportunities, for example by using systems to identify other major planned works and to contact area maintenance planners to see what activities they have planned in the same road section that might be incorporated.

A key element of the change, mentioned many times by the interviewees, was to break the past pattern of planning being done separately for different asset types (with jobs being defined as a pavement task, a drainage task, a barriers task and so on) which naturally guided thinking towards individual road interventions for each asset. By moving to multi-disciplinary programmes early in the design stage, the possible synergy or conflict between types of asset work can be considered.

Outcomes

Interviewees were very clear that the expectation of considering options for bundling has changed, notably in the last two years (2019-20). They reported that it is now much more common for designers working on major interventions to approach the area maintenance team and ask about works that might be planned around the same time to see if bundling is possible; and connect, directly or through representatives, with other stakeholders including local authorities, for example to avoid conflicts where one organisation is closing a road and diverting traffic down a route which the other organisation is planning to have works on at that time.

Interviewees gave examples of how this engagement process is comprehensive, rather than simply a desktop exercise within the scheme design team. Examples included engagement with local MPs and community consultation: for example, one community was consulted on whether they would prefer one larger intervention to enable bundling of works – with significant local inconvenience – or a series of smaller ones. In that case the community chose to ‘get all the pain over in one go’.

Assessing the impact of these changes is challenging, since the benefits realisation is mostly anticipated to occur later in the RIS2 period, but the anticipated benefits include commercial savings along with benefits to safety, customer experience and emissions reduction.

However, the bundling of smaller works in with Major Projects or some larger Capital Renewals can still be challenging, in part because of the incentives and performance criteria set for very large schemes. In one case, as a programme developed the overall costs were seen as too high and consequently the lower-value elements, including some renewal works, were removed. The systems in place at the time were not agile enough to factor in the wider impact of those renewals needing to be done later as a separate project. In another case, it was not possible to resurface all lanes after a road widening, since the project had a very visible “open to traffic” date which would be put at risk. Further closures have since been required to go back and repair early failing surface at the joints.

Reasons for the initiative taking place, and influence of the reforms

Interviewees identified several reasons for a greater focus on project bundling. These were the greater funding certainty provided by RIS; the move to the Asset Delivery model; and other changes within National Highways.

Funding certainty makes bundling easier because the five-year planning cycle allows for early discussion of whether works from different years can be re-arranged to enable bundling, while maintaining the same overall spending envelope and annual estimate. This was much harder under annualised budgets and where the decisions were made largely inside the tier 1 contracting companies.

The move to the Asset Delivery model, where more work takes place in-house, was seen as fundamental to driving this change by changing the incentives around how work is planned and bringing control over bundling decisions, along with those making those decisions, almost entirely within National Highways. This has, in turn, made it easier to consider bundling that spans work across different directorates (e.g. Major Projects and Maintenance). The previous system was also seen as having encouraged contractors to think on an asset-by-asset basis (partly as a way of standardising approaches to similar assets across different areas).

The initiative was also attributed to several changes within National Highways, specifically a move to more collaborative working across the directorates responsible for Major Projects, Capital Renewals and Maintenance; recruitment of staff, including senior roles, with asset management and delivery experience in other sectors, notably rail and water; and an increased focus on the customer experience, not just on value for money or technical quality. As described earlier in this chapter, there are clear links from Roads Reform to these changes in staff recruitment and customer focus, with the increase in collaborative working also attributed by interviewees to the need to become more customer focused. There were numerous mentions during the interviews of a change from an inward focus on simply getting works done, to an attitude where significant effort

is put in to assessing the impact on customers and how it might be minimised by how the overall programme is planned and delivered. This was related to the overall organisational change to be more customer focused that has been driven by the reforms.

3 The Monitor and Watchdog

This chapter presents an assessment of the effectiveness of two new actors within the reformed system: the Office of Rail and Road (the Monitor) and Transport Focus (the Watchdog). The new roles for both organisations were intended to contribute to more accountable, transparent, and customer-focused management of the Strategic Road Network (SRN).

The Office of Rail and Road (ORR) independently monitors how National Highways exercises its function. It does so by investigating, publishing reports or giving advice to the Secretary of State on whether, how and at what cost the Company has achieved its objectives set out in the RIS (Highways monitor: memorandum of understanding, 2015). In the second Road Period (2020-25), ORR's role is also to perform an assessment of the RIS2 and strategic business plan, to conduct research and produce reports that are relevant to the fulfilment of RIS2, and provide advice to the Secretary of State (ORR's role in the second RIS, 2016). Independent monitoring was expected to ensure effective scrutiny of National Highways' decision-making, and that National Highways remained focused on its key objectives, which in turn would contribute to better performance and value for money for the SRN.

Transport Focus, formerly Passenger Focus, is the independent watchdog representing the interests of transport users: as part of Roads Reform, its remit was expanded to include users of the SRN. Transport Focus's work is intended to improve the availability of evidence and insights on customer needs, and the use of this evidence to help shape services. Transport Focus provides independent advice to National Highways (as well as DfT and ORR) on customer priorities, so that National Highways' decisions are better informed.

This chapter focuses on two key evaluation questions for this theme:

To what extent has the work of the Monitor effectively enabled and incentivised National Highways to improve its performance and efficiency?

To what extent has the work of the Watchdog effectively ensured National Highways and DfT take decisions that are more focused on the needs of users / customers?

3.1 Overall conclusions

As in the previous wave, evidence from the interviews conducted suggests that both ORR and Transport Focus have been effective in holding National Highways to account, influencing its priorities and, in some cases, modifying its behaviour.

- ORR's public monitoring has led to greater transparency about National Highways' performance. DfT value ORR's independence when holding National Highways to account and reported that others such as parliament and the media also find this useful.
- ORR's existence has influenced National Highways' priorities, leading to a greater focus on improving day-to-day operations and performance. As well as the evidence given in previous chapters that National Highways is directing its activity to meet the set KPIs, there are specific examples of where ORR has influenced National Highways' activity. While some external stakeholders were concerned that the performance specification could have negative consequences if the focus on targets were too narrow, internal stakeholders believed that ORR's

monitoring had overall led to a greater emphasis on the ultimate goal of delivering value for customers. The KPIs for RIS2 were seen as an improvement on those for RIS1.

- The channels ORR has to influence National Highways, including publications, internal discussions, and powers to escalate issues of concern, were thought to work well. Internal stakeholders stressed the importance of the escalator process that ORR has in place for holding National Highways to account. Although this is only used as a last resort, it gives a greater authority to ORR in terms of requesting information it needs from National Highways to assess performance or investigate potential issues. Many internal stakeholders also described how the relationship between National Highways and the monitor had matured over time to become more constructive.
- Transport Focus provides National Highways with information on the needs, priorities and satisfaction of a wide range of road users, and its independence means it is able to promote the issues that matter most to road users.
- National Highways' response to Transport Focus' recommendations is documented publicly³⁰, and interviewees provided examples of how National Highways has taken different approaches as a result of Transport Focus' research, demonstrating that Transport Focus' work influences National Highways. However, internal stakeholders noted that Transport Focus has no powers to ensure its recommendations are acted on, and National Highways is under no obligation to follow through with them. Transport Focus identified areas of its recommendations where it felt National Highways had been slower to act, for example in improving roadside facilities for truck drivers or in maintaining signs.
- More broadly, Transport Focus influences National Highways' performance metrics and customer plans, often through internal channels such as committees and the development of the RIS. This may not always be visible to external stakeholders: some were relatively unaware of the role of Transport Focus, with others thinking that the watchdog should have more influence on National Highways.
- While external stakeholders who were aware of Transport Focus' role had generally positive views on the watchdog, some perceived overlap in the activities of Transport Focus and ORR and were concerned about the potential for duplication.

Alternative explanations

We have considered what alternative explanations there could be for the outcomes observed, in order to assess the extent to which this pillar of the reforms, the monitor and watchdog (as opposed to other factors) has contributed to these outcomes.

The effects of both ORR and Transport Focus on National Highways are complemented by other elements of the reforms (see chapter 4 for a further discussion of how the reforms complement one another). For example, in chapter 1 we noted that the existence of a performance specification as part of the RIS had encouraged National Highways to focus more on overall outcomes rather than processes, and this may still have been the case in the absence of independent monitoring. Likewise, the transformation of the Highways Agency into Highways England (now National Highways) has led to a

³⁰ For example, National Highways' response to Transport Focus' research into the needs of disabled SRN users has been published in *A more accessible road network*, published by Transport Focus in 2021 and available at: <https://d3cez36w5wymxj.cloudfront.net/wp-content/uploads/2021/07/21124438/A-more-accessible-road-network-report-1.pdf>

greater customer focus in several ways, and so it is likely that National Highways would take a greater interest in customer views even without insight and prompting from Transport Focus. National Highways undertakes a significant amount of its own research to understand customer priorities, and can also draw on research published by road user representatives like AA and RAC.

