# Mayor's Code of Conduct for Roadworks

**Annual Report 2009/10**

## Foreword

Anyone that has navigated the streets of our capital will be aware that the greatest obstruction to their smooth progress are the holes in our roads, cordoned off by barriers and annoyingly surrounded by diversion signs blocking off lanes; or worse, whole roads. London's roads are the economic arteries of the capital and keeping them running well, has surely never been more important. Yet each day Londoners trying to go about their day to day business find their path clogged by an army of cones. It was this frustration and the disruption it causes that led the Mayor to declare war on holey roads.

That is why early this year, Transport for London and a large group of the capital's boroughs introduced the UK's first roadworks permitting scheme. It has been a crucial further step towards easing the congestion roadworks cause. The permit scheme gives us far greater control over the number, duration and timing of works that take place. It has operated alongside the Mayor's Code of Conduct for Roadworks, which itself has been signed up to by all of the major utility companies working in London, and commits them to ensuring their works are well planned, coordinated and carried out as efficiently as possible. They say imitation is the sincerest form of flattery and it is good news for everyone that also this year a national roll out of the code swiftly followed our lead in London.

Although progress is being made, these are just the first steps towards more effective management of our road network. This report contains some encouraging information but there is still far more we can do to ease disruption. We want every London borough to sign up to the Mayor's Code of Conduct. We also want every London borough to be part of the permitting scheme. However, our ultimate goal remains the implementation of a lane rental scheme. We believe that targeted lane charges for companies who dig up the busiest sections of the Capital's roads remains the best possible incentive for work to be efficiently undertaken, minimising the inconvenience caused to all of us, and reducing the cost of congestion to all London's businesses.

Kulveer Ranger
Mayor of London's Transport Advisor

## Executive Summary

Roadworks are necessary, not only to ensure the provision of essential utility services, but to facilitate much needed development and improvements to the road network and to ensure it remains in a fit and proper state of repair. However, roadworks also cause significant delay and disruption to the road network and frustration to drivers and pedestrians alike.

There are almost 10 million car trips, over half a million cycle trips, and around six million bus passenger journeys on London's roads every day. Almost all freight is carried on the roads. Overall, four out of every five journeys in London depend entirely on the smooth operation of its road network. The average daily traffic flow in London is 40 per cent higher than average flows in other urban areas of England (eg Tyne & Wear, Greater Manchester, Merseyside).

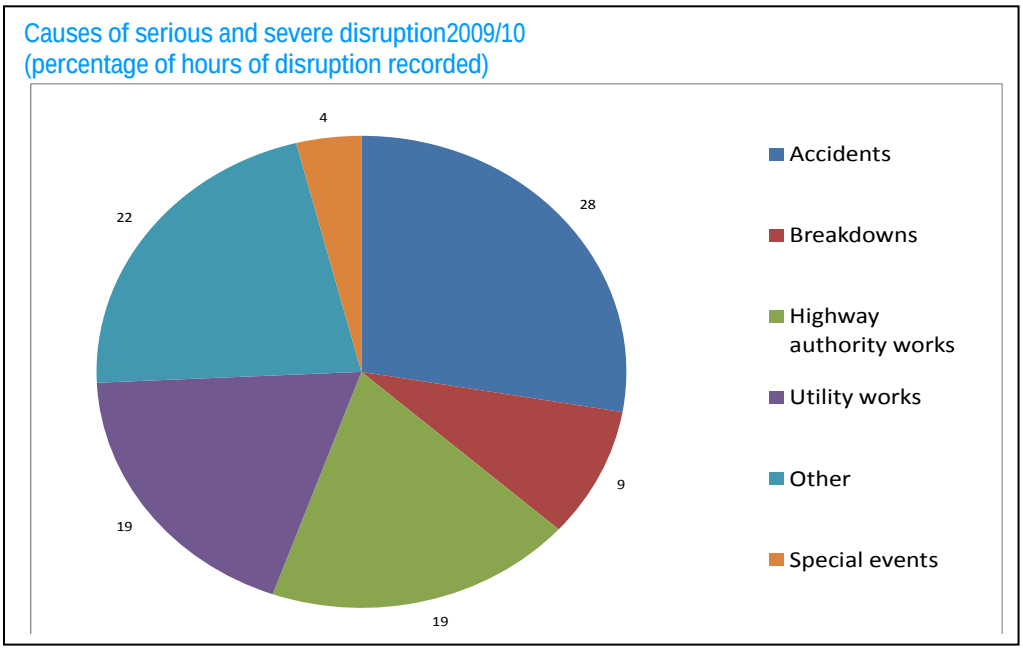
There are 34 Highway Authorities in London (TfL and the 33 boroughs), managing around 13,000 km of road. In addition, there are up to 100 utilities licensed to carry out roadworks. In 2009/10, TfL recorded around 370,000 works having taken place across the Capital, carried out by both Highway Authorities and public utilities. However, not all works are captured and recorded by Highway Authorities and this figure is likely to be on the low side. It is estimated that over half a million holes are dug on London's road network every year. It would only be possible to give a completely accurate picture of the works taking place in the Capital if all boroughs implemented a roadworks permit scheme or recorded all works that take place, including their own.

