Title: Roads Reform	Impact Assessment (IA)			
IA No: DfT00251	Date: 29/10/2013			
Lead department or agency:	Stage: Consultation			
Department for Transport	Source of intervention: Domestic			
Other departments or agencies:	Type of measure: Primary legislation			
Highways Agency HM Treasury	Contact for enquiries: roads.reform@dft.gsi.gov.uk			

Summary: Intervention and Options | RPC: RPC Opinion Status

Cost of Preferred (or more likely) Option								
Total Net Present Value	Business Net Present Value	Net cost to business per year (EANCB on 2009 prices)	In scope of One-In, Measure qualifies a One-Out?					
£3,320m	£0m	£0m	No	NA				

What is the problem under consideration? Why is government intervention necessary?

Action for Roads found that the institutional framework for the management of the strategic road network (SRN) by the Highways Agency (HA) creates cost-inefficiencies for the taxpayer and does not deliver the best outcome for motorists. Reasons include a lack of long-term certainty on investment in the network, a working culture dominated by the processes of wider government and no continuous external pressure for efficiency. A large increase in funding was announced at the last Spending Round so the Government wants to ensure the institutional framework for the management of the SRN is appropriate and maximises value for money. More generally government intervention is necessary because roads are already within the public sector. This is due to elements of natural monopoly, major externalities and links with other objectives such as housing and economic development.

What are the policy objectives and the intended effects?

With reform we aim to achieve: (i) Operation of the SRN that delivers more effectively with better value for money for the taxpayer and road user, and hence supports economic growth and (ii) An improved service to the road user achieved with clearer accountability of the roads operator to motorists and other users. We also want to achieve the first steps in reform quickly. The evidence base explains that a wide range of options for governance of the network have been considered, but that currently we are focusing on reform which is achievable in the short-term.

What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)

Do nothing: Highways Agency remains as an executive agency with funding allocated annually from DfT's budget and no improvement in strategic direction from government.

Option 1: Institutional reform with legislation - establish the HA as a government-owned company with greater freedoms, set out a Roads Investment Strategy with funding certainty for a number of years and establish a form of scrutiny and accountability seeking to improve efficiency and performance. This option would use legislation to establish or support these measures where appropriate and is our preferred option because funding certainty underpinned by legislation will enable longer-term contracts and should secure supply chain confidence and hence associated efficient behaviour.

Option 2: Institutional reform without legislation - the same measures so far as they can be achieved without legislation.

Will the policy be reviewed? It will be reviewed. If applicable, set review date: 08/2018								
Does implementation go beyond minimum EU requirements? N/A								
Are any of these organisations in scope? If Micros not exempted set out reason in Evidence Base.	Micro No	< 20 No	Small Medium Large No No No					
What is the CO_2 equivalent change in greenhouse gas emission (Million tonnes CO_2 equivalent)	Traded:	Non	-traded:					

I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.

Signed by the Minister responsible: Robert Goodwill MP	<u>W</u>	Date:	25/10/2013	

Summary: Analysis & Evidence

Description: Institutional reform with legislation

FULL ECONOMIC ASSESSMENT

Price Base	PV Base	Time Period	Net	Benefit (Present Value (PV)) (£m)		
Year 2013/14	Year 2013/14	Years 10	Low: £2,128m	High: £6,532m	Best Estimate: £3,319m	

COSTS (£m)					Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	£3m	2013/	£2m	£24m		
High	£3m	14 to 2014/	£18m	£169m		
Best Estimate	£3m	15	£4m	£42m		

Description and scale of key monetised costs by 'main affected groups' (2013/14 prices, non-discounted)

Cost of implementing and operating new value for money scrutiny and consumer championing capabilities: £2m p.a. estimate, range of £1m-£3m.

Cost to new company of value for money scrutiny requirements: £2m central p.a., range £1m-£15m p.a. Staff cost increase – new HR and financial managers; £0.4m per year.

Transitional cost of time dedicated to reform by DfT, HA and contracted staff: £3m over 18 months

Other key non-monetised costs by 'main affected groups'

Reducing policy and legal flexibility for Ministers to change road investment plans to take into account new circumstances.

Reducing budgetary flexibility across government, potentially leading to less efficient allocation of public funds.

Potential transitional costs of change to office accommodation.

BENEFITS (£m)	Total Transition (Constant Price) Years		Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	£0m		£258m	£2,297m
High	£0m		£740m	£6,557m
Best Estimate	£0m		£380m	£3,361m

Description and scale of key monetised benefits by 'main affected groups' (2013/14 prices, non-discounted) Improvements in efficiency and value for money in delivering:

- Major capital schemes: £275m p.a. (range £152m to £634m)
- Capital maintenance and renewals: £50m p.a. (no range estimated)
- Resource maintenance and operations: £57m p.a. (no range estimated)

Savings accrue to taxpayers.

Other key non-monetised benefits by 'main affected groups'

Potential for better service for road users.

Impacts on UK economic growth through improving the conditions for the domestic supply chain.

Reduced risk to delivery of Highways Agency capital programme on time.

Key assumptions/sensitivities/risks

Discount rate (%)

3.5

We believe that legislation will be sufficient to achieve a sustained commitment to 5 year investment plans and that the supply chain will believe the plans and change behaviour accordingly; if this is not true the benefits will be significantly lower.

The Roads Investment Strategy may lead to cyclical spending patterns as observed in the water industry The performance specification should establish clear responsibility for social and environmental goals, but risk this does not work as intended

BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m:					In scope of OIOO?	Measure qualifies as	
Costs:	£0m	Benefits:	£0m	Net:	£0m	No	NA

Summary: Analysis & Evidence

Description: Institutional reform without legislation

FULL ECONOMIC ASSESSMENT

Price Base	PV Base	Time Period	me Period Net Benefit (Present Value (PV)) (£m)					
Year 2013/14	Year 2013/14	Years 10	Low: -£169m	High: £3,338m	Best Estimate: £900m			

COSTS (£m)	TS (£m) Total Transition (Constant Price) Years		Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	£2.5m	2013/	£2m	£24m
High	£2.5m	14 to 2014/	£18m	£169m
Best Estimate	£2.5m	15	£4m	£42m

Description and scale of key monetised costs by 'main affected groups' (2013/14 prices, non-discounted)

Cost of implementing and operating new value for money scrutiny and consumer championing capabilities: £2m p.a. estimate, range of £1m-£3m.

Cost to new company of value for money scrutiny requirements: £2m central, range £1m-£15m.

Staff cost increase – new HR and financial managers; £0.4m per year.

Transitional cost of time dedicated to reform by DfT, HA and contracted staff: £2.5m over 18 months.

Other key non-monetised costs by 'main affected groups'

Reducing policy flexibility for ministers.

Potential transitional costs of change to office accommodation.

BENEFITS (£m)	Total Transition (Constant Price) Years		Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	£0m		£0m	£0m
High	£0m		£380m	£3,361m
Best Estimate	£0m		£106m	£942m

Description and scale of key monetised benefits by 'main affected groups' (2013/14 prices, non-discounted)

Potential improvements in efficiency and value for money in delivering:

- Capital maintenance and renewals: £49m p.a. (range £0m to £49m)
- Resource maintenance and operations: £57m p.a. (range £0m to £57m)
- Major capital schemes: central estimate £0m p.a. (range of £0m to £275m)

Any savings accrue to taxpayers.

Other key non-monetised benefits by 'main affected groups'

Potential for better service for road users.

Potential impacts on UK economic growth through improving the conditions for the domestic supply chain. Potential reduced risk to delivery of Highways Agency capital programme on time.

Key assumptions/sensitivities/risks

Discount rate (%)

3.5

We have evidence that promises of funding certainty by HM Treasury are not sufficient to deliver significant change in supply chain behaviour, but this is the key uncertainty.

The Roads Investment Strategy may lead to cyclical spending patterns as observed in the water industry. The new structure should appropriately balance operational objectives and economic priorities with environmental and social goals, but risk this does not work as intended.

BUSINESS ASSESSMENT (Option 2)

Direct imp	Direct impact on business (Equivalent Annual) £m:					In scope of OIOO?	Measure qualifies as
Costs:	£0m	Benefits:	£0m	Net:	£0m	No	NA

Evidence Base (for summary sheets)

1. Problem under consideration

- 1.1 The strategic road network (SRN) is the network of motorways and trunk roads consisting of around 2% of England's roads but carrying a third of its traffic. The Highways Agency (HA) is the executive agency of the Department for Transport (DfT) responsible for the maintenance, operation and enhancement of the SRN on behalf of the Secretary of State.¹
- 1.2 Improving the performance of the existing road network was one of the top priorities identified by the Eddington report, *Transport and the Economy*, which estimated in 2006 that a 5% reduction in travel time for all business and freight travel on the roads could generate around £2.5 billion of cost savings around 0.2% of GDP.² In addition, many recent surveys have found that the UK continues to compare poorly internationally on business perceptions of transport infrastructure: for example, the quality of roads infrastructure was ranked twenty-eighth in the World Economic Forum's *Global Competitiveness Report*. ³ Nearly 90% of UK businesses surveyed in 2008 by the CBI reported that the poor reliability of the road network was having an impact on their productivity.⁴
- 1.3 In June 2013, *Investing in Britain's Future* announced the Government's spending plans for roads up to 2020-21. The total £28 billion roads package included nearly £18 billion for the SRN.⁵ Over £4 billion of this is for repair and renewals.⁶ Details over how this would be delivered were firmed up in the Command Paper *Action for Roads*, published by the DfT in July 2013, alongside proposals on how to reform the existing institutional set-up in order to ensure delivery of the investment package whilst maximising efficiency.⁷
- 1.4 This increase in investment is already planned. However, the Government also recognises that there are problems with the current structure of the HA to most efficiently deliver for taxpayers and motorists. In 2011 Alan Cook published his report A Fresh Start for the Strategic Road Network (the 'Cook Review'), which identified the following issues:
 - "...the unique position of the Agency, and its relationship with government, has failed to reflect the wider interests of our economy. The close proximity of the Agency to the DfT means that there has historically been little pressure for the Government to take, or stick to, long-term decisions for investment in the network. Governments have tended to put their own short-term needs, as service providers and funders, ahead of the long-term interests of taxpayers and road users. Perceptions of political pressure, and constraints on civil service recruitment and rewards, have also created an over-centralised working culture that is unnecessarily 'risk-averse'. Unlike in the regulated sectors, there is no continuous external pressure for efficiency. Successive changes of approach and agenda have also created duplications and inefficiencies between the Agency, its supply chain and local authorities."⁸
- 1.5 This impact assessment covers reforms which look to establish the best institutional framework to deliver the enhancement and continued operation and maintenance of the network over the next decade.

¹ The relationship between the DfT and the Highways Agency is set out in: Department for Transport, *Strategic road network performance specification 2013-2015*, https://www.gov.uk/government/publications/strategic-road-network-performance-specification-2013-to-2015

² R. Eddington, *Transport and the Economy*, December 2006.

World Economic Forum, *The Global Competitiveness Report 2013-14*, http://www.weforum.org/reports/global-competitiveness-report-2013-14, http://www.weforum.org/reports/global-competitiveness-report-2013-14, http://www.weforum.org/reports/global-competitiveness-report-2013-2014

⁴ OECD, Going For Growth 2011, 2011 & Confederation of British Industry, Tackling congestion, driving growth, March 2010.

⁵ HM Treasury, *Investing in Britain's Future*, June 2013,

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/209279/PU1524_IUK_new_template.pdf

⁶ Capital maintenance alone, resource maintenance is an additional £2 billion.

Department for Transport, Action for Roads: a network for the 21st century, July 2013.

⁸ https://www.gov.uk/government/publications/a-fresh-start-for-the-strategic-road-network. This Impact Assessment draws heavily on this report as the most recent published assessment of this issue; we include references to the report where there is no other primary source of information.

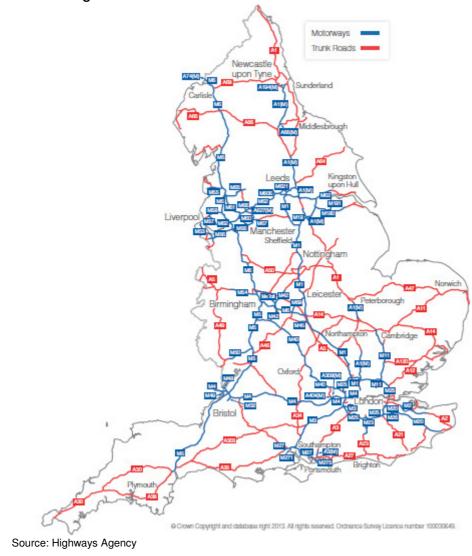
- 1.6 Building on the work undertaken by Alan Cook and as part of producing Action for Roads, we have identified seven key weaknesses in the status quo arrangement:
 - **Dependence** The Highways Agency is much closer to central government than other organisations providing national infrastructure. All powers and duties relating to national roads reside with the Secretary of State under the Highways Act 1980, Road Traffic Regulation Act 1984 and Traffic Management Act 2004. As an executive agency, and therefore not a separate legal entity, the HA acts on behalf of the Secretary of State, and in his name. This means that formal responsibility for road schemes, renewals and maintenance remains with the Secretary of State, which means that the Minister's considerations of wider matters may influence the day-to-day activities of the Agency, diluting the Agency's focus on operational matters and efficiencies.
 - II) Strategic Previously, government has not always provided the Agency with a clear vision for what it needs to achieve - either right now or over the longer term. Instead it has focused on local matters, specific schemes and programmes, and operational and methodological techniques in areas such as information services and traffic management. Cook identified a lack of strategic thinking, at the national level, about value for money, overall resource allocation or the customer experience.
 - III) Stop-go The HA is funded through annual allocations as part of the DfT's budget. This creates a lack of certainty in the budget from year-to-year which means that the HA's contracts with its suppliers are short-term and more expensive than necessary as risk is priced in and the suppliers cannot enter cheaper, longer-term contracts for materials. An example of this is illustrated in Figure 5.1 in the Cook Review.9 It is not primarily the fluctuations in overall spend, but the uncertainty over future funding levels that affect the HA's and suppliers' behaviour. This arrangement therefore misses opportunities to deliver pipelines of major schemes at lower cost to the taxpaver. The HA's suppliers are based throughout the UK; when they have little certainty over the HA's future programme it leads to a higher turnover of staff to meet fluctuating demand, meaning there is less incentive to invest in training and apprenticeships. These factors lead to inefficiencies and losses for the HA, its suppliers and the UK economy.
 - IV) Modal Roads spending remains one of the few areas of transport where government does not make long-term spending commitments, making it more variable. Spending on rail, for example, is determined to a pre-announced timetable through the Rail Investment Strategy¹⁰ and the associated Statement of Funds Available, both of which are underpinned by legislation. This means that spending on roads is more exposed to short-term adjustment when savings are needed in DfT budgets or more investment funding becomes available, increasing the lack of certainty.
 - V) Budget flexibility Unlike other infrastructure providers, the Agency has to use its funding allocation within financial year periods, rather than planning over the longer-term and allocating spend to maximise efficiency. The way the government's annual budget cycles work also means that the HA sometimes has to spend its remaining budget as it approaches the new fiscal year in the winter months, which are the least effective and most costly times of year for schemes and maintenance.
 - VI) Personnel The Agency offers its contractors performance-related incentives, but cannot use comparable means to incentivise its own staff. This makes incentivising performance more difficult. The HA is also disadvantaged in competing for the specialists on the international labour market and retaining specialised staff due to civil service restrictions on pay policy.
 - VII) Comparison The Highways Agency's performance is not scrutinised independently and the DfT does not currently have a framework in place to adequately measure the HA against best practice elsewhere. This means that learning from other countries and other sectors is limited and benchmarking of regions within the HA is not undertaken to its full potential.
- 1.7 As a result of the above problems, there are inefficiencies in the way roads are managed, maintained and delivered.