Some internal stakeholders believed that accountability and transparency in the system would have improved regardless of the monitor and watchdog due to the other reforms in the overall system of SRN management. However, the independence of both the monitor and watchdog, and the additional capacity and capability they bring, was seen to have influenced National Highways' priorities and made these changes happen more quickly than they would otherwise.

3.2 Role of ORR in raising transparency and accountability at National Highways

ORR's monitoring role was expected to lead to a greater level of transparency and accountability in the way National Highways operates. Wave 2 of the evaluation concluded that ORR contributed to National Highways' accountability and focus on the performance specification by providing independent monitoring beyond that which DfT would have been able to provide. DfT interviews in this wave corroborated this view, explaining that an independent monitor has the capacity and capability to investigate in more depth, but also better able to step back and look at the "bigger picture" of performance.

Internal and external stakeholders who were interviewed in wave 3 reflected positively on how the Company has become more accountable and transparent, and that there is now a greater ability for a wide range of interested parties, including academics, local authorities and foreign governments, to understand National Highways' performance.

"I think there does seem to be much more transparency about them and their performance. Having to report their annual performance... I'm not sure that you would have picked that up in the past so much (media publicity regarding spending) so there's probably more transparency than there used to be" -external stakeholder interviewee

One example of increased transparency is the way in which National Highways is reporting performance in RIS2 on a more regional level, to help identify opportunities for improvement and so that it will not be possible for poor performance in one region to be hidden. This was laid out in the latest ORR annual assessment³¹, with ORR interviewees explaining that they would be monitoring these regional differences. The Department for Transport pushed for greater regional reporting during RIS2, following ORR producing the [Benchmarking Highways England 2020 progress report](#) at the end of RIS1, which provided significant input in this disaggregation process. ORR has provided support and is "discussing with [National Highways] the effort needed to expand the range of indicators that are reported at regional level", to ensure that this DfT aim can be achieved.

Some road user representatives were less aware of the role of ORR and believed this should be made more visible. Other external stakeholders were concerned that having four organisations (DfT, NH, ORR and TF) involved in the overall management of the SRN might reduce accountability. This suggests the importance of clearly outlining the responsibilities of each organisation and communicating this to external bodies.

³¹ <https://www.orr.gov.uk/sites/default/files/2021-07/annual-assessment-of-highways-englands-performance-2021-web.pdf>

3.3 Effect of ORR on National Highways' performance

Discussed in greater detail in chapter 5, National Highways achieved its efficiency targets for RP1, and reported £243m of efficiency savings in 2020-21, £10m more than its target.

In the previous wave, the evaluation identified emerging evidence that ORR's work contributed to enabling and/or incentivising National Highways to improve its performance and efficiency. In particular, stakeholders noted the impact of ORR's annual assessments, and pointed to the level of engagement between the two organisations in the lead-up to publication of these as evidence of their significance. Stakeholders also noted that less formal internal discussions were also important in ensuring National Highways was meeting its obligations, and gave examples of where ORR had influenced National Highways' approach to addressing a backlog of structural inspections and scheduling the delivery of major schemes. Some of these examples were also mentioned in wave 3 interviews as evidence of the influence of ORR.

“Over the next 6 to 9 months they got those 2,500 overdue inspections right down to 1 or 2. If we hadn't spotted that, if we hadn't pushed that really hard at chief exec level, I am fairly certain that nothing would have happened, and then you run the risk of course of there being a big safety issue.” – ORR interviewee

Findings from this wave of stakeholder interviews have been broadly similar. National Highways interviewees reported that, overall, the company operates differently as a result of ORR's existence and work.

“There's always that question, 'Is this going to satisfy the monitor?' And I think that's a good thing, but it just makes you stop and reconsider the decision, reconsider the processes again, to make sure you are contributing to your KPIs, you are contributing to your wider targets...I was in a metric development workshop the other day and 4 or 5 times through that, the question was always, 'We'll have to run this past the monitor. Do we think this is what the monitor is looking for?'” – National Highways interviewee

“ORR plays its part in asking us to really be able to demonstrate how we literally account for all the pennies and how we demonstrate that everything has been spent efficiently or otherwise” – National Highways interviewee

ORR provided a further example of how the scrutiny its reporting provides led to some positive changes in National Highways' performance – due to a data processing error, a KPI for pavement condition was thought to have been met in 2016, but after further investigation it was found that the target had been missed. The interviewee felt that whilst National Highways would have solved this issue itself eventually, the process was quickened due to the public attention ORR drew to the problem.

“Maybe if it was the Highways Agency, that would've just been brushed over and no one would've ever known. But we actually reported on that, and because of that reporting and them being below the target, they quickly put in place a recovery plan and started to deliver that, and ended up by the end of the second year, they were nearly on target, and then by the third year they were back above target again.” – ORR interviewee

Some areas of ORR's work were seen as more impactful than others: for example, its work on the efficiency review for RIS2 was seen as influential on DfT and Treasury as well as National Highways. This was attributed to the expertise ORR provided in economics and engineering, but also its independent role as an “honest broker” between National Highways and DfT. On the other hand, National Highways felt that some of the deep-dive reports commissioned by ORR were of less value than the efficiency reviews.

ORR interviewees reported that their ability to identify and resolve potential risks to National Highways' compliance with the Road Investment Strategy was greatly helped by the escalation process in place to deal with any problems that arise, and that this was an effective process in making National Highways accountable about its performance. The use of this this escalation process was very uncommon and only a last resort, with internal stakeholders observing collaborative dialogue between ORR and National Highways to resolve issues without escalating their concerns in a more formal manner. However, ORR interviewees believed that the prospect of high-level investigations, leading to negative media publicity, was effective in prompting National Highways to respond and provide information requested, given the company's sensitivity to external perception and desire to "own the message". This corroborates findings from the previous wave, where stakeholders felt ORR's staged escalation process, and softer approaches, was generally appropriate.

"If at some point we have to fine them for something, it means that something will have gone pretty seriously wrong, so we have to try and use the other levers underneath that. And so, it does show that they do take that seriously internally, and I think they are very sensitive to how they're externally perceived... I think we have levers and they're quite subtle, but I think they do work, it's just we would probably be happier... if they just complied with what we wanted straight away." – ORR interviewee

3.4 Effect of ORR monitoring of KPIs on National Highways' focus and priorities

ORR publishes annual assessments of National Highways' performance against its key performance indicators. Internal stakeholders believed that National Highways focuses heavily on these KPIs and is encouraged to do so by ORR. Internal stakeholders explained that while the relationship between National Highways and the DfT focussed mainly on delivering enhancements and major projects, ORR's monitoring against KPIs has increased the company's focus on more day-to-day performance issues around operations, maintenance and renewals, which are key to user satisfaction.

"I think compared to before the reforms, there was no such target, there was no such metric at all. There was no understanding I think really of how happy road users are with what they're getting. The reforms brought the requirement to report that, they brought ORR the role of commenting on that publicly to say, '[National Highways], you have or have not met it. Here's what you should do' – DfT interviewee

One example of this is ORR's influence on the initiative to improve roadworks accuracy information, described in chapter 2. As another example, National Highways interviewees explained that the existence of ORR led to a focus on improving the incidence clearance KPI.

"We had an 85% target when it first came in, and we struggled to hit that, and we focused on it, got pushed on it by our [monitor], understood what levers to pull, and we're now constantly sitting at the high 80s, 88, 89% performance on that" – National Highways interviewee

Indeed, [ORR's Benchmarking Highways England report](#), published in February 2022, showed that National Highways excelled in the incidence clearance KPI, with the target of at least 85% of incidents being cleared within one hour being comfortably met – National Highways recorded a percentage of 89.1% cleared, at the end of RIS1 and 88.6% cleared in 2020-21.

"They have responded to the nature of the target to achieve the target. Which does suggest they are operating in a way that's driven or at least influenced by the performance specification." – ORR interviewee

More broadly, stakeholders believed that more transparent and high-profile monitoring against KPIs had led to National Highways' increased prioritisation of achieving these targets, compared to before the reforms took place:

“And I think it's also more prominent. So old Highways Agency performance metrics would have been buried in an annex at the end of a Highways Agency annual report whereas now we have a role in making sure those things come out of being just in an annex and getting a bit more attention” – ORR interviewee

Several National Highways interviewees felt that the KPIs for RIS2 were an improvement on those for RIS1, with more consideration of how they relate to the company's overall goals and delivering value for customers.