London has around 20% of the UK's traffic congestion, costing the Capital's economy at least £2 billion a year. In 2009/10 TfL recorded the main causes of congestion as shown below.

Utility and Highway Authority roadworks account for 38% of the duration of the most serious and severe disruption across London, with an estimated cost to the economy of £752 million.

It is vital, therefore, that action continues to be taken to improve the planning and coordination of all roadworks and to incentivise shorter works durations, to minimise as far as possible the disruption they cause.

The Mayor's Code of Conduct for Roadworks, the first of its kind in the UK, came into operation on 1 April 2009. It brought together TfL and five of the main utility companies



operating in London: National Grid, BT Openreach, Virgin Media, EDF Energy Networks and Thames Water.

This Code, going beyond existing regulation, legal requirements and other industry codes, is seeking to deliver a step change in the way roadworks are managed in London - to reduce their impact on the Capital's traffic and economy. It is a voluntary agreement, with signatories committing to work to provide better information for road users, explore ways to reduce the impact of their roadworks, and share best practice to drive further improvements.

A significant element of the Code was the support for efficient implementation of the permit scheme for roadworks which TfL and 18 London Highway Authorities introduced on their road networks early in 2010.

Over its twelve months of operation, the Code has also helped to deliver:

- an increase in the number of roadworks taking place outside of peak traffic times
- a significant reduction, overall, in the number of days of works over-runs
- greater use of plating over excavations to return roads to traffic at peak times. Thames Water has been leading on this and used 3.8 kilometres of plating at its work sites across London last year, keeping roads and pavements open when they would otherwise have been closed. During the first year of the Mayor's Code of Conduct for Roadworks, 996 days of traffic disruption were saved through joint working, one of the key approaches being pursued through the Code. Some notable examples include:
- Borough High Street, where Thames Water and Southern Gas Networks are jointly using one contractor to lay new gas and water mains. Works by EDF and TfL have also been undertaken simultaneously, cumulatively saving seven months' worth of disruption
- A 72-hour weekend workathon on Commercial Street in August 2009, where 100 different activities were undertaken by TfL and six utility companies, saving over three months' worth of delays.
- On 25 February 2010, Southern Gas Networks signed up to the Mayor's Code of Conduct for Roadworks for 2010/11, joining the original five utility signatories. This means that almost 95 per cent of the works undertaken on the TLRN are now covered by the Code of Conduct.

The Code for 2010/11 has also been strengthened to include two new measures - improved reinstatements and responsiveness to surface defect notices - and, for the first time, it includes specific targets to drive real improvement. The strengthened Code came into effect on 1 April 2010.