⁹ A. Cook, A Fresh Start for the Strategic Road Network, November 2011, https://www.gov.uk/government/publications/a-fresh-start-for-thestrategic-road-network, (hereafter 'Cook Review') p. 30.

Formerly known as the high-level output specification (HLOS).

- 1.8 The strategic road network is critical to the UK's economy. While it only covers 2.6% of the road network in England, it covers 30% of all traffic and 60% of freight and business traffic. 85 billion vehicle miles were travelled in 2012 alone and in any given year 90% of the British population will use the network. 11 DfT estimates that the direct cost to the UK economy of time lost due to congestion, on the SRN alone, is £2 billion a year and that this could rise to £10 billion a year by 2040.12
- 1.9 The institutional and strategic problems identified above come on top of historic underinvestment in the SRN. Britons now drive almost 50 billion miles more than 20 years ago but spending on major projects has not kept pace. 13 The problems with the network are set to be exacerbated by rising traffic which we expect to grow as a result of a rising population, falling cost of driving and economic growth. DfT traffic demand forecasts project an increase of 24-72% in driving on the SRN by 2040.14 This means that it is more important now than ever to take steps that ensure we have the best system for governing our roads.

Figure 1: Map of the strategic road network



Department for Transport, Annual Road Traffic Estimates: Great Britain 2012, June 2013, p. 8 & ONS Omnibus Survey 2013.

The costs of congestion both at present and in 2040 are estimates arrived at using the National Transport Model (2013). These costs do not include the impacts that congestion may have on journey time reliability which may increase the costs by up to 50%. For more information on the future impact of rising traffic see Action for Roads, pp. 13-15.

¹⁴ Department for Transport, *Road Traffic Forecasts 2013*, July 2013, https://www.gov.uk/government/publications/road-transport-forecasts-2013

2. Rationale for intervention

- 2.1 There are many good reasons why the business of motorways and trunk roads should have distinctive features. This business is to a large extent a 'natural monopoly', ¹⁵ operating an 'open' network that forms an integral part of a wider transport system. The business gives rise to serious safety and environmental issues, and requires a very long-term approach to planning and investment. However while these reasons provide a clear reason for intervention, none of them provides a compelling argument for the business to be run directly by central government, compared to an arms length body or another model. Other businesses with some or all of these features operate successfully under a wide range of business models.
- 2.2 The strategic road network is different in another respect from most other infrastructure networks which exist solely to provide a secondary commodity or service to consumers (water or electricity). For users of road networks, the infrastructure is the service. However, as road users have no direct relationship with the infrastructure provider at the point of use, they must instead rely on democratically accountable public authorities to ensure their needs and concerns are taken into account by the infrastructure provider. This is important, but it does not follow that the public authority and the infrastructure provider must be part of the same organisation. There is a wide variety of arrangements across local government where highways services are delivered by different companies under an agreed performance contract with the authority.

3. Policy objectives

- 3.1 Reform should enable cost savings over the status quo and more effective delivery across the HA's activities. Efficiency savings should be apparent both for the HA and its supply chain throughout the different stages of major projects, maintenance and renewals.
- 3.2 One of the Government's overarching national objectives is boosting economic growth. We aim to support this through this policy as a consequence of efficiency savings. This is because lower costs and improved confidence should enhance the sustainability and competitiveness of the UK supply chain, consequently leading to a boost in employment and training in UK companies, as opposed to international competitors. Additionally, greater value for money in improving and managing the SRN would mean taxpayers' money going further and potentially releasing funds for further road improvements or other spending.
- 3.3 Economic growth should also be boosted by the higher levels of investment announced at the recent Spending Round, however we do not assess the case for this investment here. The case for roads investment will be assessed through the forthcoming National Networks National Policy Statement, the Roads Investment Strategy (the process for which is discussed below) and specific scheme appraisals in line with standard DfT guidance.¹⁶
- 3.4 With any institutional changes to the governance of the strategic road network the government aims to improve the customer focus of the operator through bringing about clearer accountability of the roads operator to road users. The preferred option must ensure that users continue to receive a good service from the strategic road network and that there are proper performance safeguards in place.
- 3.5 The design and building of roads can have environmental, social and health impacts. It is important that any framework for enhancing and managing the network continues to give priority to consideration of these impacts and provides for strict scrutiny of the business case for and design of schemes before they enter the roads programme.
- 3.6 The government has announced a major increase in investment on the strategic road network, taking effect between now and 2021. It is important that any reform can take effect quickly, so that

¹⁵ The key facts about the market which lead to this characterisation are that the network has high sunk costs and low variable and fixed costs. The SRN had an estimated asset valuation of £110bn in 2013, compared to the 2012-13 net operating cost of £2.1bn (Highways Agency Annual Report and Accounts 2012/13, June 2013). This will lead to decreasing average costs to scale over a large range, a key characteristic of natural monopolies.

http://www.dft.gov.uk/webtag/

improvements in efficiency and speed of delivery support this new programme. This IA therefore looks at reform deliverable during this parliament.

4. Description of options

- 4.0 The current SRN governance structure operates reasonably well today; as Alan Cook showed, the HA is not a failing service that needs to be rescued. However, a range of strategic opportunities for improvement exist that could provide a much better deal for motorists and taxpayers. Three options are set out:
 - doing nothing and maintaining current institutional and budgeting arrangements from the 2013 Spending Round onwards;
 - implementing the reforms in Action for Roads corporatising the HA, creating a stable funding basis and improving accountability - implementing or underpinning parts of these proposals with legislation; or
 - implementing the same reforms through non-statutory means only.

4.1 Do nothing

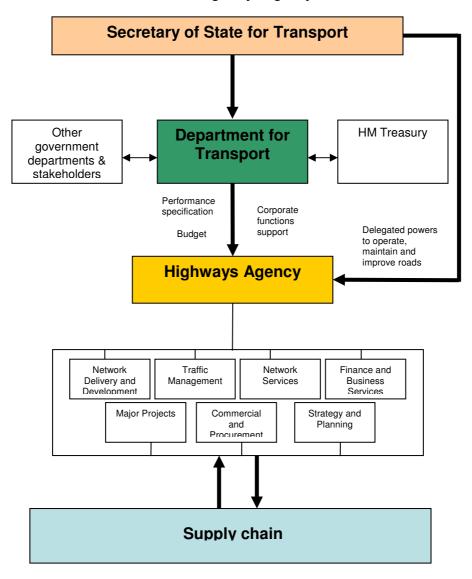
- 4.1.1 The HA is responsible for operating, maintaining and improving the SRN, the network of motorways and trunk roads approximately 4,300 miles in length. At the end of March 2013, there were 3,220 permanent, full-time staff working directly for the HA, 1,596 of whom as part of the Traffic Officer Service.
- 4.1.2 ¹⁷ This workforce is spread across England, including seven regional offices, seven regional response centres and 32 outstations. The current institutional framework is illustrated in figure 2 below.
- 4.1.3 The Agency was established in 1994. As the Cook Review said, there have been some significant changes to its purpose and priorities since then:
 - "the Agency's core purpose has shifted from being a 'predict and provide' road builder with a focus on creating new motorway and trunk road connections, to being a network operator and asset manager, primarily concerned with effective management and enhancement of the existing network:
 - as the existing network became more intensively used, the Agency established a range of new traffic management services and programmes – including a dedicated Traffic Officer Service, introduced in 2004, which now manages and clears an average of 26,500 incidents each month;
 - the size of the Agency's network has decreased, with much of its network being transferred to local authorities – the current network of around 7,000 km compares to approximately 10,000 km in 1998."18
- 4.1.4 Following the findings of the Cook Review, the Government has already implemented two important reform measures within the current institutional set-up:
 - Performance specification: in April 2013 the first performance specification for the SRN and HA was published. This set out the standards which the Agency is expected to meet in its work, against a series of key criteria. 19
 - Route-based strategies: this is a new way to plan the management and enhancement of the SRN, taking into account local aspirations and priorities for growth, balancing local and national needs on the network.²⁰

¹⁷ Highways Agency, Annual Report and Accounts 2012-2013, p. 35

¹⁸ Cook Review, p. 17.

¹⁹ Performance specification 2013-2015.

Figure 2: Current institutional framework of the Highways Agency



4.1.5 The key aspect of the baseline is the anticipated spending level. The table below shows the baseline spending, and below we summarise the key assumptions.

> 10 Yr Total Capital 4,884 1,848 6,732 26,732 33,464 Resource

> > 5,815 10,939

Table 1: Highways Agency anticipated spending 2015/16 to 2024/25

15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25
Capital									
440	451	462	474	485	497	506	514	523	532
289	297	304	312	319	327	-	-	-	-
729	748	766	786	804	824	506	514	523	532
1,071	1,120	1,609	1,960	2,508	3,450	3,707	3,736	3,753	3,817
1,800	1,869	2,376	2,746	3,313	4,274	4,213	4,250	4,276	4,348
Resource									
426	458	479	467	474	567	515	545	550	643
538	548	557	566	576	586	596	606	616	627
964	1,006	1,036	1,034	1,050	1,152	1,111	1,151	1,166	1,269
	440 289 729 1,071 1,800 426 538	440 451 289 297 729 748 1,071 1,120 1,800 1,869 426 458 538 548	Capital 440 451 462 289 297 304 729 748 766 1,071 1,120 1,609 1,800 1,869 2,376 Resource 426 458 479 538 548 557	Capital 440 451 462 474 289 297 304 312 729 748 766 786 1,071 1,120 1,609 1,960 1,800 1,869 2,376 2,746 Resource 426 458 479 467 538 548 557 566	Capital 440 451 462 474 485 289 297 304 312 319 729 748 766 786 804 1,071 1,120 1,609 1,960 2,508 1,800 1,869 2,376 2,746 3,313 Resource 426 458 479 467 474 538 548 557 566 576	Capital 440 451 462 474 485 497 289 297 304 312 319 327 729 748 766 786 804 824 1,071 1,120 1,609 1,960 2,508 3,450 1,800 1,869 2,376 2,746 3,313 4,274 Resource 426 458 479 467 474 567 538 548 557 566 576 586	Capital 440 451 462 474 485 497 506 289 297 304 312 319 327 - 729 748 766 786 804 824 506 1,071 1,120 1,609 1,960 2,508 3,450 3,707 1,800 1,869 2,376 2,746 3,313 4,274 4,213 Resource 426 458 479 467 474 567 515 538 548 557 566 576 586 596	Capital 440 451 462 474 485 497 506 514 289 297 304 312 319 327 - - 729 748 766 786 804 824 506 514 1,071 1,120 1,609 1,960 2,508 3,450 3,707 3,736 1,800 1,869 2,376 2,746 3,313 4,274 4,213 4,250 Resource 426 458 479 467 474 567 515 545 538 548 557 566 576 586 596 606	Capital 440 451 462 474 485 497 506 514 523 289 297 304 312 319 327 - - - - 729 748 766 786 804 824 506 514 523 1,071 1,120 1,609 1,960 2,508 3,450 3,707 3,736 3,753 1,800 1,869 2,376 2,746 3,313 4,274 4,213 4,250 4,276 Resource 426 458 479 467 474 567 515 545 550 538 548 557 566 576 586 596 606 616

Note: This table represents committed funding for 15/16 on all lines, committed capital investment funding up to 2020/21, with all other lines only representing anticipated funding based on assumptions as described above.

- 4.1.6 The assumptions used to generate the baseline spending level are:
 - From 2015/16 to 2020/21 this reflects the anticipated Highways Agency budget as announced at Spending Round 2013 and *Investing in Britain's Future*:
 - a. Capital funding announced for period from 2015/16 to 2020/21.
 - b. Resource funding for 2015/16, kept constant in real terms (using the GDP deflator to increase for inflation) and estimated future funding based on PFI commitments.
 - Beyond 2020/21:
 - a. Resource figures kept constant in real terms (using the GDP deflator to increase for inflation) for non PFI service payments programme areas
 - b. Resource PFI service payments are anticipated spend on servicing these contracts
 - c. Capital maintenance renewals are assumed to continue at the same real level, but the resurfacing programme is assumed to be complete by 2020/21 so no further spend included
 - d. Major schemes (non maintenance capital programmes) reflects the Government's ambition for upgrading the SRN by investing in total between £30 billion and £50 billion over a 10-15 year period, as stated in *Investing in Britain's Future*.
- 4.1.7 This baseline already includes many anticipated efficiency measures which the Highways Agency will aim to deliver whether these reforms happen or not. However these are aspired estimates, and the reform measures discussed below would increase the certainty they could be delivered. We discuss this in the analysis of options.

4.2 Option one – Institutional reform with legislation

4.2.1 We have built on the recommendations in the Cook Review to identify a package of interconnected reform measures, all of which could be underpinned or supported by legislation. Many of these measures could in theory be delivered separately; however the appraisal section of this IA explains how the reforms are deeply inter-related. Hence we have analysed the package in the round, and where possible picked out where the costs and benefits apply to the particular elements.

