



REPORT

# Road enhancements: progress with the second road investment strategy (2020 to 2025)

Department for Transport and National Highways



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## Report by the Comptroller and Auditor General

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**Gareth Davies**  
Comptroller and Auditor General  
National Audit Office

**22 November 2022**

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## Key facts

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**£14.1bn**

funding as at March 2020 for work on road enhancements between April 2020 and March 2025

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**£3.4bn**

reduction in funding from the initial £14.1 billion budget for road enhancement projects between April 2020 and March 2025

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**£3.3bn**

increase since 2020 in the total cost to deliver the road enhancement projects planned for delivery between April 2020 and March 2025 (as at September 2022)

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- 33** of the initial 69 road enhancement projects planned for delivery between April 2020 to March 2025 are nationally significant infrastructure projects and require development consent orders
- 7** road enhancement projects received development consent orders between April 2015 and December 2019 (three of which were included in the 33 planned for delivery between April 2020 and March 2025)
- 22** road enhancement projects assessed by National Highways in March 2022 as being at risk of missing a delivery commitment
- £1.19 billion** of contingency allocated to enhancement projects by July 2022. This is more than the initial £1.16 billion contingency budget created in 2020 for road enhancements for the five-year period from April 2020 to March 2025
- £740 million** additional cost pressure for road enhancements to March 2025 from inflation, estimated by National Highways in September 2022
- £6 billion** increase since 2020 in the forecast cost of projects approved in 2020 and planned for delivery between April 2025 and March 2030. In September 2022, National Highways set out a forecast cost of £11.5 billion, up from its initial estimate of £5.5 billion

## Summary

- 1** The strategic road network in England comprises more than 4,300 miles of motorways and major A-roads. These roads carry a significant amount of traffic and are an important way for people and goods to move around the country. The Department for Transport (DfT) plans improvements to these roads through periodic road investment strategies and sets the priorities for the strategic road network. Government introduced road strategies to allow longer-term planning and provide greater certainty to National Highways and its supply chain. DfT funds National Highways, which is responsible for the enhancement, renewal, maintenance, and operation of the strategic road network.
- 2** In March 2020, the government published its current, second, Road Investment Strategy (the second road strategy), running from April 2020 to March 2025, which outlined its intention to spend £27.4 billion on the strategic road network. Of this, DfT committed £14.1 billion to a complex and challenging portfolio of 69 road enhancement projects, almost double the £7.7 billion budget for the previous five years. Of these, 33 were deemed ‘nationally significant infrastructure projects’ requiring approval from the Secretary of State through a development consent order. This included nine ‘Tier 1’ projects that either cost more than £500 million and/or are novel, contentious, involve complex engineering work or detailed consultation with stakeholders. In providing advice to DfT and National Highways in June 2019, Office of Rail and Road (ORR), said there were more large and complex projects in the portfolio than had opened for traffic in the previous five years. The first two years of the second road strategy took place in the context of the COVID-19 pandemic.
- 3** From late 2021, significant changes were made to the delivery plan as it became clear that it could not be implemented as planned. DfT reduced the total number of projects that it requires National Highways to deliver by 2025. Separately, as a result of delays to projects, DfT reduced National Highways’ budget for road enhancements by £3.4 billion (27%).

## Scope of this report

**4** This report examines how effectively National Highways and DfT are managing risks to value for money across the portfolio of road enhancement projects. We based our assessment on our good practice guides to managing portfolios and programmes (Appendix One). We examine:

- why the portfolio of road enhancements could not be delivered as planned and whether National Highways has managed risk effectively to date;
- whether National Highways is now better placed to deliver the revised delivery plan; and,
- whether National Highways and DfT are taking effective steps to plan for the next road strategy and are implementing learning from previous road enhancements work.

We have not examined National Highways' work on other parts of the second road strategy.