The Code has been well received. It is hoped that all London Boroughs will sign up to the Mayor's Code of Conduct for Roadworks. It forms the basis of a National Code of Conduct, launched by the National Joint Utilities Group (NJUG) on 22 June 2010.

## Background

This review looks at the first year of the Code in relation to the Greater London Authority roads, known as the Transport for London Road Network (TLRN). These roads comprise 580km (or 5%) of London's road network but carry over one third of its traffic.

The review uses data from the five signatories for the period 1 May 2008 to 31 March 2010, omitting April because historically comparable data is not available.

## Roadworks on the TLRN

In 2009/10, there were 48,247 works undertaken on the TLRN; accounting for 47% of the serious and severe disruption on that network and with an estimated cost to the economy of £300 million - almost half the cost of roadworks disruption for London as a whole. Reducing this type of disruption is therefore a priority.

The five utility company signatories together carried out 50% of all the works undertaken on the TLRN, and 90% of the utility works.

### Planned Works

Around 60% of the works undertaken on the TLRN in 2009/10 were planned, split roughly 50/50 between TfL highway authority (including developer related activity) and utility works. They accounted for 27% of the duration of serious and severe disruption recorded on the TLRN over the same period.

Only 2% of works were major schemes. These are often thought of as the most disruptive, but advance notification and engagement means that works can be well planned and coordinated, and opportunities to combine works explored, to minimise disruption as far as possible.

The vast majority of works (52%) were minor schemes. These require a permit application to be made only three days ahead of works commencing. While minor schemes are short in duration the limited advance notice provides authorities with little opportunity to coordinate works and facilitate the sharing of works sites and traffic management.

### Unplanned Works

Around 40% of works undertaken on the TLRN were unplanned works (emergency or urgent); again split fairly evenly between utility and TfL highway authority works. These accounted for 20% of the duration of serious and severe disruption recorded on the TLRN.

Unplanned highway works are mainly relatively quick pothole or trip hazard repairs, many of which are on pavements rather than carriageways. Utility companies, on the other hand, tend to have to dig into carriageways to undertake more time-consuming repairs to fix faults on the water, gas, electricity and telecommunication networks and, therefore, cause significantly more disruption.

Over 90% of works on the TLRN (unplanned and minor works) require three days advance notice or less. It is especially difficult to coordinate other works around the large number of emergencies that arise on such a busy road network.

TfL and the six utility company signatories will continue to work together to develop the Code and include additional targets and measures. For example, for signatories to alert TfL to potential minor works at least ten days ahead of works commencing, which will provide greater opportunities to coordinate and promote joint working and 'workathons', thereby reducing disruption.

## Mayor's Code of Conduct for Roadworks 2009/10

The 2009/10 Code of Conduct had eight sections, encompassing the goals and commitments of the programme and providing a structure for reporting on progress. This has been increased to ten sections in the 2010/11 Code. The five 'founder member' utilities committed to focus on the following eight areas under the Code for 2009/10:

### 1 - Permitting

The London Permit Scheme (LoPS) was launched on 11 January 2010 with TfL and 16 London Boroughs participating. Two further boroughs joined on 1 April 2010 with another seven committed to joining in late 2010/early 2011. The signatories undertook to put the necessary systems and processes in place to support permitting.

### 2 - Sharing Long Term Plans

The signatories have pledged to continue to share their long term plans for upgrade, maintenance and new connections across London, especially on the routes likely to be required for the 2012 Olympic Games.

### 3 - Plating

The signatories undertook to utilise plating or bridging techniques to their excavations, where safe and practical to do so, resulting in a rapid return of carriageways and footways to road users and pedestrians.

### 4 - Working Outside Peak Hours

The signatories pledged to increase the number of works undertaken outside of peak hours in order to reduce peak period traffic delays. Where appropriate they agreed to implement 24 hour working, 7 days a week at locations where environmental concerns could be overcome and disturbance to residents kept to a minimum.