Reform of the Highways Agency

- 4.2.2 Under this option the HA would be corporatised that is, a new publicly-owned body would be created to manage the SRN and take over the roles of the HA.
- 4.2.3 At this stage it is expected that this company will be constituted under the Companies Act, however for the purpose of this analysis the route is not as important as the governance arrangements that will be in place to deliver the necessary balance of freedoms, government control and public accountability as described in the appraisal of options below.
- 4.2.4 The company would be given a range of duties and powers for administering motorways and trunk roads under the Highways Act 1980 (and other appropriate legislation). It is envisaged that legislation will enable the Secretary of State to create a licence which will entitle the body corporate (as licence holder) to use statutory powers, and place certain responsibilities and duties upon it. This would enable it to operate without day-to-day approval from ministers in most cases.
- 4.2.5 Based on the level of public sector control, the company is likely to be classified to the central government sector for national accounting purposes. Usually, this means it would be subject to standard central government controls on the use of public money. In some instances, the HA currently has delegations that allow it to exceed normal limits, for example on technical services and strategic supplier management; these would continue. As described in the options appraisal, further work will be undertaken to find the best controls arrangement.

Roads Investment Strategy and funding certainty

4.2.6 Following recommendations in the Cook Review, the Government agreed the first performance specification for the HA and the SRN to cover the period 2013 to 2015. Based on outputs expected, it

is an approach that would continue to form the basis for a Roads Investment Strategy (RIS). The RIS would be built around three core elements:

- A performance specification for the SRN and the company, articulating the Government's
 ambition for the strategic road network and setting out specific expectations for future delivery,
 including metrics and key performance indicators. In addition to covering issues around network
 performance, this will also need to set clear requirements around crucial considerations such as
 safety and the environment.
- A statement of available funds, setting out how much can be spent on strategic roads during the lifetime of the RIS (usually five years).
- A funding and investment plan, setting out how this funding is allocated to deliver the Government's expectations. Amongst other things, this will cover maintenance and enhancement works, as well as identifying any specific major schemes.
- 4.2.7 Based on the priorities identified in these documents, the RIS would identify a list of major schemes, as well as the amounts of investment on maintenance, programmes of smaller-scale enhancements, operation of the network and other programmes of investment. These will be based on evidence, for example from route-based strategies strategies which focus on specific stretches of roads or junctions within the SRN, evaluating problems and identifying solutions. The result would be a statement outlining five years of investment that the government is committed to; plans and a pipeline of future investment for ten years; and a twenty-year vision.
- 4.2.8 The obligation for government to provide a statement and the level of funding commitment would be put into legislation. This means there would be a statutory obligation on the Secretary of State for Transport to publish a RIS with a pre-announced most-likely five-year cycle of review (as in the rail sector). The schemes, performance specification and funding set out in the RIS would only be revisable within those cycles by way of an extensive and transparent review. There would be some change mechanism in the case of exceptional circumstances.
- 4.2.9 At the 2013 Spending Round it was announced that the new company will be given flexibility to manage its finances between years. It will have the ability to move up to 10% of its capital budget between years to ensure that the capital spending profile is efficient. This does not require legislation to be delivered, but is a necessary measure to realise benefits from the certainty of the RIS (as explained in the options appraisal, below). End-year flexibility is unorthodox in government accounting, and HM Treasury has made clear this is dependent on other reform measures being carried out, therefore it only forms part of option one.

Efficiency monitor and road user watchdog

- 4.2.10 To ensure the accountability of the company to both the taxpayer, for its use of funds, and road users, for the service provided, there are two core roles needed:-
 - A watchdog gathering the views of users about how well the new company is performing. This
 involves working alongside but independently from interest groups and using national surveys to
 inform conclusions, and providing advice to government on key metrics and KPIs of the
 performance framework, indicating how far they reflect road user priorities and needs
 - A **monitor** assessing cost performance and delivery. The monitor would benchmark delivery performance, particularly on cost and efficiency, including against domestic and international comparators where available, using this to provide advice on efficiency targets.
- 4.2.11 There are a number of ways in which these two roles could be delivered and could be discharged by more than one body (already the practice in other sectors). But we are seeking to avoid duplication and to take full advantage of skills and knowledge which already exist beyond central government. This could be through:
 - An existing DfT sponsored panel This can draw on existing experience, knowledge and skills of those in the roads sector, including direct links with existing user and expert groups. One example is the Motorists' Forum a group set up by the Department where the heads of groups like the RAC, AA and FTA regularly meet to discuss government roads policy.

- An existing regulator This will have access to a range of expert skills, as well as a large
 amount of formal independence. The Office of the Rail Regulator currently benchmarks cost
 performance at Network Rail, and other regulators carry out similar work for their respective
 sectors.
- An existing user body This would provide both independence and experience of representing passenger interests with infrastructure companies. For example, Passenger Focus currently represents the interests of rail, bus and coach passengers, and regularly deals with train operators and bus companies.

A working preference is to use existing bodies where possible, to take advantage of incumbent expertise, reduce potential transitional costs, and to support the Government's stated policy on limiting the number of new arm's-length bodies. But for the purposes of this assessment, the location of the roles is of secondary importance to the impact that the functions have.

4.2.12 To ensure the company provides the watchdog and monitor with information as required, responsibilities could be created via a licence, or the framework agreement, which would oblige the company to provide information (over and above obligations under Freedom of Information legislation etc). This would enable the benchmarking of costs between different SRN regions and comparable local authorities or internationally. A road user watchdog could also use this information to act as a source of expert advice for government, helping to determine the RIS, and to publish reports on the company's performance that would be available to the public.

4.3 Option two – Institutional reform without legislation

- 4.3.1 The reform measures outlined above could feasibly be implemented without legislation. The key differences would be:
 - A company under public ownership could be created under the Companies Act but without any transfer of statutory functions from the Secretary of State.
 - The RIS could be created with the same components, but without a statutory process which
 involves a clear commitment to the delivery of schemes and the associated funding contained in
 the RIS settlement.
 - As discussed above, there are several means by which to create the efficiency monitoring and road user watchdog functions. The responsibility to provide information could not be created via a licence set up in statute, but it could be part of the framework agreement.

5. Options Appraisal

5.1 Appraisal parameters

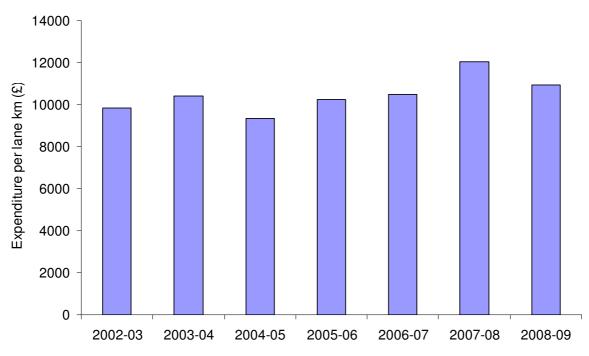
- 5.1.1 To appraise the impact of the reforms we use the following parameters:
 - An implementation period of 2013/14-2014/15 during which transitional costs are incurred.
 - First full year of the impact of the reforms in 2015/16, with an appraisal period of 10 years following (we use 10 years as the recent Spending Round announced funding to 2020/21 and a plan for a further increased level of investment for the next 10-15 years; we don't use a longer period as we are appraising the delivery of road infrastructure, not the impacts of that infrastructure which would usually be appraised over a 60 year period).
 - A price base of 2013/14, using the HMT GDP deflator series to convert costs and benefits to the same price base. Below the basis of all figures are quoted.
 - A present value base year of 2013/14 (as this is the current year), using the HMT Green Book discount rate of 3.5% to discount costs and benefits.
 - We use financial years to fit with HA financial data.

5.1.2 The sections below explain the evidence base and assumptions for our estimates and note the price base and whether figures are discounted or not. Using the above assumptions we have calculated the figures shown on the summary sheet.

5.2 Do nothing

- 5.2.1 This is the do nothing option against which the other options are assessed and hence has no cost or benefit of its own. The baseline institutional framework and expenditure forecasts have been described above.
- 5.2.2 Below we cover the options for reform, but in this section we cover the evidence that there is scope for improvement. The key evidence for this comes from considering the drivers for economic efficiency in the provision of long-term national infrastructure. Economic efficiency means ensuring that resources are allocated to the most productive uses ('allocative' efficiency), that these resources are spent in a way that maximises value for money ('productive' efficiency), and that over time resources are used to drive innovation and minimise whole-life costs ('dynamic' efficiency).
- 5.2.3 As explained in our discussion of the problem, there are many instances where the characteristics of the status quo are not optimal for driving value for money. We have evidence that this is the case from a variety of sources:
 - A number of reports have identified inefficiencies in government procurement of infrastructure and construction of at least 15–20%.²¹
 - Benchmarking of eight roads projects between the UK and the Netherlands by Infrastructure UK indicated that the UK examples were on average 10% higher, based on the unit costs per lane kilometre. A previous study undertaken on behalf of the Highways Agency in 2009 similarly indicated that unit costs in the UK were up to 32% higher than the Netherlands per lane kilometre, although this was based on tendered prices rather than actual costs.²² National Audit Office (NAO) analysis of maintenance schemes also shows that unit costs have risen in recent years well above the rate of inflation, as Figure 3 shows.

Figure 3: Routine maintenance expenditure per lane kilometre adjusted for general inflation (£, 2008/09 prices)



Source: Highways Agency: Contracting for Highways Maintenance, National Audit Office, October 2009

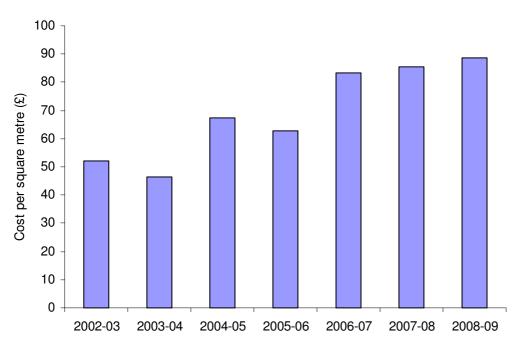
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These include: Infrastructure Cost Review, Infrastructure UK, December 2010; Government Procurement Strategy, Cabinet Office, May 2011.

²² Infrastructure Cost Review, Infrastructure UK, December 2010, and European Cost Comparison – Cost differences between English and Dutch Highway Construction, EC Harris and TRL, December 2009. The latter study made a series of technical and cultural adjustments to the UK costs which – as noted by Infrastructure UK – together reduce the difference to a figure comparable to their findings.

5.2.4 The NAO found that spending on planned renewals of roads per square metre resurfaced also rose by 70% over the same period, as shown in Figure 4. However, this figure includes spending on items such as barriers, lighting and drainage which do not yield a resurfaced area – we believe this type of spending has represented an increasing proportion of the total. The Agency's own estimate of spending on resurfacing per square metre treated indicates an increase of 17% above general price inflation between 2004/05 and 2008/09, but the NAO was not able to fully validate this estimate.

Figure 4: Total cost of road renewals activity per square metre of resurfacing, adjusted for general inflation (2002/03-2008/09)



Source: Highways Agency: Contracting for Highways Maintenance, National Audit Office, October 2009

5.2.5 Uncertainty in investment planning and funding creates inefficiency in a variety of ways:

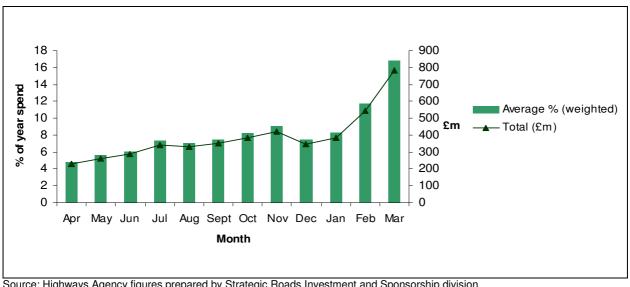
- Reducing the Agency's ability to secure efficiencies by preventing it from striking long-term agreements with suppliers that could offer better value for money.
- The risk of project cancellation is built into the prices guoted by suppliers, thus increasing the cost.
- Requiring the organisation to sometimes delay or cancel programmes (which can lead to abortive design and procurement work).
- The Agency has found itself unable to adopt rigorous optimum whole-life asset management principles, or sign contracts with suppliers reflecting those principles.
- 5.2.6 Analysis by a number of organisations, including CIPFA, the Institute of Asset Management, and Infrastructure UK²³, indicates that, when coupled with robust asset management and commercial capability on the part of the service provider, greater visibility of the pipeline of future roads investment enables cost efficiencies for the service provider and supply chain. For example, greater certainty of funding enables economies of scale from procurement of materials for larger programmes of work, reduced labour costs by allowing contractors to plan for and smooth out peaks and troughs of work, and greater investment in new technologies and processes which become cost-efficient with greater certainty over future work.
- 5.2.7 The theoretical case is supported by some empirical evidence. Infrastructure UK's Infrastructure Cost Review 2010 indicated that extending funding certainty has been associated with unit cost

²³ Infrastructure Cost Review, 2010, *HM Treasury and Infrastructure UK* (https://www.gov.uk/government/uploads/system/uploads

savings of 10-20% in other sectors and countries, particularly for routine maintenance and renewals work. 24 For example:

- the Scottish Government's long-term road maintenance contracts, lasting up to 10 years, have been associated with significant savings from giving contractors a pipeline of work that incentivises investment in year-on-year improvement, for example reducing labour cost through improving productivity by 20%;
- the Rijkswaterstaat in the Netherlands generated savings of 20% in roads, by extending contract terms from 1-2 years to 5-7 years and by bundling more maintenance activities together in the same contract; and
- within the Birmingham Highways Maintenance PFI, the ability to plan long-term provided certainty of requirement for 1 million tonnes of asphalt, which allowed them to procure this more effectively. reducing supplier and subcontractor costs by at least 10%.
- 5.2.8 In the regulated infrastructure sectors, greater certainty over the investment pipeline has been achieved through five-yearly cycles of investment planning, over which the regulator sets prices in the industry. However, research by Infrastructure UK indicates that, even in the regulated sectors, the five-yearly reviews create a line of uncertainty in investment around the review point, which means that potential efficiency savings continue to be lost, estimated by one water company to be in the order of 10-15% in the water sector.²⁵
- 5.2.9 Another issue is the affect of annualised budgets, particularly when combined with the 'stop-start' nature of funding previously described. The Highways Agency currently has no end-year flexibility, in its own right, on when budgets are spent. The combination of this with regular changes to budgets as fiscal events drives an approach to capital investment where the programme is split into annual delivery plans / budgets. Because the preparation, design and delivery of schemes must happen within a year, the first half of the financial year (April to September) is used to prepare and design schemes and the second half to deliver - this results in too many works in winter.
- 5.2.10 The following figure shows the extent to which expenditure has occurred towards the back end of the financial year over the last two spending reviews:

Figure 5: Average annual spend profile 2007-2013



Source; Highways Agency figures prepared by Strategic Roads Investment and Sponsorship division

5.2.11 The figures indicate a marked annual cycle with 62% of the programme typically being delivered in the second half of the financial year (Oct-March) and 37% of the programme in the winter months (Nov-Feb). This imposes three types of cost:

 $^{^{25}}$ Smoothing Investment Cycles in the Water Sector, HM Treasury

- Inefficient delivery due to rushing scheme development (to ensure it is in time for year-end) and inefficient use of resources to deliver schemes, as delivery challenges are unnecessarily increased and the same staff needed to work on multiple schemes.
- Undertaking more work than necessary in winter months with associated cost increases and delays due to winter weather and a reduction in asset life.²⁶
- Lower allocative efficiency as schemes are more likely to be selected on their deliverability in the short-term rather than the best value in the longer term
- 5.2.12 Alan Cook considered this range of evidence and concluded that:

"Based on evidence from comparisons with other infrastructure businesses, I am convinced that the public is not getting a good enough deal and the current model is an inadequate way of running one of the UK's most important pieces of economic infrastructure. This is because:

- there are insufficient sustained and external pressures on the Agency to secure improvements in value for money across its programme;
- the need to put flexibility first leads to sub-optimal decisions about resource allocation and network management, which do not reflect the country's long-term economic interest; and
- mechanisms for identifying the specific needs of road users, and translating those into incentives to meet those needs and provide excellent customer service, are weak.'27
- 5.2.13 The above illustrates some of the key reasons why there is scope for improved performance. There is evidence from other infrastructure businesses that committed long-term funding, a clear sense of strategic direction and active championing of the needs of customers can lead to dramatic improvements to efficiency, while achieving better quality infrastructure and improved service quality²⁸.