“KPIs were always tracked but we had to shake off the habit of only looking at the money and the expenditure and bring in the, 'What are we doing with it?' and caring about what we actually created” – National Highways interviewee

Some stakeholders were less positive about the effect of KPIs, and raised concerns that they could lead the organisation to focus too narrowly on meeting particular targets rather than thinking about wider outcomes, leading to an inefficient allocation of resources or limiting National Highways' ability to be flexible in meeting customer needs. For example, the road surface quality KPI used in RIS1 was based on surface quality of only the inside lane, and National Highways was concerned that work done to maintain the other lanes was therefore not being recognised. During RIS2, this metric will change to one capturing the condition of all lanes.

Case study research identified trade-offs between different outcomes: for example, bundling projects to take place in a single road closure has clear advantages for road users, but may make it more difficult to meet targets on delivery dates or accuracy of closure data (because the combined projects become more complex and uncertain, because budgets may need to be re-allocated from work to meet other KPIs, and because there are fewer projects altogether, increasing the percentage “failure” rate for a fixed number of problems). Some case study interviewees were unsure of the extent to which ORR would be accommodating to these trade-offs.

However, National Highways generally felt that ORR's approach had encouraged the organisation to focus more on outcomes and overall performance, particularly with regard to user satisfaction.

“ORR said, 'It's great you're doing this feasibility work in terms of X, Y, and Z, but actually, what difference is it going to make on the ground to the customer this year?' That really did push us to not just select but think about stuff that's going to make a tangible difference, and if it's not making a tangible difference, will it? If it's not going to, then why are we doing it? So, I think that cultural push really helped.” – National Highways interviewee

3.5 Transport Focus' role in providing customer insight to National Highways

There was widespread agreement among interviewees from DfT and National Highways that National Highways is better informed about customer requirements due to the work of Transport Focus, and that in particular the independence of the watchdog helps to ensure that information on customer needs genuinely represents what is most important to customers.

“Having an independent watchdog representing your customers hopefully keeps you aware of and able to respond to your customer asks, your customer requirements, your customer views, and helps avoid the risk that you either don't seek, or stop hearing, what your customers are telling you. I think some organisations who run their own customer information might be overly tempted to be selective about which customers they ask, or how often they ask them. [National Highways] don't have that choice, because Transport Focus do it on their behalf with that measure of independence” – DfT interviewee

A review of internal documentation corroborates this: National Highways maintains a comprehensive list of suggestions Transport Focus has made to National Highways following consultation with customers, and National Highways' response. For example, Transport Focus relayed to National Highways that more consideration needs to be given to bus timetables during road disruptions: customers felt that National Highways did not take into account first and last bus times when deciding to close roads overnight. National Highways responded by stating that for planned closures, it will update its internal guidance to specifically include reference to considering the first/last scheduled bus and coach times when planning closure times. National Highways has agreed to respond formally in writing to Transport Focus' formal recommendations and this is then published on the Transport Focus website.

Stakeholders also commented that Transport Focus' work has provided National Highways with insight from a wide range of customers, providing diversity in thought. One instance, as the internal list of Transport Focus recommendations detailed, showed that Transport Focus recommended to National Highways to improve signage and information for disabled road users so that the road network would be more accessible. National Highways took this into account and is delivering this in its Customer Service plan. This was corroborated by an interview with Transport Focus, which touched upon National Highways' drive towards making the SRN more accessible for all.

“The proportion of things like designated funds that go into doing things for non-core groups like equestrians and cyclists, and so on. They're much stronger now in getting their heads around accessibility” – Transport Focus interviewee

3.6 Transport Focus' influence on National Highways' priorities

Internal stakeholders provided a wide range of examples of National Highways taking a different approach in response to insight from Transport Focus. These included:

- the use of tarmac for road surfaces rather than concrete, despite concrete's long-lasting reputation and cheaper costs, because road users prefer the relative quietness of tarmac³²;
- National Highways closing smaller stretches of road for roadworks, rather than closing “20 miles at a time”, because Transport Focus' consumer-driven research showed that road users were dissatisfied with roadworks stretching for miles; and
- changing the speed limit through roadworks to 60mph from 50mph, following research that showed that it made people calmer. This last change was welcomed by some external stakeholders.

“The introduction of 60mph speed limits for roadworks was long overdue. Safety is a priority but at the end of the day, just why it took so long to introduce 60 as opposed to 50 really astounds me. All the survey feedback from Transport Focus shows the benefits.” – External stakeholder interviewee

³² This issue has been included in several Transport Focus publications, including *Road users' priorities for improvement* (2015) and *Road surface quality: what road users want from Highways England* (2017).

Both National Highways and Transport Focus interviewees mentioned the positive impact that their relationship has had in encouraging a greater focus on the experience of the freight sector, with the views of professional drivers now incorporated in the Strategic Roads User Survey as well as the Logistics and Coach Survey, and National Highways establishing a small team dedicated to this. More broadly, National Highways described how Transport Focus influences its priorities, including the metrics it uses to judge performance and their customer service plans.

“Engagement with [Transport Focus and ORR] at the root development stage sets out our performance targets, influences what metrics we judge ourselves on and what message we report ourselves on, so we know we’re hitting or reporting on and delivering the things that our customers want rather than just the things that are easy to deliver in an engineering way. It’s very easy to look at an engineering team and pick some metrics around that, but translating that into what the customer wants over a 5 year period, having that engagement with monitor-type groups helps on that” – National Highways interviewee

“We use Transport Focus and others as critical friends. Transport Focus reviewed our customer service strategy and it’s not just a tick in the box, we actually made a few changes based on their feedback. We don’t necessarily have to, but it is bringing that different view, that customer view forward.” – National Highways interviewee

The regular dialogue between National Highways and Transport Focus was also a recurring topic during the interviews, with interviewees describing a sense of mutual respect between the two organisations and joint long-term planning about which areas to focus on to improve user satisfaction. Interviewees described how their representatives sit with National Highways and DfT on regional committees and specialist committees to look at particular issues, and that they have found this approach to be very effective in turning research findings into decisions and actions on the ground. Transport Focus also has a role in developing the RIS performance metrics

Some internal stakeholders reported some uncertainty about the extent of Transport Focus’ remit in terms of holding National Highways to account rather than simply providing information. Interviewees noted that while Transport Focus relays important information and recommendations to National Highways regarding customer insight, there are no great sanctions for not acting on this. The fact that Transport Focus does not produce a performance report every year, does not have the same ability as ORR to advise the Secretary of State regarding National Highways’ performance, and cannot take enforcement actions, means that its power is more limited than that of ORR. As in the previous wave, some internal stakeholders felt that there was potential for Transport Focus to have more “bite” regarding how it interacts with National Highways, but others were not sure whether this would be appropriate. In particular, as Transport Focus provides insight on any issues important to SRN customers, not only those captured in the RIS performance specification or even within National Highways’ control, this could create challenges for National Highways in terms of prioritising these issues versus meeting its RIS performance commitments.

4 The functioning of the reformed system

4.1 Introduction

This chapter considers the system of relationships between the four key organisations involved with Roads Reform, and whether this is working effectively and along the lines originally envisaged. It also considers whether the reformed system, and the way the organisations relate to and interact with each other, is facilitating more effective and efficient management of the SRN. As part of this, it considers how the three ‘pillars’ of the reforms discussed in the preceding chapters support and reinforce each other in bringing about changes to the system. The evaluation question relevant to this chapter is:

To what extent is the reformed system, and the way the organisations relate to and interact with each other, facilitating more effective and efficient management of the SRN?

The summary of the case for the reforms described that the new system would mean National Highways would have “a more strategic relationship with government”. At the same time “ministers will remain accountable to Parliament for the way the roads are run, and the activities and performance of the company.” There was also intended to be “a robust and transparent performance contract with government and a system of independent scrutiny.”

In the second wave of the evaluation, we reported that the relationships between organisations were generally collaborative and constructive, some inbuilt tensions notwithstanding, and that this was widely expected to improve the management of the SRN. There were examples of interactions between the partner organisations to improve their working relationships, and in particular the relationship between National Highways and ORR had improved. National Highways was seen as less independent from DfT than had been originally envisaged, but stakeholders viewed this as to some extent inevitable, and commented that National Highways was undoubtedly more independent than the Highways Agency had been.

4.2 Overall conclusions

Overall, there was a consensus that the design of the system is working as intended; and that the relationships between the organisations involved were positive and constructive, which is key to the effective functioning of the system. The different elements of the reforms complement and mutually reinforce each other, working together to make the system of SRN management more strategic, more transparent, and more focused on meaningful outcomes and customer experience.