## Key findings

Why National Highways and DfT have made changes to the delivery plan

**5 National Highways took steps to improve its processes and capabilities ahead of the second road strategy.** The first road strategy (covering April 2015 to March 2020) was put together at speed in 17 months by DfT, which created risks to deliverability, affordability, and value for money. National Highways was not able to increase its capacity and capability as fast as expected to deliver the number of planned projects. National Highways and DfT had to make several changes, including reducing the number of road enhancement projects it planned to start work on from 112 to 73. For the second road strategy, it took steps to improve its processes and capabilities. This included introducing a contingency budget for enhancements and developing corporate capacity and capability to match the size of its capital portfolio. Evaluations commissioned by DfT have pointed to improvements in how National Highways operates (paragraphs 1.5 and 1.6).

**6 Independent reviews found that National Highways' plan for the second road strategy was challenging but deliverable.** In summer 2019, ORR and the Infrastructure and Projects Authority (IPA) reviewed National Highways' draft strategic business plan for the second road strategy. These assessments identified that National Highways had improved its cost estimation approach and introduced a contingency budget to help it manage any portfolio-level risks. However, they recognised that the plan represented a set of large and complex projects that would be challenging but deliverable (paragraphs 1.7 to 1.10).



**7 Delays to road projects mean that they will cost more and take longer to deliver than originally planned.** National Highways estimates it will cost £3.3 billion more to complete its road enhancement projects than planned. In total, 39 projects have seen costs increase and National Highways is forecasting delays on 33 projects – it expects these delayed projects to take on average 12 months longer than planned to open for traffic. DfT has identified a key measure of success for the road strategy as delivery of enhancement projects to time and budget. National Highways is assessed each year by ORR against its latest revised delivery schedule, and in 2021-22 reported that it had met the revised in-year delivery commitments. It is right that National Highways works to realistic targets, but implications of the changes made to the delivery plan on outcomes, benefits and for road users are not clear in its public reporting. National Highways and DfT have not assessed the impact of the delays on the intended outcomes and road users (paragraphs 1.13 and 1.14).

**8 National Highways and DfT have reduced the number of road projects in the portfolio from 69 to 58 following the government's change in priorities on smart motorways.** Smart motorways have attracted significant public and political attention and their safety has been questioned. Alongside completing six smart motorway projects already in construction, National Highways is completing a package of measures intended to make smart motorways safer and provide greater public confidence in their use. Following a Transport Select Committee recommendation in November 2021, the government agreed to pause work on 11 smart motorway projects yet to start construction. In agreement with DfT and HM Treasury, National Highways has reallocated the associated funding to retrofit additional emergency areas to existing smart motorways and for other safety measures (paragraphs 1.12 and 1.16 to 1.19).

**9 National Highways and DfT did not anticipate that there would be delays in securing development consent for road projects.** National Highways planned to obtain consent for 33 nationally significant infrastructure projects in the second road strategy. During the first road strategy it received consent for seven projects, none of which were subject to legal challenge. By May 2022 National Highways had experienced delays in receiving or applying for development consent on 12 projects. It needed to do additional work to show how road projects complied with evolving government policy relating to the environment, and some of the projects were challenged by stakeholders in relation to their cumulative carbon impact. National Highways, in its initial planning, did not assess which of the projects in its portfolio were riskier from a development consent perspective. It has taken steps to improve its approach to obtaining development consents but could have done more to anticipate the impact of wider government policy changes on its work (paragraphs 1.20 to 1.25 and 2.4).

**10 National Highways could have done more to plan for and manage the risks arising from a larger and more complex portfolio.** In developing its delivery plan for the second road strategy, National Highways focused its assessment of risk on affordability, and sought to strike the right balance in overprogramming to avoid the issues seen in the first road strategy. National Highways identified portfolio-level risks in its planning – such as changing government priorities, environmental issues and legal challenge. However, it could have done more to demonstrate a consistent approach to monitoring and managing these risks. When portfolio-level risks materialised early in the second road strategy, such as on smart motorways and achieving development consents, it focused attention on managing them. National Highways has been maturing its approach to managing portfolio risks over this period (paragraphs 1.26 to 1.29).