5.3 Option one – Institutional reform with legislation

Benefits

- 5.3.1 There are three main types of benefit which we have identified from this option:
 - Improvements in efficiency and value for money of delivery
 - Potential for a better service for road users
 - Economic growth through improving the conditions for the domestic UK-wide supply chain We take these in turn below.

Improving efficiency and value for money

- 5.3.2 The Highways Agency plans its schemes on a value management basis. In order to develop a robust programme of works that makes best use of funding to meet critical network needs, the Highways Agency operates a strict scheme development and funding process (particularly for renewals and smaller schemes) based on a national prioritisation of evidenced need. All schemes deliver value for money within the current governance framework that the HA operate and work under.
- 5.3.3 However, as the earlier discussions highlight, there are a range of potential reforms that could help improve the Highways Agency's ability to drive efficiency and value for money further. Making

²⁶ For example, re-surfacing works can only effectively be undertaken when the temperature is above 5 degrees as the material does not bind correctly at lower temperatures.

²⁷ Cook Review, p. 65.

²⁸ This is consistent with Infrastructure UK's Cost Review Charter, published in June 2011.

the roads operator more independent than the HA is at present could engender a commercial and long-term approach to managing the roads. Being closer to the commercial market it operates in and taking a long-term approach to managing the SRN are both key to the company realising the efficiencies envisaged in the Cook Review. The report recommended that the government should:

- "...reform the status of the network manager in order to provide a catalyst for change, so that it can operate with more certainty in its funding settlements, greater commercial flexibility, and less ministerial intervention on a day-to-day operational basis".²⁹
- 5.3.4 The table below summarises the scope of these possible reforms which we go on to assess the evidence for.

Table 2: Reform	options					
Area of reform	Specific reforms possible	Reason this could enable improvement				
Roads Investment Strategy	Statement of available funds for a given number of years. Performance specification,	Funding certainty and investment planning certainty, enabling benefits from long-term focus and less financial risk borne by suppliers.				
	including identification of schemes to be delivered.	Encourage greater innovation in supply chain				
	End year flexibility.	Work scheduled at appropriate times of the year.				
		Avoiding pressure to spend budget in year, allowing improved planning.				
		Better aligned with full-life asset management.				
		Ability to move projects between years where it will maximise efficiency.				
Efficiency monitoring	Establishment of a monitoring function to scrutinise and challenge company's costs.	Sustained pressure to achieve value for money with independent benchmarking of performance.				
Road user watchdog	Person, panel or body appointed to represent the interests of road users.	Publish reports and advise government and the company, helping to align company's objectives with road users' interests.				
Institutional constraints under central controls	Reforms possible in a variety of areas: Pay and remuneration ICT Digital service delivery Advertising, marketing and	Potential time and cost savings in recruitment, upgrading IT, training and various areas of procurement. Quicker sign-off procedures giving improved relationship with supply chain, particularly on major projects and financial procedures.				
	 communications Consultancy Property Learning and development External recruitment 	Attracting and retaining specialised staff; particularly in project management and commercial procurement. Potential scope to introduce performance related pay.				
Other institutional constraints	Statutory powers and duties. A more commercially-focused and independent governance structure could be introduced.	Clear demarcation of roles between government and the day-to-day operations, giving transparency of process. This should enable an improved relationship with the supply chain, as the new body will manage the relationship on its own authority.				
		Potential time and cost savings from quicker decision making.				
		Disciplines from commercial governance framework under the Companies Act will improve performance and make independence credible, raising the company's public profile and improving supplier confidence in long-term planning.				

²⁹ Cook Review, p. 73.

- 5.3.5 The reforms could be combined in more than one way; however there are interrelationships between many of the measures (for example, more experienced commercial managers would be able to achieve more in an organisation with funding certainty and flexibility than without), therefore we have treated these reforms as one option for the purposes of this impact assessment, analysing the scale of net benefits the reform presents and whether legislation maximises them.
- 5.3.6 We reviewed the evidence and found potential savings, as illustrated in the chart below. The Highways Agency aims to deliver significant efficiencies even if reform does not happen; the central estimate of these is shown by the green (top) portion of the bars. However, there is some uncertainty over the feasibility of these savings, and passing the reforms would increase the likelihood they will be realised we reflect this in our high estimate of the range of efficiencies the reforms could deliver. The second, purple, portion of the bars shows the efficiencies that legislated certainty of investment plans and flexibility of funding is expected to make possible. The bottom, blue, portion of the bars shows the anticipated spending following the reforms. Below we explain the evidence for these estimates.

Anticipated ■ Efficiencies HA aim to deliver over period in baseline (certainty of achieving these increased with legislation) spending per year ■ Efficiencies deliverable with certainty of investment plans and flexibility of funding £7bn ■ HA spending with full reforms £6bn £5bn £4bn £3bn £2bn £1bn £0bn 15/16 16/17 17/18 18/19 19/20 20/21 21/22 22/23 23/24 24/25

Figure 6: Highways Agency anticipated spending and estimated efficiencies - central case

Company framework and status

Source: Highways Agency and DfT

- 5.3.7 After reviewing the evidence of the problems the Highways Agency currently faces, *Action for Roads* and the Cook Review suggested that the establishment of a new body a 'government-owned company' would allow for an institutional structure which would better drive efficiencies.
- 5.3.8 The HA currently operates under an executive agency framework with central controls over its governance. When creating a company there will be an opportunity to assess the optimal governance structure to allow a commercial culture change based on greater independence from ministers. This includes determining the ideal size and make-up of the board; the mechanisms for appointing the chair, CEO and board members and where Accounting Officer and reporting responsibilities lie. The right structure must be in place to have a balance of independence and strategic direction to enable reform to succeed.
- 5.3.9 Under the status quo, the HA has to refer decision-making at various levels to ministers, because executive agencies fall firmly within the remit and responsibility of ministers. Creating a company will provide legal separation of the operator from the Secretary of State. This is seen as a necessary first step in building the wider culture of independence recommended by Cook. Without that separation,

the Secretary of State would be legally required to assure himself of all decisions that the Agency makes on his behalf – which in practice means that all decision-making is dominated by the minister's personal responsibility.

- 5.3.10 Secondly, legal separation between the company and government enhances the chances of the Road Investment Strategy working effectively. As explained below, for the RIS to offer statutory protection for investment, its fundamentals must be laid out in legislation. This is clear, credible and logical if it is expressed as an agreement between two separate bodies, even if both are in the public sector. However if it is expressed as a unilateral statement by the Secretary of State (even if under a statutory duty), any arrangement will be far easier to revise.
- 5.3.11 The board of a legally separate company would be fully accountable for meeting the performance specification in the RIS, effectively meaning it could be held to a contractual agreement with the department. The Agency would then be incentivised and challenged to act more like an innovative, commercially-focused infrastructure provider, closer to its market and focused on the needs of the network. It would be more difficult for Whitehall to direct the company to make disruptive changes to agreed contractual outputs in the RIS without a major, transparent and protracted review of the RIS and the funding. This would be an important improvement over the status quo, where government directs the HA closely, meaning it has to act on a range of competing political pressures, which alter its approach to network management on an unpredictable basis and would make the benefits of a long-term approach difficult to realise.
- 5.3.12 A further benefit of the transparency of the RIS and the responsibility of meeting it residing firmly with the company's directors is that the company would operate with a clear focus on maintaining a good reputation with road users and with neighbours to the network, and it would operate with sharper financial behaviour as it sought to innovate to reduce or remove cost (pressure coming from a watchdog and the government as shareholder). The Chairman, Chief Executive and the Board would have clear personal accountability and in the case of the Chairman and CEO, a higher public profile than is the case now. They would therefore be subject to far greater public pressure to deliver a better operating network at genuinely lower unit cost.
- 5.3.13 If the independence from government is not seen as credible by the companies in the supply chain, there is a strong risk that little change will be perceived from the present arrangement. This would mean that the savings expected from greater commitment to operational matters and efficiency will not be realised to anything like the same extent, as these rely on efficiencies secured by suppliers planning activity over longer periods.

Transfer of statutory duties to the new government-owned company

- 5.3.14 A new degree of operational independence from ministers could be achieved by setting up the Agency as a highway authority under the Highways Act (and other relevant legislation) in order to transfer appropriate powers from the Secretary of State to the company, removing ministerial approval from some layers of the decision-making process. The company would have the rights necessary to fulfil the RIS (over and above the general duties and obligations that would be transferred to maintain and enhance the strategic road network). The body would be able to plan in a more stable environment, speed up day-to-day operations, and align its internal processes more closely to that of the supply market it operates in.
- 5.3.15 On the other hand, the Secretary of State will no longer be directly liable for the management of affected roads. This means he will be able to concentrate on developing successive performance indicators and shaping a strategic direction for the company, without needing to be concerned about the tactical management of the network. At the same time, it is recognised that ultimate political responsibility will remain with the Secretary of State for Transport, as is the case with all transport modes.
- 5.3.16 There will, however, be a need to place some control over how the company spends the public money by which it will be funded. In this structure, this would be delivered in several ways:

- by the Department for Transport setting a Roads Investment Strategy with a statement of funds available; consideration of the value for money of most major schemes would be made at this stage;
- by a new structure for accountability various options for this are discussed below and this would include the structure under which the reformed Highways Agency could make decisions about individual investments including where responsibility for the value of money of spending would now lie; and
- retaining some central government control where necessary to ensure public money is used appropriately (see below).

Relaxation of central government controls

- 5.3.17 In the context of being an agency of a government department, constraints are placed on an organisation's ability to compete with private-sector competitors (for example for staff) and to respond quickly to commercial challenges.
- 5.3.18 As civil service organisations, executive agencies face further constraints on their operational decisions, particularly in terms of human resourcing decisions. As members of the civil service, HA staff have the same conditions of service as central departments. This can mean that it is more difficult for management to achieve greater efficiencies in its staff costs, and management will have less flexibility in altering incentive structures to the needs of the business. Furthermore, civil service remuneration levels are more restricted than those operating in the commercial sector, making it more difficult to recruit middle and senior managers with appropriate experience and technical expertise. Companies classified to central government, like executive agencies, operate within limits on setting pay for their staff.
- 5.3.19 A number of Agency senior management and external stakeholders interviewed by the Cook Review team argued that central government constraints inhibit the ability of the Agency to operate as efficiently as possible, given that its primary focus is on interacting with the private sector. While it is difficult to quantify the impact of these, some key constraints were identified over:
 - ability to attract and retain commercial talent in the infrastructure sector. The remuneration of specialised staff – such as engineers, contract managers and asset managers – compares poorly with private-sector comparators, and there is relatively little use of performance-related pay, limiting the ability of the sponsor to incentivise managerial performance as a substitute for a shareholder profit motive;
 - flexibility in managing human resources, particularly in making responsive operational decisions in traffic management, which compares poorly to private sector comparators such as the RAC, based on internal benchmarking of procedure;
 - the ability to develop skills in the Agency, particularly in securing training for core competencies such as asset management;
 - ability to promote culture change, including a more commercial culture; and
 - perceived wastage of resources through bureaucratic controls, including duplication of governance arrangements.
- 5.3.20 Civil service organisations also have to respond to other central policy initiatives, which may in some instances constrain the flexibility of their commercial decision-making and their focus on delivering their core business. Highways Agency board members interviewed by the Cook Review team identified bureaucracy and delays around decisions on consultancy spending and IT projects as a constraint on their ability to make responsive commercial decisions. For example:
 - the Agency delivers its outcomes through the supply chain, and it is routine practice to outsource technical services such as design, specialist advice and construction activities. The Agency estimates that it currently suffers some five weeks of additional delay for a number of these decisions which have to be referred to the DfT for approval; and

- the Agency's procurement process for office-based IT services is central to the effective operation
 and therefore programme delivery. This element represents less than 1% of programme spend but
 the internal approval processes typically add between several weeks and several months to
 programmes as requirements are clarified.
- 5.3.21 Some of the controls mentioned above may apply to the company by default. Once established as outside of the civil service, the company will be able to recruit staff much more quickly as civil service recruitment principles will not apply and therefore it will be able to respond to its business needs far more rapidly than at present. However, most other central controls listed above apply to organisations classified as central government.
- 5.3.22 It is possible that the company could be given more freedom around certain controls where there is a clear case for it, despite being classified to central government. This would remove some of the costs described above and allow the company to compete for its staff in the same market place as its suppliers, as well as set its own structures for incentivising performance, which should lead to lower costs through more efficient management of projects and better contract negotiation and management. Also, it would remove unnecessary delays due to official and ministerial layers in decision-making processes, focusing the accountability for speed and performance on managers to the board and on the board to the shareholder (the Secretary of State). Further work will be undertaken to establish the most ideal control arrangements.
- 5.3.23 It is envisaged that the company will establish its own HR function and arrangements that are independent of the civil service. This should provide for greater responsiveness and the flexibility to shape a culture and behaviours that incentivise performance and are consistent with those found in a commercial environment, subject to any central government restrictions that are maintained. This means that the company could be set up with the freedom to set its own talent management strategy for the recruitment, retention, reward and release of its staff and could introduce changes to the contractual employment terms and conditions of transferred staff through the normal course of its business, subject to consulting employees and their representatives in line with employment and trades union legislation. In addition, the company would be free to hire new staff on a different employment contract.