- The reforms have afforded National Highways a greater degree of independence than the Highways Agency, and this was seen as positive in reducing bureaucracy, in leading DfT to be clearer about its expectations, and in encouraging National Highways to take more responsibility for decision-making.
- However, interviewees observed that National Highways is not as arms’-length from the DfT as it was intended to be at the outset of the reforms: overall, most interviewees did not have concerns about this and thought it somewhat inevitable, although some external parties thought further independence for National Highways might lead to greater efficiency. The interdependency

between National Highways, DfT and ORR needs to be managed carefully in the future to ensure the impacts of Roads Reform are maintained.

- Some external stakeholders had concerns about perceived duplication and overlap between the different organisations, and were unsure of which organisation held ultimate responsibility for some issues relating to the SRN.
- Internal stakeholders believed roles and responsibilities had evolved well since the second wave of the evaluation and complemented each other. The existence of the monitor and watchdog was seen as strengthening the scrutiny of National Highways, and the combination of information from ORR, Transport Focus and National Highways itself helped Government Ministers quickly assess National Highways' performance.

4.3 Interaction between the changes brought about by the reforms

Previous report chapters have looked at the effects of the different elements or pillars of the reforms in isolation – namely the Road Investment Strategy (pillar 1), the transformation of the network operator (pillar 2), and the creation of the Monitor and Watchdog (pillar 3). However, it is clear that these elements complement each other and work together to bring about a system of SRN management which is more strategic, more transparent, and more focused on meaningful outcomes and customer experience. The previous chapters have discussed the evidence for whether and how the different pillars of the reforms have contributed to generating the desired changes. In what follows, we briefly summarise the main ways in which these mutually reinforce each other, suggesting that the sum of the effects of the reforms is indeed greater than its parts, and that the resulting system is working broadly as intended.

The management of the SRN and the performance of National Highways has become **more transparent to external parties**. This results from the visible process of developing the RIS and engaging with external stakeholders to do so, the publication of RIS and the guaranteed settlement it represents (pillar 1), the changed position of the network operator - which stakeholders argued is now more of a visible “brand”, separate from DfT (pillar 2), and the external, independent scrutiny provided by ORR (pillar 3).

National Highways is undergoing a cultural change to be more **focused on performance and achieving results that are meaningful to road users**, rather than simply monitoring spending or following set processes. Being set a performance specification (pillar 1) to meet and being monitored against this by ORR (pillar 3) has underpinned this change. However, stakeholders argued that the cultural change was also fostered by a more commercial, results-focused mindset due to staff changes within the organisation (pillar 2).

Similarly, there was widespread recognition that National Highways has **prioritised understanding customer needs and is striving to meet these**. This is not only because this is a key part of the performance specification (pillar 1), but due to a top-down campaign throughout the organisation to bring customer needs to the forefront in decision-making, and the recruitment of staff with specific skills in customer engagement (pillar 2). The existence of the Watchdog (pillar 3) has also enabled National Highways to better understand customer priorities and provided further encouragement to do so.

Greater independence from DfT (pillar 2) has led to National Highways taking on ownership of more decisions, and the move towards an outcomes focus has led the organisation to think more strategically about how best to meet these outcomes. Longer-term funding certainty and a clearly defined

specification from DfT (pillar 1) has also given the organisation the opportunity to **make higher-level plans and think more strategically**.

4.4 Relationship between DfT and National Highways

As in the second wave of the evaluation, there was agreement among internal stakeholders that the reforms have afforded National Highways a greater degree of independence than the Highways Agency, although this was less apparent to external stakeholders. This greater independence was seen as positive for several reasons:

- in reducing inefficient bureaucracy in terms of the “back and forth” review process needed for DfT to approve work, which is no longer required for Tier 2 projects.
- As mentioned in previous chapters, a greater level of independence has led National Highways to take a more strategic view and take greater responsibility for its decisions. This in turn has led the organisation to improve its analytical and decision-making capability -- for example, developing tailored analytical guidance for project appraisals rather than using the generic analysis processes required by DfT.
- The security of the RIS settlement was also seen as helpful for the DfT/National Highways relationship since it requires DfT to provide clearer guidance to National Highways on what it wants.

From the above points, it can be seen that some of the positive effects of greater independence (pillar 2) are also closely linked to the effects of a longer-term funding settlement (pillar 1).

However, as in previous waves, some interviewees observed that National Highways is not as arm’s-length from the DfT as they had thought it would be. For example, both RIS1 and RIS2 set out specific enhancement projects for National Highways to deliver, rather than only setting outcomes and overall goals for National Highways to meet. It was also observed that, in reacting to events, ministers wanted to give instructions to National Highways that were not part of the agreed package of work (for example cleaning graffiti in specific areas) and that National Highways was under pressure to deliver these.

“The DfT-[National Highways] relationship can still feel like a government department instructing its agency. If in the middle of a RIS a minister wants something then they deliver it.” – ORR interviewee

This could create some tension: ORR observed that DfT may be involved at a greater level of detail than National Highways would expect, while some DfT stakeholders commented that National Highways can sometimes be reluctant to provide information on request. There was also a perception that some government players are unhappy with the way in which RIS limits their ability to take urgent action due to the formal change process required to amend the RIS. However, DfT interviewees themselves understood the advantages of longer-term stability and commented that, while the 5-year settlement might create a risk of inflexibility, this was not happening in practice, because National Highways was responsive to their needs. One National Highways interviewee raised a concern that over time, the organisation’s autonomy might be “chipped away” with DfT becoming more involved, leading to a situation closer to the pre-reform relationship and losing the advantages of greater autonomy.

“We don’t want to fall back into historic ways that potentially undermine some of the benefits and reasons why the system was set up.” – National Highways interviewee

Some external stakeholders would have liked to see National Highways becoming more independent, commenting that this would lead to greater efficiency gains.

“There is still a relationship of the department ultimately having to take decisions on key elements, which means that a lot of resource within National Highways is diverted towards managing DfT and DfT stakeholders and also Treasury, as well, on the biggest projects.” – External stakeholder

However, overall, most interviewees did not have significant concerns about this and generally believed that some level of ministerial involvement in the SRN would be inevitable, given the level of spending involved and the sensitivity of some of the decisions being made. At the outset of the reforms, the network operator was planned to have “daily independence that is closer to that of a private company”, and DfT envisaged that “it will no longer need to keep one eye on its network and the other on the politics of central government.” ([Action for Roads](#), 2013). However, with hindsight, stakeholders suggested this may not have been entirely realistic.

“I think it would be very hard for a minister to be able to just say, 'Okay, I don't need to worry about delivery of these schemes and making sure it's on track, that's just National Highways' job.' I think, inevitably, it has to have that confidence, that ability to challenge the progress of delivery.” – National Highways interviewee

“One of the primary goals was to be at arm's-length from the political decision-makers. I think that hasn't quite happened... in fairness, that's the bit that would be very difficult to take down unless you privatise DfT, which probably isn't going to happen. So, I think being realistic, it's worked as well as you could expect.” – ORR interviewee

Some commented that the nature of the relationship also reflects wider shifts in government attitudes and a desire to have closer relationships with public bodies. They pointed to the [Williams-Shapps plans](#) for a new public body to run and plan the rail network, replacing the existing system of franchises, as another example of this.

4.5 The role of the Monitor and Watchdog

As described in chapter 3, the existence of the monitor and watchdog was seen as strengthening the scrutiny of National Highways, and the combination of information from ORR, Transport Focus and National Highways itself helped ministers quickly assess National Highways' performance. Chapter 3 also noted how ORR and Transport Focus' influence on National Highways (pillar 3) was complemented by other aspects of the reforms, such as the RIS performance specification (pillar 1) and cultural changes at National Highways (pillar 2).

In the second wave of the evaluation, we reported that there were some concerns within National Highways around overlaps and duplications between the monitoring and oversight roles of ORR, the DfT and (to some extent) HM Treasury³³. Although some external stakeholders continued to have concerns about this, it was no longer mentioned as a concern in this wave by internal stakeholders, and roles and responsibilities were seen to have evolved well.

“ORR and DfT focus on slightly different spaces and think from a slightly different perspective” – National Highways interviewee.

³³ The scope of ORR's role as Highways Monitor is set out in a Memorandum of Understanding between ORR and DfT, which clarifies the respective roles of the two organisations:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/411801/mou-orr.pdf

Likewise, there is a potential risk of overlap between the roles of the watchdog and monitor, but stakeholders felt this had been avoided by the organisations choosing to work together where appropriate.