### 5 - Standard Information Signage

The signatories undertook to ensure that work site courtesy boards containing contact details, together with an update on the progress of works, would be displayed at each site. This is particularly important for sites that are to be unattended for any length of time.

### 6 - Inspections

The signatories agreed to inspect their works on footways and carriageways on a regular basis and will promptly rectify all aspects of the site that did not meet appropriate standards.

### 7 - First time Re-Instatements

The signatories aimed to undertake first time permanent re-instatements at all sites as another way of reducing delays and disruption.

### 8 - Good Practice Guide

Spreading good practice is a key to raising awareness and driving performance improvement. The signatories agreed to share examples of good practice and adopt the highest standards that emerge from this awareness. They have met regularly to review progress.

# Report on progress

## 1 - Permitting

*"For the roll-out, we will prove systems and put necessary processes in place"*

Transport for London and 18 London Boroughs currently operate permit schemes for roadworks. Utility companies and other organisations must apply for a permit before commencing work, giving highway authorities an opportunity to coordinate works between different agencies and collect data to support better management of the network.

Before the permit schemes came into effect, utilities would issue notices of intended works. The highway authorities would act on these to coordinate traffic and minimise disruption. Unused notices could be cancelled without penalty.

Permits, unlike notices, are not free, so there is a 'disincentive' to utilities to apply for a permit which they subsequently cancel. The utility will still be required to pay for the permit even if works do not go ahead. The charge ranges between £40 - £240 depending on the type of work and location. This should act to encourage better scheduling of works and a more accurate estimation of their duration.

A low and declining rate of cancelled permits is one goal of the scheme and TfL expects the cancellation rate to fall from the previous average of one in five (cancelled notices).

This will yield a direct benefit for TfL and other road authorities, freeing up staff time for more productive uses.

The proportion of cancelled notices/permits has reduced from 34% for the 2008/09 period to 28% for the 2009/10 period, reflecting the efforts of signatories to reduce cancellations.

During the period 11 January to 31 March, TfL approved 10,020 Permits and refused 1,422, approximately 12%.

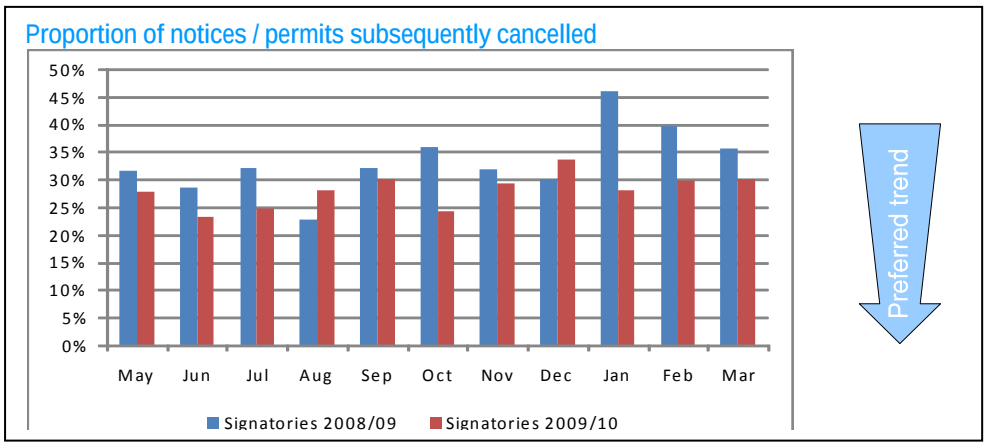
## 2 - Sharing long term plans

*"Continue to share long term plans for works, especially on roads likely to be used for the Olympic Games"*

The sooner a road authority knows about plans for utility works in a particular location, the better it can make arrangements to minimise disruption and coordinate them with other works in that area.

Formal Forward Planning notices are currently only available for major works, they are voluntary, and give an indication of locations and likely dates of works. They supplement mandatory Section 54 notices which must be given within three months of the works commencing. TfL also operates an informal method for notification of Forward Plans within LondonWorks (the central roadworks register), which is more used by the signatories than other promoters.