End-year flexibility

- 5.3.24 As stated in the description of options, the new company will have the ability to move 10% of its capital budget between years. This is necessary to deliver the RIS as it means the company will be able to plan when schemes are undertaken across the RIS cycle to ensure greatest efficiency, consistent with outcomes required of it. This also gives the HA the flexibility to avoid the 'spend it or lose it' mentality that is often associated with annual budgets. This allows the focus to be on the most efficient and timely delivery, rather than it having to fit in to the financial calendar.
- 5.3.25 Currently the HA suffers from its financial year ending just after the winter months, as outlined above, combined with unexpected changes to funding. The combined impact of these two factors means that planning cannot be undertaken over the appropriate timescale and maintenance work, especially pavement works, requires good planning. It should take account of seasonal traffic capacity demands, access requirements, other adjacent works, and special events. Weather strongly influences the work programme since pavement materials are susceptible to extreme temperatures, snow and rain. For example, re-surfacing works can only be effectively undertaken when the temperature is above 5 degrees as the material does not bind correctly at lower temperatures. In addition, contractors are ideally required to work at night time to minimise disruption, meaning they are more often laying asphalt materials and concrete in very cold conditions. This could potentially result in the rapid cooling of asphalt and areas of asphalt paving with reduced durability. The subsequent repairs of the defective areas would incur additional costs to the Highways Agency and generate more traffic disruption. The future maintenance requirements, although not quantified at this stage, could be a significant cost of winter works over the long term.
- 5.3.26 The slower speed of progress during winter months for the weather-related reasons above incurs higher costs, for example due to plant being left idle for periods awaiting warmer temperatures or traffic management required for longer periods. A degree of flexibility in the way the Highways

- Agency manages its budget would enable them to plan the works programme and achieve the best possible workmanship, thus minimising traffic disruption and costs to the public in the long run.
- 5.3.27 More importantly, longer-term planning has been identified as an effective way to deal with inefficiency caused by winter works. The HA estimates that profiling works efficiently can achieve 20% quicker delivery and that this leads to a 20% reduction in average proportion of scheme costs accounted for by time based costs. Better planning would allow more summer working avoiding the shorter working days and the poor weather of winter.
- 5.3.28 Table 3 shows the average proportion of scheme costs accounted for by time-based costs (such as preliminary work and traffic management) and non-time-based costs. It is assumed that time-based costs are directly proportional to duration of the works to derive the conclusion that 20% quicker delivery of those works currently undertaken in winter would translate to 20% reduction of time based costs which would deliver 5% reduction in the costs of a scheme undertaken in winter. 37% of works are currently undertaken in winter; if all these were re-profiled then overall savings of 1.9% could be made on the maintenance budget due to end-year flexibility.

Table 3: Forecast savings (20% quicker delivery of winter works)

Potential savings			
%	Current costs as % of total (average scheme)	% savings for 20% quicker delivery	% savings for 20% quicker delivery at 37% works during winter (Nov to Feb)
Time-based costs			
Preliminary work	10.7	2.1	0.8
Traffic management	14.5	2.9	1.1
Non-time-based costs			
Works	46.5	N/A	N/A
Preparation, supervision and design	28.3	N/A	N/A
Total	100.0	5.0	1.9

5.3.29 The exact saving will depend upon how much work currently undertaken during winter months can be moved to other periods of the year and the extent to which this allows works to be completed quicker. The following table shows some scenarios with estimated total annual savings based on total annual expenditure of £600m.

Table 4: Scenarios for saving on winter works

	10% quicker (%)	10% quicker (£m)	20% quicker (%)	20% quicker (£m)	30% quicker (%)	30% quicker (£m)
25% winter work						
moved	0.24	1.4	0.48	2.8	0.7	4.2
50% winter work						
moved	0.48	2.8	0.95	5.7	1.4	8.4
100% winter work						
moved	0.95	5.7	1.9	11.4	2.8	16.8

- 5.3.30 The realism of these estimates is supported by the detail of the Agency's current maintenance contracts. Specifically, the Asset Support Contracts (ASCs) include rate adjustments for summer and winter work rates with summer rates being 0.5-1% less (based on the two ASCs let to date for Area 2 and 10). The rates are used to set target costs meaning that lower overall target costs will be set ensuring the above savings are realised by the HA in cash terms.
- 5.3.31 Ensuring the Highways Agency has end-year flexibility would also avoid the risk of schemes being selected based on their deliverability rather than maximising the value for money of schemes taken forward to construction. This should improve the allocative efficiency of scheme selection and lead to greater scheme benefits. We have not been able to quantify this however as without

operating the new method it is not possible to say how much decisions on schemes would actually be altered.

- 5.3.32 End-year flexibility will allow for major projects to be delivered in the most timely and cost effective way, rather than having to fit to an investment profile often decided many years in advance of the actual project delivery. Currently, once a project is approved the total level of funding required will often be fairly certain (within a range) but the timing of this spend over a number of years will be uncertain at the time that funding is allocated. There are many factors that will impact the timing of delivery, for example public consultations or the procurement process. Whilst managing to a specific annual funding level is easier across a programme of activity, having some flexibility between years will ensure delivery is not constrained through an arbitrary annual funding constraint.
- 5.3.33 Historically, there has needed to be short-term slowing down or speeding up of investment to fit with annual funding profiles. This is also difficult for the supply chain to manage, resulting in an inability to confidently plan for capital investment and for long-term workforce planning. Ad hoc solutions to the problem have been explored. For example, the Highways Agency, through the Department for Transport, negotiated a budget exchange with the Treasury for 2012/13 (to carry forward funding from one year to the next) to reflect the reality of fluctuating spending profiles as projects moved through the development cycle. Whilst this avoided the need to slow down delivery of road schemes, this still resulted in uncertainty until relatively late in the year. Flexibility over a RIS cycle should bring clearer benefits.

Investment planning certainty

- 5.3.34 For the HA to deliver efficiencies it needs to be certain that the funding will continue for the longterm (and avoid the annual cycle of government budgeting it currently becomes involved in). Therefore legislation will place an obligation on government to provide a statement on both the investment plan and the public finances which will be committed for the period. The aim is to provide a level of certainty over investment which currently exists in other infrastructure sectors – including rail and water – locking in the benefits.
- 5.3.35 Over 95% of the Highways Agency's spend is delivered under contract by the private sector and the uncertainty over funding levels causes delay and inefficiency.
- 5.3.36 Currently maintenance and renewal projects are effectively procured on a project-by-project basis based on a set of tendered rates (ASC) or derived prices (Managing Agent Contractor, MAC) and an incentive mechanism to deliver at a lower cost. This approach is reasonably standard and to a certain extent driven by the funding constraints. However, it does not encourage a programme approach to be taken. Such a programme approach could, for example, be through planning a sequential programme of road renewal schemes where plant and labour move from one project to another with limited mobilisation and de-mobilisation costs.
- 5.3.37 An example of how this can be delivered is through reducing the cost of demobilisation / mobilisation. Evidence from CECA³⁰ shows the potential impact of this:

"The Agency bears the costs of firing and re-hiring directly (contractually), or indirectly, through the high prices set by suppliers to protect against the risk of uncertain business. Based on Office of National Statistics data³¹ for output in the roads sector, CECA estimates that around 10,000 employees have been lost from the industry as a result of the decline in output between the peak in activity in 2010 and 2012. Based on Chartered Institute of Personnel and Development research³² looking at the typical costs of redundancy, it could be estimated that the cost of laying off this number of employees would be more than £100 million. Renewed hiring of the same number of workers to respond to new demand would cost a further £50 million, based on existing research on the costs of employment. 183

 $^{^{30}}$ CECA briefing: The road ahead – benefits of highways investment certainty to the supply chain, June 2013

³¹ Output in the Construction Industry, March 2013 http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-283308

³² Labour cost savings from alternatives to redundancy – Chartered Institute of Personnel and Development www.cipd.co.uk/NR/rdonlyres/A3435C16-6837-4DC9-85B1-0646F72310F3/0/impact 27 2of3.pdf

U.K. Talent Acquisition Factbook® 2011 – Bersin http://marketing.bersin.com/rs/bersin/images/120911 ES TAFB-UK2011 KOL Final.pdf

- 5.3.38 Contracting a sequential programme of road renewal schemes would enable labour to move from one project to another with limited mobilisation and de-mobilisation costs. Certainty and continuity would give suppliers the benefit of managing their resources (including human resources) better, reduce their costs and offer lower rates.
- 5.3.39 Similar situations have been seen in utility companies where investment plans are subject to regulator approval on a five-yearly cycle. A recent HMT study, 'Smoothing investment cycles in the water sector' (July 2012), highlighted the issue and estimated that between 3% and 5% productivity was being lost from the effects of hiring and firing workers in the industry caused as a result of cyclical investment. The issue is worsened in the case of roads by a funding cycle which is shorter and particularly far less certain even than that in the regulated utilities.
- 5.3.40 The Highways Agency, based on anecdotal evidence as described above, and a cautious comparison with the water industry, estimates that it loses at least 1.5 3% in productivity from the effects of hiring and firing workers caused as a result of cyclical investment. It is difficult to quantify the exact efficiency loss due to a lack of data regarding the costs incurred by hiring and difficulty to isolate these costs from other effects of the cyclical investment. This data needs to be collected from suppliers and a detailed study would be required to show with more confidence by how much productivity could be enhanced.
- 5.3.41 The bulk of the HA's non-capital maintenance (routine) activities are delivered through 5-year contracts with fixed costs covering routine maintenance activities (emergency repairs, grass cutting, winter maintenance etc). The commitments under these contracts extend beyond the budgets allocated to the HA and therefore are prioritised in each budget. Longer term funding will allow even longer contract terms to be considered which extend beyond 5 years. Benefits would come from:
 - reduced mobilisation / demobilisation costs; and
 - reduced tender costs.
- 5.3.42 Ten-year contracts are likely to halve the mobilisation/demobilisation and tender costs. For an asset management organisation, 5-year contracts are not long enough to ensure efficient asset management. The efficiencies would come from overhead savings e.g. longer office leases, PPM and financial systems and greater incentives for suppliers to invest and contribute towards long-term saving initiatives. In the Cook Review, it was estimated that the HA could generate 5% savings on lump sum current maintenance costs (which represent c.£10m p.a.).
- 5.3.43 Table 5 shows a summary of the managing agent costs which comprise the lump sum fee and the potential for achieving savings in this area based on the above assumptions. A high relative proportion of costs relate to overhead type activities which could be reduced with longer term supply contracts or these overheads being provided as a central service across all contracts (e.g. for financial systems).

Table 5: Managing agents cost ratios

%	Average lump sum
Overheads	37%
Routine maintenance	39%
Winter service	8%
Incident support	16%
Total	100%

- 5.3.44 The HA believe that 37% overhead costs is higher than the average for such an asset management organisation and a 13% efficiency saving in overhead activities as listed above, achievable through longer term certainty, would yield an overall 5% saving in maintenance costs through reduced overheads.
- 5.3.45 Balfour Beatty identified that letting contracts that traverse the lifecycle unlock efficiency benefits through superior and shared asset knowledge and ensure best practise becomes standard across the industry by fostering partnership with and between suppliers. The M25 contract is an example of

this where actions such as increasing steel widths used for sheet piling reduced future maintenance costs.

- 5.3.46 Overall, internal analysis by the Agency suggests that greater funding certainty alone would enable savings of around 15% in renewals work (aggregated saving across various renewals elements), consistent with case study evidence from Infrastructure UK on 10–20% savings in other industries. This is likely to be through a number of methods principally involving combining smaller projects in to larger projects. This would reduce construction scheme overheads such as site set up costs and traffic management. To effectively combine schemes in this manner will require a longer-term commitment, as suppliers will be required to increase their delivery capacity to meet the required output level. Again, the supply chain has been used to at least a run of 4-year indicative budgets but which have then been varied at relatively short notice. There would be a learning period, so for our efficiency estimates we assume that the renewals budget would be 15% lower from 2020/21, and between 2015/16 and then savings on the renewals budget would increase by 2.5 percentage points each year.
- 5.3.47 There is also likely to be scope for further annual efficiencies in the major scheme programme, because the Agency would have a better foundation to approach the supply chain with than the 'stop/start' historical funding situation that had existed in the past spending reviews and subsequent Autumn Statements. Even more cost savings could be achieved due to better mobilisation of plant, machinery and workforce and economies of scale as a result of a guaranteed volume and duration of work. This is also dependent on consistency and how the programme is delivered i.e. longer-term higher volume programme vs. more short-term lower level investment. The Highways Agency estimates that certainty of investment plans and flexibility of funding could deliver savings of around 15% on new major schemes. This has not been applied to those schemes in the appraisal period which are already underway as it is unlikely the reforms will come in time to deliver further savings so the overall saving is slightly less than this 15%. The Highways Agency and the supply chain view it as critical that the funding level over the longer term is underpinned by legislation to give the supply chain the necessary level of confidence to change behaviour.
- 5.3.48 In order for the corporatised body to achieve efficiencies from exercising its operational and financial independence it needs a strategic direction from government and stability of funding over more than an annual cycle. The RIS would set out some of the schemes and the funding levels for different outcomes to be delivered over a five-year period with a much greater degree of certainty than under the status quo, as well as offering a clear plan for pipeline projects or schemes in the following years. This strategic approach could lead to savings by allowing the company to plan for a longer term than the HA can at present. By entering into longer contracts with suppliers it could get a better deal for taxpayers as less risk would be priced in and suppliers would be able to procure materials at lower costs over longer time periods. The forward programme of work would also give suppliers the confidence of a future active market for their services.
- 5.3.49 Funding certainty applies to capital and resource maintenance lines, which is where efficiencies are expected to be made. Currently funding certainty from HM Treasury is not guaranteed for the company's administrative resource budgets. However, as the Government will be committing a large long-term budget and announcing a series of schemes and outcomes, other mechanisms will be examined to ensure the company has the necessary security of operational resource to deliver.
- 5.3.50 Finally, the Highways Agency estimates that the certainty of investment plans and programme budget would generate 15% savings on the annual resource budget (except the element which is already contracted in PFI schemes) by 2020/21, increasing by 2.5 percentage points each year until then. This estimate is based on experience in other sectors and the competitive pressure that would be driven through the certainty of workload across the full portfolio. Table 5 illustrates that the area where most improvement would be driven from is the allocation of overheads.
- 5.3.51 Overall the above assumptions produce the following estimate of required funding for a reformed Highways Agency. Table 6, when compared to the base case in table 1, produces the efficiencies shown in table 7, below.

