Introduction

We have an objective to provide a much more free-flowing network; and over the next five years the Government is investing more than £11 billion towards this. Traffic on our network is expected to grow by between 27% and 50% by 2040, and we must not only improve our network, but also improve our operations. Yet this will only give our customers the service they require if we operate both existing and new roads effectively, making the most of that investment.

So our role is not only to deliver this investment; but also to maximise the opportunities it brings by effectively operating our newly improved roads and increasing their integration with other transport systems.

How our customers want to feel

Our customers tell us that they want stress free journeys, where they feel safe, in control and listened to. To give them this, we not only need to deliver more road capacity, we also need to make the most of the capacity we already have. That is why operating our network is as important to us as maintaining and upgrading it.

Until now we have largely focussed on elements we can control within our own boundaries, but our customers expect a quality journey no matter who operates the road they are travelling on. To give our customers what they want, our operation will become more integrated with the transport systems around it, including local authority roads, the traffic information community, and other transport providers. Increasingly it will be through working with others that we will increase the benefits for our customers and create solutions of the future.

Context and challenges

Many roads operate with limited intervention but to get the most out of our 4,300 miles of motorways and trunk road, we need to actively maximise the movement of people and goods across England, connecting them to other parts of the country and international markets and destinations.

We have significant operational capability; collecting information and data to understand traffic flows and potential disruption; managing incidents; planning for both known and unknown events; managing roadworks; and providing information.
To support our operation, the Government has set us targets to maintain network flow; to ensure that lane availability does not fall below 97% in any one rolling year, and to clear at least 85% of all motorway incidents within one hour. While we do all this, we recognise the complexity of the transport system as a whole.

Every day millions of people traverse the network, wanting to get to different locations at different times, driving at different speeds, wanting different information and, sometimes, exhibiting behaviours which put themselves and others at risk.

By actively operating our roads, we can make the most of our capacity and give our customers stress free journeys, helping to keep them safe and in control.

Our concept of operations

We published a concept for our operations and invited our partners to comment and offer suggestions for how we could do better. We are now working towards setting out in more detail how we plan to actively operate our roads.

Principles of the concept of operations

**Demand**
We will positively influence demand for our network by providing our customers with information they need in the format they need it.

1. We will manage demand through influence rather than large-scale restrictions
2. We will be accountable for our information

**Utilisation**
We will maximise throughput on the network by proactively managing vehicle movements.

3. We will benchmark and drive increases in throughput
4. We will promote sustainable transport
5. We will promote the development of technology to improve operations

**Availability**
We will maximise network availability to road users by reducing the impact of incidents and smarter planning of roadworks.

6. No one should be killed or seriously injured on our roads
7. We will target incident clearance resource to those incidents which create most congestion
8. We will minimise the adverse impact of roadworks on our customers

**Understanding**
We will improve our understanding of the network so that we can make intelligence-based and increasingly informed intervention.

9. We will seek out operational solutions to problems, as well as infrastructure ones
10. We will be considerate of and listen to our customers
Our approach

We will:

Consistently delivering the basics

We will always weigh up different options for how we undertake our roadworks, balancing the need to keep our infrastructure in good condition, the cost to the taxpayer and the impact on road users and communities. Where effective, we will aim to work 24 hours a day, 7 days a week. After completing significant works, we do not intend to have to return for major roadworks for at least five years.

We set out the importance of traffic information to our operational approach in a specific Traffic Information Strategy; we will improve the quality of messages we give on the road, by making sure the messages we set on our signs are helpful to our customers.

We will continue to improve our capability to clear incidents and we will reinvigorate our relationships with our partners through the Joint Emergency Services Interoperability Programme, and the CLEAR initiative (Collision, Lead, Evaluate, Act, Reopen).

Improving our service and network

We will continue to deliver our smart motorways improvements which not only increase road capacity but also provide better driver information and improve our ability to actively operate those sections of road.

Away from the motorways, expressways will also increase both capacity and our ability to improve the operation of the busiest parts of our trunk roads.

Our on-road traffic officers currently mostly work on the motorways. We have started a pilot for them to provide greater coverage of our whole road network, so that they can give a more flexible service to our customers.

To minimise the environmental impact of our operations, we are assessing the feasibility of introducing ultra-low emission vehicles (ULEVs) for the Traffic Officer Service.

Optimising to meet customer needs

We are setting out to better understand how different amounts of delay make customers feel; as well as how traffic information affects their behaviour and their satisfaction with their journeys.

Through this and further insight, we will deepen our understanding of how our customers’ behaviour impacts the flow of our network, and how our actions can impact their behaviours.

Based on an improving understanding of our customers, we will develop more proactive traffic management tools, so that we not only clear blockages when they happen, but start to better predict and pre-empt problems on our roads.
The benefits of operations at the heart of the Strategic Road Network

As our roads become busier and the demands of our customers increase, we have to make the most out of the network capacity we have.

Exploiting this capacity means not only operating existing roads effectively, but also undertaking upgrades and maintenance with operations in mind. For example, we will roll out more smart motorways, which maximise the benefits of an additional lane, by preserving safety, smoothing journeys and maximising throughput, all through proactive operation.

Proactive operation will also enable us to make the most of our road capacity by influencing our customers to help them avoid congestion where possible; maximising the availability of the network; and thereby maximising its utilisation.