“By and large stuff they want to look at we will do jointly if we can, because there's bound to be a user dimension to it... That's been a plus that ORR and Transport Focus, who could potentially have been trying to tread on each other's turf, have actually worked pretty well together.” – Transport Focus

Transport Focus' viewpoint was also seen as complementary to ORR's in that whilst ORR held National Highways accountable to an agreed performance specification, Transport Focus encouraged the organisation to go beyond this and to do more for customers, thus driving continuous improvement. As in previous waves, some internal stakeholders and road user representatives felt that Transport Focus could have more powers to encourage National Highways to act on its advice. However, others noted that because Transport Focus' remit is wider than the agreed performance specification, this could lead to competing priorities if National Highways was required to deliver changes recommended by Transport Focus as well as delivering the performance specification. Overall, it appeared that Transport Focus had a significant degree of influence on National Highways (see section 3.6 above), despite the absence of these official powers.

As well as providing independent and trusted scrutiny, the existence of ORR was seen as helpful by the DfT in acting as an “honest broker” between them and National Highways; in that, as well as challenging National Highways, ORR also had a role to assess the feasibility of the demands being placed on them by DfT, and push back if these were seen as unreasonable.

“Otherwise, the government would potentially be tempted to give them not enough money for a very over-ambitious set of outputs. A bit like Buckaroo!, 'Just a bit more,' 'And another thing.' The role of having an independent monitor in that space I think is quite powerful, in giving [National Highways] a decent, fair settlement, and trying to set them up for success.” – DfT interviewee

4.6 The system overall

Overall, there was a consensus that relationships are working effectively. Some commented that this system could potentially serve as a good model for other parts of the public sector that need to invest on a long-term basis, because it provides a greater ability to plan long-term, without losing political involvement where this is seen as necessary, and the independent watchdog and monitor provide a useful level of scrutiny and a channel for user views to be fed into the system. Overall, the findings of the evaluation suggest that the three pillars of the reforms complement each other and are working to produce similar changes in the system.

However, the design of the model does not on its own produce good performance. Given the tensions inherent with the system, its effective functioning also relies on the existence of good relationships between the organisations involved and individuals and organisations adopting constructive rather than adversarial attitudes to one another.

External stakeholders identified some potential disadvantages of the increased complexity of the system, such as the risk of duplication in roles.

“It seems to have got more complex... we’ve had the ORR’s annual assessment for [National Highways] for 2021, we’ve had a Transport Focus one, we’ve had the [National Highways] annual report and accounts... this was wading through paper. It just seems very bureaucratic. All those documents took people and costs to produce. I’m wondering if the cost benefit is actually worth it.” – External stakeholder

Another potential disadvantage was identified by external stakeholders in that they were unsure of who held ultimate responsibility for dealing with high-profile issues related to the network, such as smart motorways or the 2021 Insulate UK protests, and were concerned that the complex structure of SRN management could make it more difficult for longer-term issues such as decarbonisation to be addressed. However, these challenges and risks were discussed more in hypothetical than actual terms, and some could be reduced by better communication about the roles of the respective organisations.

5 The long-term impacts of Roads Reform

5.1 Introduction

This chapter assesses the longer-term impacts of Roads Reform and the extent to which, six years on, it appears to have achieved its objectives. The case for the reforms argued that both road users and taxpayers would ultimately benefit:

“Users will see the benefits of major investment, alongside a more customer-focused operator, through more reliable journeys, reduced congestion, better information, less delay and disruption and a better user experience – and taxpayers will benefit from more efficient delivery and significant savings.”³⁴

This chapter therefore looks at these two main outcomes in turn: road users’ experience and satisfaction with their journeys, and the efficiency of delivery and cost savings. These are summarised in the two relevant evaluation questions:

Has the satisfaction of Strategic Road Network users increased as a result of Roads Reform?

What level of efficiency and value for money improvements have been delivered by Roads Reform?

As mentioned in the introductory section, whilst six years is sufficient time to be able to allow some judgements to be made about longer-term impacts, further longer-term changes resulting from the reforms may be seen as time goes on. For example, we noted above that supplier confidence is likely to increase as the RIS process becomes more embedded, leading to further investment in innovation and skills; and that National Highways’ increased data analysis capability is yet to reach its full potential. Some of the effects of the reforms were expected to materialise over a longer time-frame: for example, DfT documents at the outset of the reforms show that they were anticipated to deliver £2.6bn savings to the taxpayer over 10 years³⁵, and to save 46 million hours lost in traffic each year by 2030³⁶.

5.2 Overall conclusions

- Overall, the evidence gathered by this evaluation supports the conclusion that the reforms have had positive effects on value for money and road users’ experience.
- Levels of road user satisfaction have remained broadly the same since Roads Reform, according to ORR. The disruption caused by the pandemic, to both road users’ experience and the methods used to measure user satisfaction, means that understanding recent trends in road user satisfaction has been challenging, and this is likely to continue for the short term.
- However, there is evidence to support the view that the reforms have benefited road users, even if levels of satisfaction have not increased overall. There was widespread consensus amongst those consulted in this research that National Highways has become a more user-focused organisation,

³⁴ Transforming our strategic roads: A summary, DfT, December 2014. Available online at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/384423/roads-reform-summary.pdf

³⁵ Transforming England’s Strategic Road Network, 2014

³⁶ Road Investment Strategy Key Facts and Figures. Available online at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/381516/RIS_Facts_and_Figures.pdf

and the evaluation has identified several tangible results of the reforms that would be expected to lead to increased user satisfaction.

- These positive developments, combined with the fact that overall satisfaction remained stable over the first road period (2015-20) in spite of a higher amount of roadworks and significantly increased traffic, both of which are associated with user dissatisfaction, suggests that the reforms are beginning to generate benefits for road users.
- National Highways met its key performance indicators for efficiency in the first road period, achieving £1.45 billion of capital efficiency savings over the first road period. Although cost savings can be challenging to evidence robustly, there are some clear examples where these efficiency improvements can be related to the reforms, particularly in terms of better scheduling and planning.

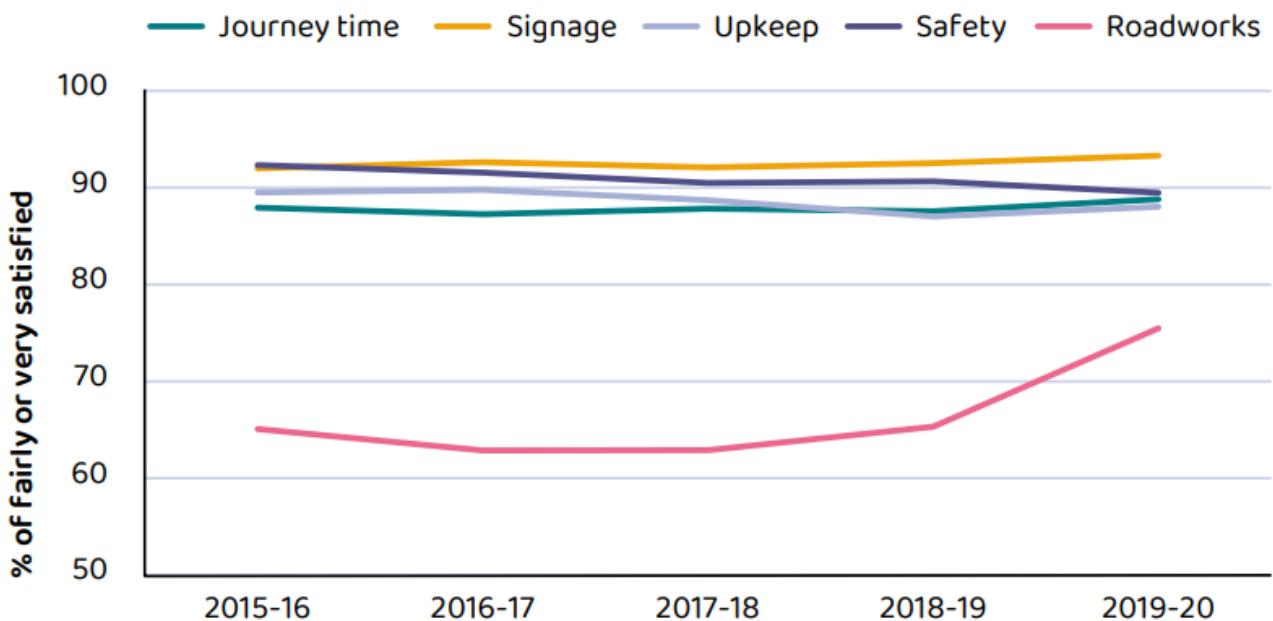
5.3 The effect of Roads Reform on user satisfaction

Overall levels of user satisfaction

Levels of road user satisfaction have remained broadly the same since Roads Reform. As measured by Transport Focus using the National Road Users’ Satisfaction Survey (NRUSS), user satisfaction did not increase over the first road period (RP1, 2015-2020) or compared to the two years prior to the reforms (when the NRUSS was carried out by the Highways Agency). User satisfaction scores were 90% in 2013/14 and 89% in 2014/15, and decreased very slightly over the first few years of RP1 (from 89.3% in 2015-16, to 88.4% in 2018-29), before increasing again in the later years (to 89.2% in 2019-20), just below the target level (90% satisfied).