Table 6: Anticipated funding levels assuming certainty / flexibility through legislation efficiencies

£m (Figures in nominal prices, non discounted)	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25
	Capital									
HA Maintenance - Renewals	429	429	428	426	425	423	430	437	444	452
HA Maintenance - Resurfacing	289	297	304	312	319	327	-	-	-	-
Total HA Maintenance	718	726	732	738	744	750	430	437	444	452
HA Majors & other non maintenance programmes	1,064	1,101	1,510	1,789	2,230	3,014	3,168	3,187	3,195	3,249
Total HA Capital Investment	1,782	1,827	2,241	2,527	2,974	3,764	3,598	3,624	3,639	3,701
			Resource	Э						
HA Roads PFI Service Payments	426	458	479	467	474	567	515	545	550	643
HA Other non PFI Service Payments programmes	525	520	515	515	504	498	506	515	524	533
Total HA Programme Resource	951	978	994	982	978	1,065	1,021	1,060	1,074	1,175

10 Yr Total
Capital
4,322
1,848
6,170
23,508
29,678
Resource
5,124
5,155
10,279

Table 7: Estimated cost efficiencies from reformed Highways Agency

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£m (Figures in nominal prices, non discounted)	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25
Capital										
HA Maintenance - Renewals	11	23	35	47	61	75	76	77	78	80
HA Maintenance - Resurfacing	-	-	-	-	-	-	-	-	-	-
Total HA Maintenance	11	23	35	47	61	75	76	77	78	80
HA Majors & other non maintenance programmes	7	19	100	172	278	436	539	548	558	567
Total HA Capital Investment	18	42	134	219	339	510	615	626	636	647
			Resource)						
HA Roads PFI Service Payments	-	-	-	-	-	-	-	-	-	-
HA Other non PFI Service Payments programmes	13	27	42	51	72	88	89	91	92	94
Total HA Programme Resource	13	27	42	51	72	88	89	91	92	94
Carriage I Halarrana American and DfT calcula	Lana Tak	1- 7		-I:tt		ممط مطاح م	alina fia	امد ما مما	-l- 1l	414

	10 Yr Total						
	Capital						
	562	13%					
	-						
	562	9%					
	3,224	14%					
	3,786	13%					
	Reso	urce					
	-						
	660	13%					
	660	6%					
:22	-!						

Source; Highways Agency and DfT calculations. Table 7 presents the difference between the baseline figures in table 1 and the post-efficiency figures in table 6.

- 5.3.52 We have adjusted these figures in line with the appraisal parameters to present figures in 2013/14 prices and present value for the summary sheets.
- 5.3.53 The above calculations represent our central case based on what we think is most likely to occur. However, there is considerable uncertainty around the scale of savings that are possible; two key factors are:
 - An uncertain level of future funding beyond 2020/21.
 - The potential that the Highways Agency won't be able to operate within the baseline funding level without reform.
- 5.3.54 Funding beyond 2020/21 is uncertain; our central case reflects the Government's plan but further spending reviews and a future Roads Investment Strategy could change this. To reflect the fact that this is a key variable in the scale of benefits that we can expect we have produced a "low" scenario where major schemes beyond 2020/21 may return to their recent average before 2010 of around £1bn per annum. This would reduce the level of expected efficiencies due to a smaller capital programme. We reflect this scenario in our low estimate of the benefits on the summary sheets.
- 5.3.55 There is a potential that the reforms will help to increase the impact of savings measures the Highways Agency already intend to undertake. In particular the Agency set itself the challenge to deliver efficiencies of 20% on major schemes announced at Spending Review 2010 and associated pipeline schemes, and 15% for new major schemes even in the absence of funding certainty and flexibility. These targets are being met, however the reforms to the corporate structure of the Agency giving a clearer relationship with the DfT could increase the ability for performance in this area. Hence in our high scenario we include these savings as attributable to the reforms. This is illustrated in figure 6, where the topmost portion of the bars are included in our high scenario only.

Improving external pressure on efficiency

5.3.56 Corporatising the HA as described above should apply commercial governance structures, reduce political influence and distraction, and provide the operator with increased independence over its internal processes. The HA should then be able to deliver better value for money for taxpayers by addressing sources of inefficiency, for example by improving its ability to manage and benchmark

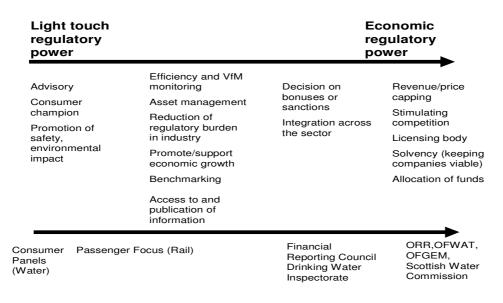
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³⁴ Internal HA outturn data.

costs and negotiate contracts with suppliers. However, as a monopoly provider receiving its income from government, the HA will not receive competitive pressure over prices or market share to reduce costs and improve both productive efficiency (the efficiency with which projects are delivered) and allocative efficiency (the choice of the best projects to provide given outcomes). Historically, in other sectors, an economic regulator compensates for this lack of full market competition and this raises the question of what role there is for a regulator in the roads sector.

- 5.3.57 As described in the options, the creation of an efficiency monitor, improving efficiency through benchmarking to imitate market pressure, could lead to benefits associated with this option.
- 5.3.58 Economic regulation (in sectors such as gas, electric and water) is used to drive efficiency across a few monopolist organisations while at the same time delivering the best price for consumers. For roads, in the absence of a direct charge to users, there is less scope for a regulator to control costs and therefore no need for a roads regulator to have the same full economic function as in other sectors. But there are potential choices around what level of accountability is wanted, the characteristics of the efficiency monitor, and whether there are further benefits in establishing it in legislation. Figure 7 describes the sort of regulatory activities on the spectrum from "light touch" to full economic regulatory power.

Figure 7: Examples of existing regulators and spectrum of functions



Source: DfT

5.3.59 There is strong evidence for the impact of economic regulation in other infrastructure sectors, with the regulator acting in the interests of consumers by applying pressure for year-on-year efficiency improvements, typically using an 'RPI – X' target for financial performance where 'X' represents the regulator's estimate of the real efficiency gains achievable by the service provider. An empirical survey by NERA (2006) argues that "distance from government...enabling effective formal economic regulation" is one of two key drivers for cost efficiency across different corporate forms for infrastructure businesses, alongside the involvement of private investors. While there is some dispute over measurement issues and appropriate comparator industries, a 2008 review of evidence from other regulated industries (prepared for the Office of Rail Regulation by Oxera) suggested a range of reductions in real operating expenditure of 4.0–6.2% per year, on average resulting from an effective regulator.

⁶⁹ Corporate Forms, Financial Guarantees, and Efficiency performance: Expectations and Evidence, NERA, December 2006.

Network Rail's scope for efficiency gains in CP4, Oxera, November 2008. This is only one of a number of reports that provide similar ranges for regulated industries: for example Corporate Forms, Financial Guarantees, and Efficiency performance: Expectations and Evidence, NERA, December 2006, estimates average efficiencies in the regulated, privatised and debt-financed utilities at c. 5% per annum. There is considerable debate about the degree of comparability between industries and price control periods. See, for example, Assessing Network Rail's Scope for Efficiency Gains, LECG, April 2008.

Ownership	Company/timescale	Opex efficiencies (average % p.a.)
Private	England and Wales water industry average (1992/93–2006/07)	1.8
	England and Wales sewerage industry average (1992/93–2006/07)	1.7
	Electricity distribution industry (1990/01–2006/07)	4.0
	BAA (1987–1998)	4.4
	NGC (1990/91–2006/07)	4.9
	BT (using call minutes, 1997/97–2006/07)	6.2
	BT (using exchange lines, 1997/97–2006/07)	4.8
Not for dividend	Welsh Water (2001–2006)	Slower than E&W average
	Network Rail (2003/04-2008/09)	6.4
Partially privatised	NATS (2002–06)	5.1
•	NATS (2006–09)	2.5
Government owned	Royal Mail (2002/03–2005/06)	2.9
	Melbourne Water (1995/96–2000/01)	2.6
Statutory corporation	Scottish Water (2002/03–2005/06)	8.8
•	Sydney Water (1996/6–2000/01)	No positive evidence ³⁷

Sources: Network Rail's scope for efficiency gains in CP4, Oxera, November 2008; Office of Rail Regulation: Regulating Network Rail's Efficiency, National Audit Office, April 2011; NERA (2006); Utilities Regulator Northern Ireland; Ofwat.

- 5.3.60 It can be difficult to unpick the effect of economic regulation from the impact of changing ownership - the introduction of regulation has often coincided with privatisation, and all these comparator industries have had freedom to borrow. However as Table 8 indicates, there are several examples of comparable efficiencies being generated in government-owned companies subject to economic regulation, such as Scottish Water and the Royal Mail.
- 5.3.61 Without price regulation it is not clear that an economic regulatory function could deliver similar performance. The analysis from regulated sectors does show that the ability of the customer or regulator to provide strong pressures for cost efficiency and performance depends on their ability to benchmark performance; we know this is a key area in which a regulator or watchdog could add value because a 2009 report by the National Audit Office (NAO) showed that the Agency was not exploiting the potential for regional benchmarking of maintenance contracts, to help drive down costs.³⁸ Since this report, the Agency has substantially improved its capability for regional benchmarking.
- 5.3.62 Hence benchmarking is of key importance for driving efficiencies in the HA; and the NAO has noted that the need to have good benchmark information increases in markets with fewer competitive pressures for efficiency. 39 The Cook Review identified several sources of benchmarking information that should in principle be available to a form of monitor including:

 $^{^{}m 37}$ Based on analysis in NERA (2006).

³⁸ Highways Agency: Contracting for Highways Maintenance, National Audit Office, October 2009

³⁹ Office of Rail Regulation: Regulating Network Rail's Efficiency, National Audit Office, April 2011

- 'bottom-up' information from the Agency on the costs of its supply chain, both from the 'cost intelligence' system of recording contractors' costs used for major projects, and regional benchmarking data collected by the Agency for maintenance contractors;
- other UK road providers, including local authority data and information from the devolved administrations:
- other infrastructure sectors, for example data collected by Network Rail and the Office of Rail Regulation (ORR) on the rail sector; and
- international comparators. The available evidence suggests that the gross costs of running the SRN are higher than in many comparable countries, such as the Netherlands, but there are considerable difficulties in constructing robust comparisons between countries with different physical, cultural and policy environments.⁴⁰
- 5.3.63 However, there needs to be an institutional setup that can incentivise use of this information to continuously drive improvements. The company's board would have a role in this but it would be difficult to structure it to effectively combine a business scrutiny and customer championing role. An efficiency monitor could address this through holding the operator to account by monitoring its performance against the RIS, in particular the efficiency targets set for it. It could also collect information, which the company would be obliged to provide in the licence or framework agreement, to benchmark costs between different SRN regions and comparable local authorities. It would use this information to act as a source of expert advice for government and publish reports to increase public scrutiny and encourage further efficiencies.

Better service for road users

- 5.3.64 Under a corporatised model for managing the network, responsibility to road users would fall firmly with the company. The Chairman, Chief Executive and the Board would all have clear personal accountability and, in the case of the Chairman and CEO, a higher public profile than is the case now. They would therefore be subject to far greater public pressure to deliver a better operating network.
- 5.3.65 Added to this, a watchdog function will be created to act in the interests of road users by advising on standards and other issues which it assesses as being of importance to road users. By introducing such a system in place of the status quo where currently the DfT acts on behalf of both taxpayers and road users via the same channels a clearer and more transparent link would be created between the roads provider and users. The watchdog would undertake research in order to understand what issues are important to road users, ranging from the sort of satisfaction surveys regularly undertaken by Passenger Focus to more in-depth reports. It would use this knowledge to provide independent guidance to the company and also to influence the outcomes and outputs specified in the RIS. On top of ensuring road users' interests are prioritised appropriately in the strategy for the network, the watchdog would provide a public focus on the company over how effectively it is meeting them.

Economic growth

5.3.66 The reforms proposed may have beneficial impacts on economic growth directly through two channels:

- Capital spending is likely to be associated with high fiscal multipliers (though these will vary depending on the likelihood of crowding out).
- A stable investment environment will allow domestic firms and institutions to grow.

This section reviews the evidence in this area.

 $^{^{}m 40}$ Infrastructure Cost Review, Infrastructure UK, December 2010; EC Harris and TRL (2009).

- 5.3.67 **Fiscal multipliers:** Government spending has knock-on impacts to economic activity and can affect national income through these impacts. The ratio of the change in national income to the change in government spending that causes it is called the fiscal multiplier. Hence a multiplier of 0.5 would mean that a £10bn increase in Government spending would result in a £5bn increase in GDP. Recently the IMF have said⁴¹ that multipliers in developed countries since 2008 may have been in the range 0.9 to 1.7 (before 2008 a value of 0.5 was used). Multipliers associated with capital spending may be higher than other types of spending given that the length of the supply chain and associated services required for building infrastructure. A recent report by CEBR finds a Gross Value Added construction sector multiplier of 2.8⁴², based on Input-Output estimates. These multipliers do illustrate the potential value of capital investment but must be used with caution for several reasons:
 - Multipliers will be higher when interest rates do not have room to fall and domestic currency can depreciate allowing a boost to exports⁴³: currently we find high multipliers because of low interest rates and a weakened currency but this may not be true when the spending is made
 - They do not take account of the potential for crowding out of other activity, which could have similarly high multipliers. Currently it is likely the economy has under-used resources and hence the multipliers are expected to be high and the likelihood of crowding out lower. However, much of the infrastructure investment planned may happen in times when this is not true.
 - The potential for consumer behaviour in line with the Ricardian Equivalence hypothesis may lead to decreased consumption elsewhere in the economy
- 5.3.68 This impact assessment looks at institutional reform, as opposed to appraising the value of increased investment. Hence we do not attempt to estimate the increased GDP or jobs associated with the investment activity, but note that there is a potential positive impact on GDP that is not captured in typical appraisal.
- 5.3.69 The reform proposals detailed above are, however, likely to have a positive impact on the domestic supply chain by creating a more stable investment and planning environment. A recent briefing note by CECA44 details the potential reasons that the proposals could have a positive impact on the UK supply chain, in particular including:
 - Greater workforce security: "Where suppliers are appointed on long-term contracts with stability of workload, this allows stability of the workforce, maintaining staffing levels rather than laying off and taking on workers to meet uncertain demand". There are transactional costs in hiring workers and making redundancies, but also apprenticeships are likely to be created in response to stable demand. CECA estimate that between 5-6% of employees in the construction sector are apprentices, and that each £1bn of steady work would be likely to create between 330-400 apprenticeships.
 - Increased research and development: Research from both innovation charity NESTA⁴⁵, and the Department for Business, Innovation and Skills Community Innovation Survey 46 indicate significantly lower levels of innovation in construction than in other major economic sectors. In particular the Community Innovation Survey indicates that uncertainty about demand for products is a key barrier to greater innovation by construction contractors. The stop-start funding arrangements detailed earlier in this document show how the roads sector in England exhibits lack of certainty. The CECA briefing note explains that "As the benefits of innovation will rely upon the nature of the innovation in question, it has not been possible to quantify the possible benefit that might arise should suppliers be offered greater scope to innovate. However a recent report from