How National Highways and DfT are placed to deliver the revised plan

**11 In March 2022, National Highways identified that around one-third of projects in the portfolio were at risk of delay and has further re-profiled its schedule of work in response.** National Highways monitors whether each of its projects is at risk of missing the target dates for starting construction work or opening for traffic. In March 2022, there were 22 projects at risk of missing a delivery commitment, up from 11 in the previous year. By September 2022, this had reduced to eight projects, because National Highways agreed later delivery commitments with DfT in response to delays on the projects. National Highways has identified securing development consents as the main cause of delivery risk for the remaining eight projects at risk (paragraphs 2.2 and 2.3 and Figure 9).

**12 National Highways believes the risk from delays due to development consent has reduced since it took steps to improve its approach.** In June 2021, DfT and National Highways agreed and began implementing an action plan to support projects through the development consent process. This included identifying riskier projects, more regular engagement with the Planning Inspectorate and developing a response to a legal challenge on cumulative carbon emissions. So far in 2022, eight projects have been approved (by mid-November). National Highways is awaiting the outcome of applications for a further six projects. Of these six projects, three are at high risk of delay from legal challenge. Two of the eight projects were challenged by stakeholders but these challenges were rejected by the High Court, however, they could go to appeal (paragraphs 2.4 to 2.6).

**13 National Highways and DfT are monitoring projects at risk of not providing value for money to inform their decision-making.** National Highways reports to DfT on those projects that are being developed but have a benefit-cost ratio of below 1:1.5, which it defines as low value for money. This has proved a sound basis for focusing closer scrutiny during decision-making. DfT has agreed to cancel one project and has deprioritised two others and removed their funding. One of these deprioritised projects was identified for acceleration by government in its 2022 *Growth Plan* despite remaining on National Highways' watchlist as poor value for money. It is not clear how it will now be funded. As at September 2022, National Highways is monitoring eight projects due to value for money issues, including the two largest projects by value - the Lower Thames Crossing and A303 Amesbury to Berwick Down (Stonehenge Tunnel) projects (paragraphs 2.8 to 2.10).

**14 National Highways has limited options to address cost pressures as it has already allocated all of its contingency budget.** National Highways created a £1.16 billion contingency budget to address any emerging risks to its road enhancement portfolio between April 2020 and March 2025. This was a positive development as there was no contingency budget in the first road strategy. However, it has not been managed as expected. National Highways committed more than half of the contingency budget (£655 million) on early cost increases between setting draft budget assumptions in 2018 and publishing its delivery plan in 2020. National Highways did not intend to use the contingency budget for this purpose. In addition, an external review identified several weaknesses in National Highways' governance of the contingency budget, leading to it being used to resolve cost increases it was not designed for. By July 2022, National Highways had allocated £1.19 billion of contingency, more than the original budget. The majority of contingency used to date has been due to cost pressures which arose before inflation increased (paragraphs 2.11 to 2.14 and Figure 10).

**15 Inflation is much higher than could have been predicted when National Highways and DfT planned the second road strategy.** In September 2022, National Highways estimated that its capital costs to March 2025 will be around £740 million higher than it budgeted for, including inflation, in 2020. National Highways has identified that the impact of inflation will be greatest after 2023 as construction work peaks and delivery contracts end with costs to be renegotiated. National Highways and DfT are assessing how to respond to these cost pressures, which are likely to extend into the next road strategy after 2025. The extent of inflationary cost pressure is beyond the level that can be absorbed by National Highways, and it may have to delay work, descope projects or cancel projects to remain within its overall budget. Similarly, DfT is experiencing cost pressures from inflation across its wider capital programme and therefore cannot absorb the current levels of inflation risk in this portfolio and deliver all its work as planned (paragraphs 2.15 to 2.17).