As a result of sharing information, opportunities for co-working can be identified enabling two or more promoters to work within one work site. In the review period, 996 days of disruption were avoided. In 2010/11, both days of disruption avoided and collaborative working data will be available.



All signatories to the Code have been active participants in the 'Clearway 2012' initiative: a voluntary collaboration of borough officers, utility and contractor managers, and other key organisations working together to minimise the impact of works on the Olympic Route Network before and during the Games.

In addition to sharing planned works information, Clearway 2012 members are looking at co-working on sites and sharing depots for rapid deployment of emergency repair teams.

Signatories to the Code have been increasingly cooperative in sharing their forward plans and have agreed to make much greater use of Forward Planning notices.

TfL will host special coordination meetings to review forward plans and look for opportunities for 'workathons'. In a workathon, two or more utilities or other works promoters use the same 'window of opportunity' to carry out their works. This can be multiple works in the same area over the same weekend, or working in the same stretch of roadway while it is closed. This minimises disruption by reducing the need for individual, separate closures.

## 3 - Plating

*"Plating to temporarily and rapidly return carriageways and footways to use by road users and pedestrians."*

Using innovative plating solutions to cover over excavations allows the footway or carriageway to return to safe, normal use where works have temporarily ceased. This reduces the impact from works on road users and is a visible method which allows the public to see the efforts being made to mitigate disruption. It also demonstrates that highway authority and works promoter are working in a collaborative manner. Thames Water has been in the forefront of plating use, and during 2009/10 used 619 m of plates at 53 sites on the TLRN.

Plating is encouraged through the Mayor's Code of Conduct for Roadworks, with all signatories agreeing to consider its use where safe and practical to do so.

## 4 - Working outside peak hours

*"Endeavour to work at times of the day that will minimise disruption and help to keep London moving."*

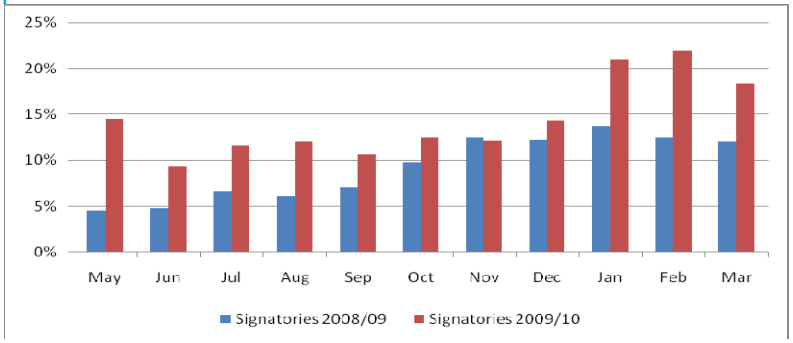
It is self-evident that roadworks undertaken outside peak hours will cause less disruption to London's traffic.

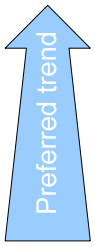
Signatories to the Code made a commitment to work outside of peak hours where they can. By their nature, however, not all roadworks can be undertaken off-peak.

Noisy works which disturb neighbouring residents should be avoided whenever possible; some operations are more hazardous when it is dark (even with artificial lighting); and labour costs can make off-peak working prohibitively expensive.

The Code has reinforced a trend, across the utilities sector, for more off-peak working. Signatories have made greater improvement than companies that have not embraced the Code of Conduct. In the review period the proportion of works being undertaken by signatories outside of peak hours has almost doubled.

Trends in signatory utility performance - proportion of works being undertaken outside peak hours



## 5 - Standard information signage

*"Standardise and enhance public information about works, including contact details"*

Information boards displaying certain information about the site are mandated in regulations and their presence or absence is recorded as part of the sample inspections carried out to assure the quality and safety of roadworks. Adequate boards were observed at 99% of active sites inspected.