⁴¹ IMF Global Prospects and Policies report 2012 (Box 1.1)

⁴² Securing Our Economy: The Case for Infrastructure (May 2013) – CEBR and CECA (http://www.cebr.com/reports/impact-of-infrastructure/)

⁴³October 2010 World Economic Outlook (http://www.imf.org/external/pubs/ft/weo/2010/02/pdf/c3.pdf)

⁴⁴ CECA briefing: The road ahead – benefits of highways investment certainty to the supply chain, June 2013

⁴⁵ Nesta, (2012) UK Innovation Index: Productivity and Growth in UK Industries

http://www.nesta.org.uk/publications/working_papers/assets/features/uk_innovation_index_productivity_and_growth_in_uk_industries_

Community Innovation http://webarchive.nationalarchives.gov.uk/+/http://www.bis.gov.uk/policies/science/science-innovation-analysis/cis

- Audit Scotland suggested that innovation would contribute to savings of around 10 per cent in the annual costs of local highways maintenance in Scotland.⁴⁷"
- Enabling small and medium-sized enterprises to compete: The CECA briefing note points out that "The Cabinet Office has identified⁴⁸ that one on the principal barriers that prevent small and medium-sized companies (SMEs) from competition for public sector opportunities in a lack of visibility of forthcoming opportunities. A commitment to longer-term certainty of investment would allow the preparation of clear pipelines of opportunities, helping all businesses including SMEs to plan ahead for likely procurement opportunities."
- 5.3.70 Hence we anticipate positive impacts on the UK supply chain which will be in addition to the cost savings identified above. We cannot quantify how large these impacts would be at this stage. We are keen to gather further evidence from the supply chain on this issue and would welcome answers to the following question:

Do you agree that the proposals (as described in the consultation document) will enable a strategic highways company and the UK highways supply chain to plan ahead and deliver more efficiently?⁵⁰

5.3.71 In addition to supporting growth through the direct channels mentioned above, the reforms could enable a more economic prioritisation of the roads programme. Either the road user watchdog or the company itself could be an independent advocate of growth, calling for schemes and investment where it will benefit the economy most, so long as sufficient checks and balances remained to ensure equal consideration of repercussions for the environment and other externalities.

Costs

Potential costs of roads operator's independence

Decentralised decision-making

5.3.72 Corporatising the HA will provide it with a greater commercial focus, but it introduces a risk that it might take decisions that have negative consequences for the public. We would not expect a company at arm's-length to make identical decisions to a minister, who is expected to take into account a wider range of impacts and views and is then held democratically accountable for them. We will be considering carefully how to ensure there are effective controls on the company's behaviour through the RIS, the efficiency monitor and road user watchdog, and other parts of the contractual framework.

Reduced flexibility for government

5.3.73 There would be impacts on the Government from creating a RIS, with a statement of funds available, and underpinning it with legislation. These are primarily around how outcomes, some schemes and the minimum funding would be 'locked in', therefore reducing flexibility for ministers if they wanted to make changes to the HA's activities and budgets within the RIS cycle. The lack of flexibility in the RIS means that if the government decided a scheme not initially included in the RIS came to be considered of national importance, or one included ceased to be perceived as important, it would be more difficult than previously to make revisions either way. This means flexibility to respond to a range scenarios could be reduced, for example when:

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⁴⁷ Maintaining Scotland's roads: An Audit Update on Councils' Progress <u>www.audit-scotland.gov.uk/docs/local/2013/nr</u> 130517 roads maintenance.rtf

⁴⁸ Government Opens Up Contracts to Small Business https://www.gov.uk/government/news/government-opens-up-contracts-to-small-business

The Road Ahead – Benefits of Highways Investment Certainty to the Supply Chain, June 2013, CECA

 $^{^{50}}$ This question can be found in the consultation document.

- a different level of traffic growth is forecast due to changes in the key drivers of demand (economic growth, cost of fuel and population changes);
- a new government comes to power with a different vision or mandate for the SRN; or
- local business needs change.
- 5.3.74 Some flexibility for change to the RIS would be needed to cater for some unexpected major event, for example serious flooding, significant failure of delivery or climate change. However any revisions would be made in an open and transparent way, and, importantly, a way that did not jeopardise the certainty of funding and the contractual agreements with suppliers that are reliant on it. There are no examples from other sectors where long-term frameworks are set – such as rail – which would allow us to monetise the potential impact of government changing what is in the RIS: however this is a significant potential cost.
- 5.3.75 Certainty of funding for the RIS will also have potential costs. If HM Treasury is committed to providing funding over 5 years, this implies that even if there are pressures to reduce the overall government budget or change spending priorities, then the SRN budget will be protected, meaning savings may have to be found elsewhere. Similarly, as the funding will come from the DfT's budget, it will reduce flexibility for the department meaning that other areas of capital and resource spending could come under pressure as needs dictated. Therefore whilst certainty of funding will improve efficiency in road spending, it could lead to a less efficient allocation of funds at the crossgovernment or departmental levels.

Time dedicated to transition

- 5.3.76 There will be a cost to DfT and the HA from implementing corporatisation of the HA into a government-owned company. Working arrangements are not fixed, but it is expected that within government a team of approximately 20 officials and one HA director will work full-time on legislation, designing the RIS and setting up the new company. Over 18 months, assuming annual salaries of £50,000 per person, except the director (average annual remuneration of the HA's executive directors including bonuses is £123,000⁵¹) and annual desk and equipment costs of £10,000 per person, this results in a cost of £1,999,500.
- 5.3.77 To ensure delivery is completed to a challenging timescale, across a range of workstreams in the HA and DfT, external programme capability has been contracted on an expected 18-month basis. The arrangement will have flexibility based on needs as progress continues, but the expected cost for this, including VAT, is £650,000. It is expected that legal and commercial contracts will be tendered to secure advice on creating a new company. These will cost up to £0.4m.

The overall cost of time dedicated to transition is therefore estimated at £3m.

New operating costs

Corporate staff

- 5.3.78 As the HA is replaced with an arm's-length body, it will have to perform its own corporate functions. We have identified three key areas where this might mean recruiting new staff, at a cost to the company:
 - Human resources will be required as the company will not be able to use DfT's Group HR.
 - Legal for the HA is currently provided by DfT. The legal support required by the company is likely to change.

⁵¹ HA, *Annual Report 2012-2013*, pp. 65-7.

Financial management is another area where the requirements are different for a company to an
executive agency, as the former has to file reports to Companies House. This will require a
different expertise in accounting and financial management.

Assuming the company hires two new persons in each of these roles, at salaries averaging £50,000 and cost of desk space and equipment estimated at £10,000 per year, this will add a £360,000 per annum cost to the company.

Efficiency monitor and road user watchdog

- 5.3.79 Most regulators are funded through the industries that they regulate, but our expectation is that the watchdog and efficiency monitor will be funded by central government rather than a levy on the company, to reinforce its independence. The cost of running a regulator is variable, and depends heavily on the scale on which the regulator operates. The most common point of comparison is ORR, which costs £28.9m a year to run. OFGEM costs substantially more £72m in 2011-12, of which £36m were staff costs (OFGEM plays an active role in delivering energy efficiency schemes); while OFWAT costs significantly less £18.7m (£12m staff).
- 5.3.80 The watchdog and the efficiency monitor proposed in this instance would be significantly cheaper for example like the Drinking Water Inspectorate which costs £2.5m a year and Passenger Focus (including an extensive survey of passengers) which is roughly £5m a year. Watchdog costs are generally around two-third staff and one-third other costs, so the overall expense is directly related to the ambition of the watchdog's remit. The option of sharing the function with an existing watchdog would be significantly less (estimated in the order of £1m to £3m). Whether the functions lie in central government, an existing watchdog or new body, we expect operating costs to be similar as the same level of resource will be required to perform the task properly. Of course existing bodies will involve smaller new overheads and start-up costs would be lower, while there will be on going expertise from similar sectors which will all help lower costs. Our central estimate for the cost of a watchdog and efficiency monitor function together is £2m per annum at 2013 prices. If existing bodies, such as Passenger Focus and the ORR, are used the Department will work with them to define the functions more clearly and thereby get a more accurate estimate of the new operating costs.
- 5.3.81 There will also be costs to the reformed Highways Agency of complying with efficiency monitor and watchdog's information requirements. These will not be costs to private business, as the new company will still be a public sector entity; however these costs will still be incurred in order to generate the benefits of good quality benchmarking. We currently do not know what these requirements might be so cannot assess them in detail. However there is evidence from the water sector that these could be significant; a 2011 review by Defra⁵² of OFWAT's reporting requirements includes examples of administrative burden:

'Water UK stated that "Companies estimate they spent approximately £100 million in additional costs and directly employed additional labour equivalent to over 500 employee-years in order to comply with the regulatory requirements of PR09". Severn Trent Water stated that their "2,000-page Final Business Plan needed to be supplemented by responding to around 100 Ofwat queries and submitting a 500-page Draft Determination representation....Our total programme costs for PR09 were c. £20m. This excludes the indirect costs, such as employee time".

5.3.82 Although we do not intend to create a regulatory function with the same responsibilities for regulating prices, we do want to establish a robust system of benchmarking which may have significant data collection requirements. OFWAT's operating cost for 2012/13 was £20.098m⁵³; combining this with the above suggests the that it is possible the administrative burden could be up to 5 times as large as the cost of the regulator. We treat this as a high range as this accounts for a number of different companies, whereas we are considering a single company so it is likely the cost will be more in line with the cost of the monitor (comparing Severn Trent's £20m cost to the £20.1m operating cost of Ofwat). This suggests the following costs for the administrative burden per year. We treat these costs as staying constant in real terms.

OFWAT Annual Accounts 2012/13

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Defra (2011) Review of OFWAT and consumer representation in the water sector https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69442/ofwat-review-2011.pdf

Table 9: Administrative burden estimates for new company

	Cost of watchdog				
£m per year, 2013/	Low (£1m)	Central (£2m)	High (£3m)		
Factor by which administrative burden	Low/Central	1	£1m	£2m	£3m
could exceed costs of regulation	High	5	£5m	£10m	£15m

Further potential costs

- 5.3.83 As yet the implementation team has not fully determined the transitional arrangements nor the structure and working arrangements of the new organisation and, as a consequence, we cannot be certain we have identified all the transitional or new operating costs. For example, there are a range of potential transitional costs that could occur:
 - No assessment of new working arrangements has been undertaken to date as it our early
 expectation is that the company will take over the current offices and IT systems of the HA.
 - It is expected that advice will need to be contracted in and research commissioned by DfT in order to prepare each RIS. This will be an ongoing cost dictated by the RIS cycles. As the design of the first RIS is not finalised it is not possible to give an accurate monetised estimate of this cost.
 - There may be further needs for legal advice, for example due diligence, in order to transfer the HA's assets to a company and to design and fund the RIS. However it is not yet clear whether this would need to be external or in-house resource, the former of which could add significant costs. As a general example of potential external resource costs, an NAO report shows that the spinning-out of My CSP as a mutual joint venture had a total transaction cost £7.7 million, of which £4.9 million was on external lawyers and consultants. The Department for Work and Pensions estimated that the proportion of cost relating to the creation of the company as a mutual joint venture was £2.1 million. ⁵⁴ But this concerned a much smaller business than the HA and, unlike the new highways company, My CSP is not 100% government-owned. Therefore it is not a direct comparator.
 - Approximately 95% of the HA's spend is contracted out. Among the most significant of these
 contracts are the 11 DBFO arrangements. It is not expected that any HA contracts with suppliers
 that are in place at the point of transfer will be changed during the transfer. However, the
 transferral of some contracts may require guarantees from the Crown, pending negotiation
 between the contracted parties. Currently the need for negotiation is unclear, given that there is no
 intention to change the contracts and public finances will continue to be used to meet them.
 - Incorporation of the Highways Agency and the transfer of statutory duties and powers raises issues around how we want to define future roles currently undertaken by the Highways Agency on behalf of the Secretary of State (for example, around planning) and the ownership of assets. Currently these issues are being worked through and no impacts can yet be identified.
- 5.3.84 The above are areas where there may be benefits or costs but at this stage they are either unconfirmed or cannot be monetised. It is our aim to improve our understanding of these and similar issues ahead of an implementation-stage impact assessment.

5.4 Option two – Institutional reform without legislation

5.4.1 Option two is to implement the same reforms as option one, but without any legislative underpinning. Therefore the type of benefits and costs identified are broadly the same as for option one, above, and the reasons for them are not repeated. However, in a number of areas we would expect the absence of legislation to change the extent of benefits and costs. These areas are explored below.

⁵⁴ National Audit Office, 'Spinning-out My CSP as a mutual joint venture', September 2013, http://www.nao.org.uk/wp-content/uploads/2013/09/10176-001-MyCSP-Book-Copy.pdf.