#### Preparations for the third road strategy

**16 National Highways and DfT are already committed to £11.5 billion of road projects in the next (third) road strategy.** In its September 2020 Delivery Plan, National Highways expected it would spend £5.5 billion in the third road strategy on projects it approved in 2020. Since then, this has increased to £11.5 billion, largely because of project delays occurring during the second road strategy period. National Highways and DfT would normally aim for a rate of around 80% high value-for-money projects and DfT has to agree any lower value-for-money projects that are included in the portfolio. However, only 7% of the money spent on projects that are expected to open for traffic in the third road strategy (by value of spend) will now be on high value-for-money projects. National Highways is developing a pipeline of 31 new projects that could be selected for the next road strategy. This could help address the value for money and regional balance of the portfolio, with 80% of committed work by spend in the third road strategy currently in the south-east, south-west and east of England. However, adding new projects may not be feasible or affordable (paragraphs 3.2 to 3.6).

**17 National Highways and DfT need to ensure they address the issues that contributed to problems during the first two road strategies.** DfT created road strategies to provide more stability and certainty, but there have been significant changes in delivery plans in both the first and second road strategies. National Highways is maturing as an organisation, and we have seen examples of how it has learned and improved from its experience to date. It is important that this continues into its preparation for the third road strategy. We would expect National Highways and DfT, for example, to ensure that: the delivery plan is prepared before the road strategy starts; the portfolio of projects is not too big or risky for the agreed budget; and that risk assessment of its portfolio is improved (paragraphs 3.7 to 3.9 and Figure 11).

**18 It will be challenging for National Highways to balance and deliver against the draft objectives that DfT has so far set out for the next road strategy.** DfT has established six draft objectives for the next road strategy, including areas such as economic growth and decarbonisation. These may yet change. In selecting road enhancement projects for investment, ministers will need to make trade-offs between competing objectives, and critically assess whether in the round, the portfolio supports the chosen objectives and other government priorities. Making progress against current environmental objectives such as biodiversity and air quality, has proved difficult for National Highways and challenges lie ahead in achieving net zero carbon emissions by 2050. National Highways is developing the third road strategy against a backdrop of uncertainty in road usage and changing technology, as well as challenges to public finances, including inflation. DfT and National Highways are developing approaches to help them plan around these areas of uncertainty (paragraphs 3.10 and 3.11 and Figure 12).

### **Conclusion on value for money**

**19** National Highways and DfT took steps to assess whether their plans were deliverable but have nevertheless had to make significant changes to what was a challenging portfolio of enhancement projects. By 2025 National Highways will have completed less work on road enhancements and at a higher cost than originally planned. Some change is expected when delivering a portfolio of projects, but there has been more change than anticipated. At the same time, National Highways and DfT could have done more to plan for and manage the potential risks to their portfolio of enhancement work. In recent months, inflationary cost pressures have risen beyond levels that could have been anticipated by National Highways and DfT, who will face difficult decisions about how to prioritise work. National Highways and DfT should seek to improve the planning and management of their portfolio of enhancement projects to ensure they optimise value for the taxpayer, and avoid delays and costs further increasing the pressure on the next road strategy.

## Recommendations

- a **National Highways and DfT, working with HM Treasury, should develop a response to current inflationary pressures** that ensures stability for the portfolio.
- b **DfT should work with other government departments to ensure a streamlined approach to updating and regularly reviewing the framework against which development consent applications are appraised.** This will help maintain alignment with wider government policies and allow applications to be prepared more efficiently.
- c **In their reporting of how National Highways has performed against what it originally planned to deliver in each road strategy, and against revised delivery targets, National Highways and DfT should set out the implications of changes made to the portfolio on expected outcomes and benefits for each road strategy.**
- d In preparing for the third road investment strategy, DfT and National Highways should:
  - **review the projects that are planned for the third road strategy (from April 2025),** to ensure the portfolio collectively remains feasible, meets strategic needs and is value for money;
  - **assess the feasibility and affordability of including new enhancements** in the third road strategy. Doing so will require determination from HM Treasury of the expected funding envelope;
  - **regularly update the estimated cost of the work planned for the third road strategy during development of the delivery plan;**
  - **further improvements to National Highways' approach to monitoring and managing portfolio risks.** This should include: improvements to the iterative monitoring of the risks identified during development of the road strategy to understand how risks change based on up-to-date information; and an integrated assessment of risks where they are considered together; and
  - **improve the robustness of governance arrangements surrounding the contingency budget to ensure it is used in the way intended.**