As shown in the graph below, three of the five components of user satisfaction measured by the NRUSS increased during RP1 (two of which – signage and journey time – increased very slightly, while the third – roadworks management – decreased at first, then saw a very notable increase in the final year), while the other two – general upkeep and safety – decreased slightly.

Figure 5.1: User satisfaction over 2015-2020 broken down into different components, as measured by NRUSS



Source: *Annual Assessment of Highways England End of Road Period 1 2015-2020, ORR, 2021*

Since then, the ability to consistently measure road user satisfaction has been limited because the relevant survey was paused during the coronavirus pandemic (no fieldwork was conducted between April 2020 and March 2021). Although the survey restarted in April 2021, changes in methodology mean that results before and after the pause are not directly comparable (see below). However, based on National Highways' own customer satisfaction research, ORR is of the view that user satisfaction has remained broadly stable over the first year of the second road period (2020-21 – see paragraph 1.35 in its most recent [annual assessment](#)). The first two waves of the new [Logistics and Coach Survey](#), delivered by Transport Focus, suggested a recent improvement in satisfaction for those involved in freight – from overall satisfaction of 42% in February and March 2020 to overall satisfaction of 55% in May 2021 (though note that this change took place over the period of the COVID-19 pandemic, during which traffic levels were much lower than normal).

There are several considerations when interpreting the finding that overall SRN user satisfaction has not increased. In assessing the effect of the reforms on user satisfaction, and in lieu of a counterfactual (data from a scenario without the reforms) we have considered what trends might have been observed in user satisfaction had the reforms not taken place. With significantly increased traffic over the course of the first road period, as well as an increase in major works taking place on the network, user satisfaction might have been expected to decrease, although it is not possible to calculate this precisely. Many of the factors affecting user satisfaction are beyond the influence of the reforms, such as the behaviour of drivers: the RAC annual reports on motoring³⁷ suggest that the aggressive behaviour of other drivers is a major concern for motorists and that levels of concern about this have remained high throughout the period since the reforms. Another key factor affecting user satisfaction is traffic levels: Transport Focus analysis suggests that traffic levels are one of the key drivers of road user (dis)satisfaction, and overall demand for the SRN increased over the first road period: vehicle miles travelled were 5.6% higher in 2018 than in 2015, the highest volume recorded to date. Moreover, the high levels of investment seen at the start of the first road period led to increased work taking place on the network. This higher volume of work may have led to delays and been reflected in the initial fall in user satisfaction, which stakeholders commented was a pattern often seen for infrastructure improvement projects. This explanation is supported by changes observed in the score for satisfaction with roadworks management, which, as noted above, improved towards the end of the first road period but is still ranked lower than other aspects of road users' experience.

Therefore, the reforms may have had positive effects on user satisfaction (as discussed below) that have been counteracted by the effects of increased traffic, increased work taking place on the network (leading to road or lane closures) and potentially other factors. Additional factors negatively affecting user satisfaction that road user representatives identified included negative perceptions of smart motorways, and coordination issues with local highways.

Interviewees from National Highways and ORR identified shortcomings of the measurement of user satisfaction used in road period one, the National Road Users' Satisfaction Survey (NRUSS), commenting that the weighting of the survey meant the metrics used were not sufficiently sensitive to change, and that the sample was too limited, both in overall size (around 2,000 road users) and in being biased towards leisure users and away from freight because of the survey method (a door-to-door survey asking about the respondent's most recent journey on motorways or major A roads). These interviewees believed that, due to these methodological issues, levels of user satisfaction may not have

³⁷ <https://www.rac.co.uk/report-on-motoring>

been accurately captured during the first road period. The NRUSS ended in March 2020 as planned, and was superseded by the Strategic Roads User Survey (SRUS), which is intended to provide a better measure of user satisfaction. Before the pandemic, the SRUS involved 8,000 interviews per year conducted at 800 locations. The questionnaire included an interactive map to understand which part of the respondent's journey is on the SRN, and the sample was boosted to better represent professional drivers.

The SRUS began in 2018 running in parallel to the NRUSS, but was paused in March 2020 due to the Covid-19 pandemic. The SRUS restarted in April 2021 with a different methodology (households within a representative sample of the driving population in England are sent a letter inviting them to complete the survey, which they then do online), meaning that the latest findings are not comparable with earlier ones³⁸. This means we still have limited ability to interrogate changes in user satisfaction, and so the finding that user satisfaction is little changed since the reforms should be interpreted with caution.

Metrics affecting user satisfaction

In terms of more reliable journeys, National Highways exceeded its targets for network availability and incident clearance in 2020-21, and met similar targets throughout the first road period. Over RP1 (2015-20), lane availability stayed relatively constant and incident clearance improved, despite the increase in work taking place on the network. The planning time index, which provides an indication of the additional time that road users should allow for their journey to arrive on time 19 times out of 20, was the same at the end of RP1 as reported at the start.

In terms of delay, at the end of RP1, average delay was 9.3 seconds per vehicle mile. This has increased throughout the road period, up from 8.9 seconds per vehicle mile in 2015-16. As ORR note, this has coincided with increased traffic on the network and National Highways undertaking more improvement work as part of its investment programme. National Highways also met its target relating to the condition of the road surface³⁹, which Transport Focus report is another factor that is important to user satisfaction.

Contribution of the reforms to user satisfaction

There is evidence to support the view that the reforms have benefited road users, even if levels of satisfaction have not increased overall. However, it is not possible to calculate the effect of the reforms on user satisfaction precisely due to the absence of data on road user satisfaction in the absence of the reforms. In this section we consider the outcomes from the reforms that are likely to have had positive effects on road users' experience.

Based on the interviews carried out for this evaluation, there is a widespread consensus among external stakeholders, National Highways itself, and the other organisations involved in delivering the reforms, that National Highways has become a more user-focused organisation. This was seen in terms of developing and carrying out specific plans to improve customers' experience, but also in terms of changes in general attitude and the importance placed on road user needs. ORR reported that there is an increasingly strong culture of customer focus at National Highways, and external stakeholders

³⁸ Published data from the SRUS appears to show that user satisfaction decreased during the second half of 2021. At the time of conducting interviews for the evaluation, this trend was less apparent and therefore interviewees largely discussed satisfaction having stayed constant over time; it has not been possible to explore the more recent data further.

³⁹ This target was that 95% of road surface did not require further investigation for possible maintenance according to the Network Pavement Condition indicator, which reports on the pavement condition resulting from deterioration of the SRN due to time, traffic and maintenance. To report network condition, the most recent condition measurements (up to 2 years old) were combined with the definition of the network and records of pavement maintenance stored in the Highways Agency Pavement Management System.

described the organisation as more willing to engage and listen to their needs. One example of this is the set of approaches National Highways has taken to improve signage on the network, which is the highest-scoring component of the user satisfaction survey. National Highways has introduced a set of new messages on variable signs and signals to improve the information provided to customers, and are more flexible and responsive in terms of how these signs can be used to provide more relevant explanations when roads are disrupted. It uses mystery shoppers to audit roadworks, including providing their opinions and perceptions on signage, and National Highways inspectors now carry equipment to clean signs and remove branches to ensure signs remain visible.

This increase in user focus was attributed to the influence of ORR and Transport Focus (described in sections 3.4, 3.5 and 3.6 above); to National Highways' leadership emphasising the importance of customer needs (see section 2.4); and to changes in National Highways' workforce to bring in more managers with experience and skills in customer relationships, increasing its capabilities for customer relationship management (section 2.5).