Benefits

Improving efficiency and value for money

- 5.4.2 There are options that could reduce the need for legislation. A new legal entity could be created without legislation in order to take over the functions of the HA. In either option, our preferred vehicle for creating a government-owned company are the provisions of the Companies Act; therefore this would offer similar opportunities in terms of selecting optimal governance as option one. Likewise, though cabinet controls would apply by default, there may be a sufficient case for government to agree to flexibility around some of these to allow greater independence. Reform without legislation could be delivered much sooner, as a company can be set up and registered with Companies House almost instantly. There would still be a lead-in time of at least several months to ensure transitional arrangements are in place and to consult staff on the changes, but this applies to any option other than the status quo.
- 5.4.3 If the HA was turned into a government-owned company without parallel legislation, no statutory powers or duties can be formally placed with the company in a manner that would effectively exclude the Secretary of State and his officials from day-to-day involvement with operational matters. The vast majority of the road schemes and maintenance the HA delivers is undertaken via contract. Without legislation a company would not be able to sub-delegate powers to its contractors, therefore contracts would have to continue to be made between the Secretary of State and the suppliers as at present. This would greatly limit the independence and accountability of the company, and would involve it in a large amount of bureaucracy. The responsible ministers would have to direct the company much more closely than under a model set up with its own powers and duties, which would undermine the role of the board and make the efficiencies of a long-term approach much harder to realise.
- 5.4.4 Government could set out a RIS as described in option one without legislative underpinning. The same level of strategic direction could be provided, building on the performance specifications used currently. Then, through successive spending reviews, the government could commit to the amount of funding required for the RIS.
- 5.4.5 The assurance for these commitments would reside in a statement or letter from the Chancellor or Chief Secretary to the Treasury. This would only help to produce the efficiency benefits discussed in the Cook Review on the condition that suppliers were confident that much greater certainty and a significant reduction in risk would materialise in practice and changed their business practices accordingly, for example by entering into longer contracts or investing more in staff.
- 5.4.6 The feedback from business organisations and the construction and supply industry that fed in to the Cook Review, which has been confirmed by the response to *Investing in Britain's Future* in June and *Action for Roads* in July, 2013, is that without a much stronger commitment (i.e. an investment plan and funding underwritten by legislation) they would not have the confidence to change how they do business. As businesses recognise, whatever the intentions when the guarantee is made, government budgets are subject to a wide range of competing and unpredictable pressures which makes funding certainty very difficult to achieve in practice unless secured by legislation. Moreover, the accounting officer responsible for the company's spending would have serious issues fulfilling his or her role when signing long-term contracts without the firm basis of funding certainty underwritten by legislation. Therefore, without the certainty legislation provides, the efficiencies envisaged by Alan Cook in his review will not be realised to nearly the same extent.
- 5.4.7 Legislation is most crucial for delivery of efficiencies in capital investment; it is reasonable to think that the efficiencies due to longer-term planning could be delivered without legislation for other funding lines (even if there is a lower level of certainty than under the preferred option). Hence we reflect this in our central scenario for resource maintenance, operational and capital maintenance and renewals benefits. However, as explained above it is possible that the lack of legislation would not give confidence for the reformed Highways Agency or the supply chain to deliver real changes and hence our low scenario reflects that there may be no benefits.
- 5.4.8 For capital investment, the qualitative evidence we have suggests that a Roads Investment Strategy without legislation is unlikely to lead to the benefits outlined in option one, so we include this as our central and low scenario. However, it may be possible to make a strong enough political

commitment and stick to it over a number of years so that it does come to represent certainty. We have no evidence on which to base an assessment of how significant this could be, so as an upper bound we have included the same efficiencies as under the central scenario for option one. It is unlikely that this would occur, but cannot be ruled out if a political commitment was strong enough to command a belief from the supply chain that it could not be changed until the RIS period had expired. The table below summarises the assumptions made.

Table 10: Summary of option two scenario assumptions linked to option one

	Option two scenarios							
	Low	Central	High					
Resource maintenance	No impact	Delivers the same as Option	Delivers the same as Option					
and operational		one (all scenarios)	one (all scenarios)					
Capital maintenance and	No impact	Delivers the same as Option	Delivers the same as Option					
renewals		one (all scenarios)	one (all scenarios)					
Capital investment	No impact	No impact of reform	Delivers the same as Option					
			one (central scenario)					

Efficiency monitoring and better service for road users

- 5.4.9 External pressure on efficiencies and representation of road users could be established in the same ways under this option as in option one, with the obligation on the company to provide information being set in the framework agreement.
- 5.4.10 However these roles might be less effective without the transparency of the relationship that is possible with the legislative framework the company operates in as a highways authority. The Government would have more influence through a variety of channels over the company, limiting the public accountability of the company.
- 5.4.11 Likewise, the RIS being underpinned by legislation also makes efficiency monitoring and road user representation more effective. This is by providing the watchdog and monitor with a clear opportunity to influence the performance specification for the company. Without legislation, the performance specification and associated funding statement would be an administrative document and the process and products could be changed easily.

Costs

- 5.4.12 The monetised costs for option two are broadly the same as for option one, as delivery of the new corporate arrangements, RIS and external scrutiny functions would still incur similar costs. We therefore make these estimates based on the same figures as above for costs. However, not designing and passing legislation under this option would mean a decreased transitional resource need, especially for legal resource. It is estimated 5-6 fewer full-time staff would be needed if legislation is not delivered, meaning the time dedicated to transition cost is £2.5m under this option.
- 5.4.13 As with option one, corporatisation of the HA to create an arm's-length company would also reduce government's influence. However, this is a much less significant cost in option two because legislation would not be in place to transfer powers, meaning ministers would retain a significant ability to influence decisions day-to-day.
- 5.4.14 The RIS would also reduce flexibility for government. However, as there would be no legislation to ensure the RIS and funding certainty, government would be able to change the schemes, plans and funding in the RIS much more easily. This would, therefore, not be a significant cost against the baseline.

6. Risks

- 6.1 Reform presents important opportunities for greater investment and an improved quality of service to motorists. However, at this stage key risks in delivering the benefits remain.
- 6.2 Potential difficulty achieving sustained split from political process: The most significant gains in this model are expected to come from establishing a sustainable Roads Investment Strategy. Although we anticipate that the statutory footing can deliver this, road building has been the subject of significant public protest including direct action in the past. Until the supply chain is comfortable that unexpected political and budgetary pressures will not interfere with the investment programme and funding guarantee, the government-owned company may not be able to deliver the efficiency gains anticipated. This risk could be increased where some resource elements of the operator's budget remain subject to more frequent budget decisions, however the Government will look at ways to ensure a level of certainty that allows efficiencies to be achieved.
- 6.3 Five-year cyclicality (as in water): Several reviewers have identified a significant tendency for cyclical investment in the water sector, linked to the 5-year periodic review process which is similar to what we propose here. Therefore there is a risk that this experience is repeated. Chris Newsome, of Anglian Water, is guoted as saying "Cyclical investment has been an issue in the water sector since privatisation. The effects of this stop-start cycle within the supply chain result in lost productivity across the five year cycle, redundancies and an environment of uncertainty in which small and medium enterprises are particularly badly affected."55 In his review of Ofwat in 2011 David Gray commented that: "The extraordinary degree of cyclicality in business flows from the water companies to the sector supply chain, which appears to be largely a response to the price review process, is obviously undesirable. It is hoped that the proposals to make regulation less intrusive and give companies more ownership of their business plans will improve the position, but it may also be necessary to consider some more proactive approaches in the shorter-term." In setting up the efficiency monitoring function we need to pay attention to this issue, and ensure the new company has ownership of its business plan. A fuller report - "Smoothing investment cycles in the water sector"56 - has been undertaken by Infrastructure UK which details the impacts of this cyclicality and potential solutions applicable to the water regulatory regime.
- 6.4 **Accountability not applied as expected:** Some government controls design to ensure the best value in managing public money could exist over the freedom of the new company to set levels of remuneration and to procure. If some controls are loosened or exempted on the use of public money, it will be much more important that accountability is monitored using the right expertise, powers and remit to scrutinise value for money effectively. The efficiency monitor has a role here, but as only one company will be formed, there could be a lack of information on which to base an assessment of performance and hence drive efficiency by benchmarking. There is a related risk that, in the absence of an economic role, the monitor may seek to expand its remit and interfere in management decisions. A suitable balance must be found using governance arrangements, the monitor and in some cases controls which ensures value for money but does not impact on the effectiveness of the reforms in delivering efficiency savings and supporting economic growth.
- 6.5 **Risk of undesirable cost savings by using poor construction standards**⁵⁷: Establishing consistent pressure on cost efficiency has the potential to lead to savings made not through efficiency but through cutting quality in undesirable ways. This can be difficult to monitor for an outside observer, as the lack of quality may not be observable for many years but could then lead to significant increases in whole-life cost. We are aware of this risk and will seek to mitigate it by a combination of some or all of the below:

⁵⁷ "Governing and Paying for England's Roads, S. Glaister, 2010

 $^{^{55}}_{-1} \ \text{https://www.gov.uk/government/news/government-calls-for-action-to-address-damaging-impacts-of-cyclicality-in-the-water-sector-like the section of the sect$

⁵⁶ Smoothing Investment Cycles in the Water Sector, HM Treasury

⁽http://www.racfoundation.org/assets/rac_foundation/content/downloadables/governing_and_paying_for_englands_roads_glaister_main_report.pdf)

- a. Including asset management expectations in the performance specification and seeking to monitor quality indicators closely.
- b. Establishing quality standards in the network licence, so that maintaining asset quality and construction standards is a key part of how the new operator is expected to behave.
- c. Ensuring the efficiency monitor and watchdog have clear remits to monitor and report.
- 6.6 Lack of integration of SRN decision-making within wider policy: Increased power for decision-making at company level might lead to loss of integration between management of the SRN and other areas of government policy including transport, planning and housing. However, secure long-term planning through the RIS could reduce planning risk by giving greater foresight to other areas of government, as it will do to business.
- 6.7 Environmental and social goals not balanced with economic priorities in new framework: Creating a government-owned company does not guarantee that environmental and social goals will be balanced with goals for economic growth and efficiency. This role must be fulfilled either by the Department for Transport through the Roads Investment Strategy or other documents that frame the relationship between government and the new body or the watchdog.

7. Summary with preferred option and plan for implementation

- 7.1 Our evidence from previous studies, as well as that provided by business and industry, strongly suggests that it would be very difficult to achieve the objectives of improving value for money and boosting the economy without institutional reform to allow for the roads operator's operational independence and certainty of funding, all underpinned by legislation. Establishing the HA as an independent company will enable a more commercial governance structure and operational independence to meet the outcomes under the RIS in the most efficient manner possible. Without establishing an independent company with a separate legal identity and its own powers under statute, responsibility for day-to-day management of the SRN would still reside with the Secretary of State. This would limit the visibility and credibility of change to the supply chain.
- 7.2 We would expect reform to offer some benefits if the company was set up at arm's-length with an optimal commercial governance structure and fewer central government restrictions, even in the absence of legislation. However, in order to secure funding certainty, it is crucial that legislation is passed to underpin the RIS, otherwise there would be no guarantee to the HA's supply chain over the forward programme of work and a risk of no improvement in efficiency over the status quo.
- 7.3 To create a more accountable roads operator, the HA needs to operate at arm's-length with legislation having transferred the duties and powers to enable it to do so. This would create a clearer link between operator and road users, which would be reinforced by the creation of a watchdog that ensures road users' interests are input at the key strategic level a RIS, secured with legislative underpinning.
- 7.4 Therefore only option one institutional reform with legislation has the potential to deliver the policy objectives.
- 7.5 The next step is to consult the public and stakeholders on these proposals, with the intention of introducing legislation in the final session of parliament in 2014. Should legislation be successful, it would receive royal assent in the first half of 2015, and the new government-owned company would come into operation as soon as possible after this. As discussed in 'other impacts', below, a period of consultation and engagement with unions and HA staff over the transfer of staff will precede the new company becoming operational. The first RIS is currently planned for introduction in 2015.
- 7.6 More detailed plans for implementation will be defined in the coming months as a result of consultation. A cross DfT-HA implementation team has been created to work closely on these issues and will be engaging with the relevant stakeholders. A final-stage impact assessment will be produced that takes account of the responses to the roads reform consultation, and any other evidence gained through engaging with stakeholders.

8. Direct costs and benefits to business

- 8.1 These proposals should have significant benefits to business through a better investment environment for strategic roads infrastructure. However we assess these benefits as indirect because they rely on the reaction of the supply chain to the reforms and we are not removing regulatory burdens directly, in line with paragraph 1.9.8 (i) of the Better Regulation Framework Manual. For this reason these reforms are not in scope of the Government's policy of One-In-Two-Out.
- 8.2 We are proposing establishing watchdog and efficiency monitoring functions as described above, which could have some regulatory burdens on the new government-owned company. However as the company will be government-owned, this will not be a burden on private businesses and hence we assess no direct cost or benefit here either.
- 8.3 Both *A Fresh Start for the Strategic Road Network* and *Action for Roads* were written after significant engagement with business organisations and the HA's UK-wide supply chain that confirmed the benefits of this approach for UK businesses. In May 2013, the Civil Engineering Contractors Association called on the government to:
 - "... develop a new model for the ownership and management of the English strategic roads network, focussing on providing long-term certainty over the investment required in the network to ensure that it is able to meet future demand in an affordable manner."
- 8.4 A statement from Adam Marshall, director of policy at the British Chambers of Commerce welcomed the proposals in *Action for Roads:*

"Business growth requires a road network that's well maintained, congestion free and upgraded where necessary. For too long, the Highways Agency has been unable to deliver on these requirements.

So we welcome the announcement that the Highways Agency is to become a public corporation, managed in a more business-like fashion, and that it will have the same sort of five-year funding certainty that has helped to improve the rail network in recent years.

Business has had enough of 'stop-start Britain'." 60

9. Other impacts

Staff and equalities

9.1 One of the groups most affected by these proposals is the Highways Agency's workforce. There are over 3,200 full-time staff working in the HA throughout England in a range of roles, all of whom are civil servants.

- 9.2 The Department has a duty under the Equality Act 2010 to consider whether policies will have any adverse impact on equalities or reduce existing inequalities.⁶¹ The DfT equal opportunities and diversity policy gives effect to the Equality Act requirements. It supports and promotes the principles of equality and fairness and encourages a diverse work force.
- 9.3 Should the government-owned company option be taken, staff would be transferred to the new company from the HA. Their terms and conditions of employment would be protected under the

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/211981/bis-13-1038-better-regulation-framework-manual-guidance-for-officials.pdf

⁵⁹ CECA, Securing our Economy: The Case for Infrastructure, May 2013, p. 5.

⁶⁰ 'Road network reforms must help put an end to 'stop-start Britain', says BCC', July 2013, http://www.britishchambers.org.uk/press-office/press-releases/road-network-reforms-must-help-put-an-end-to-%E2%80%98stop-start-britain%E2%80%99,-says-bcc.html

⁶¹ The protected characteristics, as defined in the Equality Act 2010, are: age, disability, race and ethnicity, gender, pregnancy and maternity, gender reassignment, sexual orientation, religion or belief.

principles of the Transfer of Undertakings (Protection of Employment) Regulations 2006 (TUPE). 62 Under the Public Service Pensions Act 2013, public sector workers who are TUPE transferred out of the civil service will be able to remain members of the Civil Service Pension Scheme; most HA staff are in the Principal Civil Service Pension Scheme. As conditions of service would be protected under TUPE following any transfer of staff from the HA, there should be no adverse impact on any protected groups.

9.4 Regulation 13 of TUPE places an obligation on both the old and new employer to inform trade union representatives of staff affected by the transfer 'long enough before a relevant transfer'. In accordance, DfT and the Highways Agency will ensure the appropriate provision of information to such representatives.

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For further details on TUPE see (http://www.legislation.gov.uk/uksi/2006/246/pdfs/uksi 20060246 en.pdf)