Interviewees also identified that there was still more progress to be made on user focus, which National Highways also acknowledged. Some local stakeholders commented that while they were consulted more often, overall they felt they had less influence, because they believed decision-making at National Highways had become more centralised since the reforms, in other words that more decisions were made at a higher level by teams with less understanding of local issues. Meanwhile, Transport Focus commented that National Highways seemed to acknowledge some kinds of road user feedback, in particular feedback that related to engineering and technical aspects of the road, more readily than other kinds of feedback – attributing this to a mindset at the organisation that was still inclined to focus more on the physical asset than the overall user experience. For example, Transport Focus perceived that whilst National Highways now understood the importance of road surface quality to users, it had not fully grasped the extent to which road users are concerned about, for example, litter and see this as a sign of poor maintenance. Transport Focus has recently published a letter to National Highways about signage⁴⁰ that, whilst recognising the actions the company has taken to improve signs, argued that “more action is needed to increase the customer focus in this area, in terms of both safety and journey experience.” The letter argued for improvements in the visibility of signs, the frequency with which they were maintained and replaced, and for a culture of continuous improvement.

As well as an increased focus on users, preceding chapters of this report have identified several tangible effects of the reforms that would be expected to lead to increased user satisfaction, including work on the SRN being better coordinated, and the use of improved technology and materials. National Highways has been implementing a programme of work to improve user satisfaction around roadworks, and levels of user satisfaction relating to roadworks specifically showed improvement at the end of the first road period in 2019 (see figure 5.1 above).

Road user representatives recognised some of these improved ways of working in terms of improved communication (for example improved variable signs and data about roadworks), the 60mph speed limit for roadworks, and the introduction of service delivery managers as a point of contact for operational issues. This was attributed to the organisation's overall increased focus on meeting customer needs, as well as greater independence and new contracting models allowing the organisation more scope to try new approaches. Despite this, road user representatives felt that levels of satisfaction had not significantly improved overall, which is supported by the data presented earlier in this chapter.

⁴⁰ Available online at: <https://d3cez36w5wymxj.cloudfront.net/wp-content/uploads/2021/09/28115651/Letter-to-National-Highways.pdf>

“I would appreciate a lot of the measures that [National Highways] have taken were with the best of intentions but I think the volume of traffic overall was probably subsuming those efforts.” – External stakeholder

5.4 The effect of Roads Reform on efficiency and value for money improvements

The case for the reforms argued that “greater funding certainty and a more strategic relationship with government will enable lower-cost, longer-term approaches” which would result in efficiency savings (in other words being able to do more with the same resources/budget, or being able to reduce costs).

Overall efficiency

At the beginning of the first road period in 2015 and as part of the first RIS, National Highways was set key performance indicators relating to efficiency. These targets have been met, meaning that National Highways has achieved £1.45 billion of capital efficiency savings over the first road period against a target of £1.21 billion. This is also in the context of significant growth within the organisation and delivering a much-expanded programme of work, which could lead to increases in the cost of labour. ORR interviewees were of the view that the organisation had dealt well with the challenges of scaling up and National Highways interviewees believed that they were now capable of delivering a volume of work that the Highways Agency would not have been able to.

However, some internal stakeholders commented that it was both difficult to know how challenging the efficiency target was, and overall hard to judge the extent to which efficiency has increased during the first road period, compared to periods prior to Roads Reform. The evidence base is relatively under-developed, and it is difficult to benchmark and judge the efficiency of major projects, since each one is different and because many projects have undergone changes to their scope. ORR’s assessment of National Highways’ performance at the end of RP1 commented that evidence of the actions National Highways had taken to improve efficiency was good. ORR also said, “we have constantly challenged the quality of other types of evidence of efficiency – specifically unit cost movement⁴¹ and delivery of the RIS⁴². This remains less robust but has improved and we now agree that it provides reasonably sufficient evidence of the KPI having been achieved.” ORR was able to sign off the efficiencies claimed in RIS1, and ORR and National Highways have done further work to improve how efficiency targets have been set for RIS2.

Some stakeholders suggested that large efficiency savings could be driven by a relatively small number of changes on very big projects, so that the headline figures on efficiency might belie a relative lack of change elsewhere: however, the efficiency gains described below largely apply across the business as a whole and National Highways’ [efficiency report](#) describes how efficiencies have been delivered across the business.

Moreover, some external factors affecting costs were relatively favourable during the first road period, with lower-than-expected inflation⁴³ (which has also complicated the measurement of efficiency), and a relatively abundant supply of labour (with the effects of EU Exit not yet being felt, and the High Speed Two rail project - which has competed with SRN projects for labour - not beginning construction until 2020). Case study interviews identified that labour shortages, created by a high volume of construction

⁴¹ This is an approach to assessing efficiency that compares the actual cost of the project against what it might be expected to cost without making any efficiencies. The latter is estimated from the composition of the project and standard estimates of the pre-efficient cost of each element.

⁴² This is an approach to assessing efficiency based on determining whether National Highways had delivered the requirements of RIS1 without exceeding its post-efficient funding.

⁴³ See paragraph 1.23 in ORR’s end of RP1 assessment: <https://www.orr.gov.uk/sites/default/files/om/ORR-Annual-Assessment-of-Highways-England-End-of-Road-Period-1-DIGITAL.pdf>

activity taking place in some parts of the country, were now beginning to affect the delivery of work on the SRN.

Contribution of the reforms to efficiency

ORR reported that the majority of efficiency gains in the first road period resulted from improved scheduling of major improvement schemes (the largest single factor improving efficiency); adopting 'lean' management approaches (which identify and improve issues within the design and production process of schemes); and changes in contracts and design which have created economies of scale or gaining access to better procurement rates⁴⁴. The introduction of new design methods, such as off-site production, was also a factor.

There are some clear examples where these efficiency improvements can be seen to be related to the reforms. In particular, the longer-term funding cycle has led to an improved ability to plan and coordinate work, and this can be seen in lower within-year variation in the volume of work taking place and lower levels of work taking place in the winter period. National Highways has been able to develop new contracting and procurement arrangements, such as the Asset Delivery Model, due to the funding certainty provided by RIS and the flexibility afforded by its status as a government-owned company. These were largely thought to have achieved their aim of driving efficiency, through reducing "double management", reducing the length of supply chains and allowing better oversight and coordination of work (for an example, see case study on 'bundling' in chapter 2). However, there is a caveat that new contracting models can lead to more complexity as NH has direct relationships with more suppliers and there are more handovers.

Stakeholders also identified a stronger desire within National Highways to improve efficiency and value for money for taxpayers, and a greater focus on this, which was attributed to the performance specification, the role of ORR, and the higher public profile of National Highways as a more independent organisation.

"I think before RP1, before [National Highways], it was not particularly in focus. Efficiency savings were there, but if anything, it was more around trying to stimulate the contractors to work better, work quicker, stick to programmes... it was less around delivering the money back to the public purse. Often the contractors were the ones who benefited through the contractual arrangements of any savings that were made." – ORR interviewee

The work the company has done to improve its analytical capability was also seen as driving efficiency improvements, by allowing more sophisticated analysis of value for money and enabling the use of data to support better decision-making on projects. Some ORR and National Highways interviewees commented that there was still more to be done in terms of building up the evidence base. This increased analytical capability was seen as resulting from changes in National Highways' workforce to bring in people with the appropriate skills.

"Once you start understanding it and working at it and have the data and information, that allows you to drive efficiency... but there's a build-up time to generate that information and we're still in that phase." – National Highways interviewee

The reforms were also intended to encourage greater innovation both by National Highways itself and the supply chain, leading to improvements in both user experience and efficiency.

⁴⁴ <https://www.orr.gov.uk/sites/default/files/om/ORR-Annual-Assessment-of-Highways-England-End-of-Road-Period-1-DIGITAL.pdf>

6 Concluding remarks

This report marks the culmination of the multi-year evaluation of Roads Reform, which consisted of extensive scoping work, as well as three waves of research. The [first wave](#) (carried out in 2017) found that the move to longer-term (five-year) strategic planning was universally welcomed as a positive development, with strong potential to contribute to better value for money over time. It also identified early signs that National Highways was using its new position to operate more effectively, in particular in being able to plan more strategically and in generating and using more analysis and customer insight to make decisions; and that both ORR and Transport Focus were beginning to make contributions to a more accountable, customer-focused management of the SRN. The [second wave](#) (carried out in 2018-19) found a high degree of agreement among stakeholders about the appropriateness of the overall design of the reformed system, as well as indications that the reforms were creating the short-term changes that were anticipated to eventually lead to the desired long-term effects – including numerous examples of where the reforms were contributing to changes in National Highways’ and the other partner organisations’, priorities, capabilities, structures, processes, working practices, and behaviours that would have been unlikely to occur in their absence.

This third and final wave of the evaluation was able to further confirm and substantiate the positive changes and developments identified previously. Six years have now passed since the reforms were launched and, as discussed in chapters 1 to 4 of this report, there is strong evidence that the longer planning horizons enable both National Highways and its supply chain to plan and operate more strategically; that National Highways has adopted a more commercially-driven culture of efficiency, high performance and continuous improvement; and that the work of the Monitor and Watchdog have contributed to National Highways’ greater focus on performance, efficiency and the needs of SRN users. The “journey” initiated with the reforms is far from complete, and there remains room for further improvements in certain areas – for example, the speed of National Highways’ decision-making, or external communication about the responsibilities of each organisation – overall, the available evidence suggests that the design of the reformed system is effective, and that many of the envisaged outcomes (such as changes in the priorities, capabilities, behaviours and working practices of the partner organisations) have materialised. As described in chapter 4, the different elements of the reforms described in chapters 1 to 3 reinforce each other to bring about a more transparent, efficient and customer-focused system of SRN management. The stable, longer-term planning for the network brought about by the introduction of RIS appears to be the most crucial factor underpinning these changes and their resulting effects, and is the element of the reform viewed most positively by external stakeholders.

This – namely that the theory behind the reforms has largely been borne out in practice – provides a high degree of confidence that the reforms have contributed, and continue to contribute, to the expected longer-term impacts, namely a better service for road users, and efficiency savings for taxpayers. Although the available survey data does not yet show a tangible improvement in overall user satisfaction, the fact that (1) overall satisfaction has remained stable in spite of a higher amount of roadworks and significantly increased traffic, and that (2) positive developments can be observed in several relevant areas (regarding roadworks management, signage, and satisfaction of freight carriers), suggests that the increased customer focus at National Highways is beginning to generate benefits for road users. Similarly, although cost savings have shown to be challenging to evidence robustly, there are strong indications that all three pillars of the reforms have facilitated the observed culture change at National Highways, and thus contributed to ORR’s mostly positive assessment of National Highways’ efficiency.

Overall, the evidence gathered by this evaluation supports the conclusion that the reforms have been effective in improving how the SRN is managed, and that they have had positive effects on value for money and road users' experience.

Looking to the future

Based on the findings of the evaluation, below are points for the four key organisations (DfT, National Highways, ORR and Transport Focus) to consider to help ensure that the reforms continue to result in their intended outcomes in future.

- External stakeholders were often unsure about the respective roles and responsibilities of the four organisations, in particular with regard to the process of developing the RIS, or who would lead on dealing with specific issues related to the network. This led some interviewees to voice concerns about duplication and overlap. Ongoing communication to clarify each of the four organisations' roles and relationships to one another could help external parties engage with these organisations more easily.
- To fully realise the potential benefits of RIS on supplier confidence, more could be done to raise awareness of the RIS process, particularly among suppliers not directly contracted by National Highways who tend to have lower awareness.
- National Highways should continue to encourage innovation within the supply chain by making it as easy as possible for suppliers to access the relevant initiatives, and engaging more with smaller suppliers around innovation.
- National Highways should continue to develop its analytical capabilities and consider whether more could be done to publish its data and commissioned research.
- While less independent than originally envisaged, National Highways' greater independence from DfT was seen as very positive. Some interviewees predicted that there would be pressure in future for the relationship to become closer, and emphasised the importance of maintaining the current level of independence.
- Interviews with ORR, and its published documents, identify several challenges in measuring and benchmarking efficiency at National Highways, so improving understanding of efficiency should be a priority. This has already been improving due to changes in methods used and is likely to improve further as the evidence base is built up over time.

Finally, it is important that the reforms, and the investments delivered through RIS, continue to be evaluated to monitor whether and how their intended outcomes occur. It is anticipated that some outcomes, such as supplier confidence, investment in innovation and skills, and impacts such as efficiency savings and user satisfaction metrics, will continue to evolve as a result of the reforms, with impacts expected to continue until 2030. All four organisations have a crucial role to play in monitoring and evaluating these.

Annexe 1: Assessment criteria for evaluation questions

Set out below are the evaluation questions and indicators for which the evaluation team sought evidence in order to answer each of the evaluation questions for themes 1, 2, 3, and 5. The analysis for theme 4, on the overall functioning of the system, did not use a contribution analysis approach and is not included here.

1.3 To what extent has the funding certainty RIS provides enabled Highways England (now National Highways) to plan and operate more strategically and efficiently?

- Stakeholders report that work on the SRN is better-coordinated and planned.
- Specific examples of improved coordination and planning.
- Specific examples of contracts leading to better value for money.
- HE interviewees and DfT interviewees explain that the funding certainty allowed them to use these procurement models and contracts.
- Internal and external stakeholders believe the funding certainty has led to improved planning and coordination.
- HE staff have sufficient skills/capacity to plan and coordinate work better.
- HE's workforce has improved.
- Funding settlement and plans are relatively stable and there are fewer short-term changes driven by e.g. political priorities.
- More efficient ways of working have come about as a response to the need to manage a larger portfolio.

1.4 To what extent have the longer planning horizons led to the desired changes in the supply chain, in particular greater confidence and investment?

- Suppliers report being more able to predict what future work is available to them, because of longer planning horizons
- Suppliers report that they are more confident in future work and making investments as a result.
- Suppliers make more investment in skills and innovation.
- Suppliers feel sufficiently able to predict what future work is available to them to encourage them to invest
- Suppliers are able to invest in skills and innovation if they choose to.
- Other factors have affected supplier confidence, e.g. Brexit, labour shortages, other potentially competing infrastructure projects
- Suppliers have made investments in skills and innovation for other reasons, e.g. increased volume of work on the network or demand for other infrastructure work

2.3 To what extent has HE (now NH) adopted a more commercially-driven culture of efficiency, high performance and continuous improvement?

- There is a more outcomes-focused culture at HE.
- There is a more customer-focused culture at HE – with examples
- HE's workforce has improved.
- HE's decision-making has improved
- Stakeholders believe this mindset change has been driven by HE's new roles and responsibilities.
- Stakeholders believe the new Board has led to better decision-making.
- Stakeholders believe workforce has improved as a result of greater pay, procurement and flexibility, and give examples of this.
- New mindset is adopted throughout the company, not just at most senior levels
- Suitably qualified staff are available and interested in joining HE
- Organisation's leadership could have driven these priorities while remaining a DfT agency

3.2 To what extent has the work of the Monitor effectively enabled and incentivised HE (now NH) to improve its performance and efficiency?

- HE is performing better and more efficiently.
- HE is more transparent and accountable about its performance.
- There is a more outcomes-focused culture at HE.
- There is evidence that HE's priorities are influenced by the KPIs they are monitored on.
- There is evidence that HE works differently due to the scrutiny ORR provides.
- Stakeholders believe this mindset change has been driven by HE's new roles and responsibilities.
- HE would have become more outcomes-focused, transparent and accountable for other reasons, in the absence of a monitor

3.3 To what extent has the work of the Watchdog effectively ensured HE (now NH) and DfT take decisions that are more focused on the needs of users / customers?

- HE's decisions are better informed about what customers want.
- There is a more customer-focused culture at HE -- with examples
- Transport Focus provides HE with information on customer priorities they would not otherwise have as readily.
- Stakeholders report that the existence of Transport Focus encourages HE to prioritise road users/customers.
- HE would have become more customer-focused anyway in the absence of a watchdog

5.1 Has the satisfaction of Strategic Road Network users increased as a result of Roads Reform?

- Levels of user satisfaction have increased.
- HE's customers/road users feel that HE is more responsive to their needs.
- Road users notice better coordinated work and are more satisfied as a result.
- Stakeholders report that work on the SRN is better-coordinated and planned.
- HE report greater ability to prioritise and understand customers.
- Examples of supplier innovation that improve road users'/customers' experience
- Road users notice new/different ways of working and are more satisfied as a result.
- Increased demand for the network leads to increased traffic levels and decreased user satisfaction
- The shortcomings of earlier user satisfaction measures mean that it has been hard to capture user satisfaction accurately
- User satisfaction has not increased because the volume of improvement work (and associated delays and road closures) is high, but is expected to increase in future when the improved roads are opened to traffic

5.2 What level of efficiency and value for money improvements have been delivered by Roads Reform?

- Delivery of work on the SRN is more efficient.
- Evidence that work on the SRN is better value for money because of better oversight, planning and coordination.
- Evidence that work on the SRN is more efficient because of a greater focus on outcomes at National Highways.
- Evidence that work on the SRN is more efficient because of supplier innovation.
- Evidence that an improved workforce and Board at Highways England leads to greater efficiency.
- The system is (not) overly complex due to the additional number of actors involved
- Labour shortages (e.g. due to competing infrastructure projects or Brexit) may lead to delays and inefficiencies in projects

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