The recording method used for sample inspections is not adequate to collect data on the enhanced information boards so no information about the level of use is yet available. Enhanced signage standards will be agreed and monitored in 2010/11.

## 6 - Inspections

*"We will inspect our works and promptly rectify any shortcomings."*

There is no data available on the frequency of inspections carried out by utilities of their own networks of apparatus in the street, or of the time taken for any necessary remedial action. TfL as streetworks authority carries out an inspection of a sample of works at three times - when in progress (Category A), within six months of closure and in the last three months of the 'guarantee period' (normally two years). Road-user safety is one of the key criteria for a works-in-progress inspection; later checks are looking for any sign the road surface is degrading.

The number of inspections that find a Category A dangerous failure (where an open work site is discovered to be sufficiently hazardous that immediate action has to be taken) have slightly reduced from 4.1% for the period 2008/2009 to 3.8% for the period 2009/2010. Dangerous defects must be addressed within two hours. Other defects, such as a loose manhole cover which rocks noisily, should be repaired by the utility but, due to the perceived minor or trivial nature of the problem, may by given a low priority.

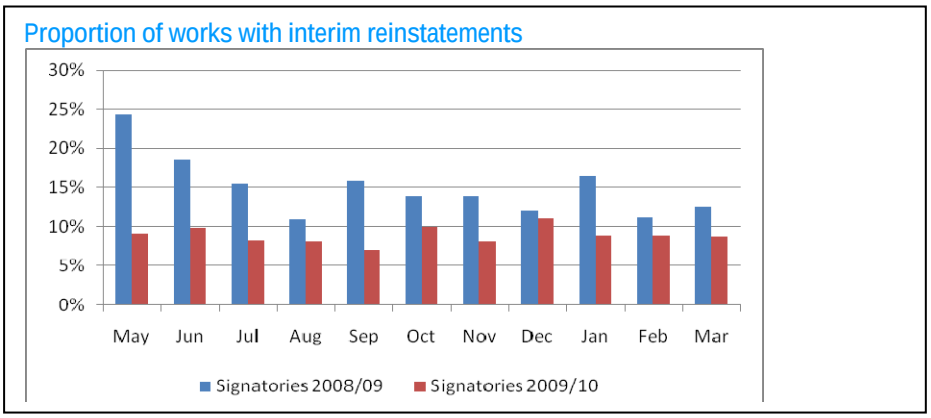
These issues can be a source of annoyance in the neighbourhood, resulting in complaints to the road authority which then inspects and re-notifies - a cycle that wastes staff time. They can, of course, become dangerous over time requiring an urgent response. The 2010/11 Mayor's Code of Conduct for Roadworks addresses the need to improve responsiveness to defects.

## 7 - First time reinstatements

*"Aim for first time reinstatements of works sites"*

Reinstatement is the final stage of roadworks, occurring once all the works on the utility infrastructure are complete and tested. The works promoter is required to restore the road surface to the same overall standard as the rest of the road network. This is defined as being reinstated to a condition where the new section of roadway is 'no more likely to fail' than other similar road surfaces.

The backfilling of the excavation and the full reconstruction of the roadway is, where possible, done at the same time. This is known as first time reinstatement and is supported by the Code.




Preferred trend

Interim reinstatements (where the excavation is temporarily backfilled) should be avoided as they require a second set of works - and therefore further traffic disruption - to remove the temporary road surface and complete the reconstruction. Improved works scheduling can reduce the need for interim reinstatements.

Signatories to the Code of Conduct have worked to minimise the use of interim reinstatements and committed themselves to a goal of at least 85 per cent of works in any given month being concluded with a permanent, first time reinstatement.

Since May 2008, there has been a steady decline in the proportion of works with interim reinstatements, from close to 25 per cent to less than 10 per cent. Signatories have achieved their target of 85 per cent first time reinstatement.

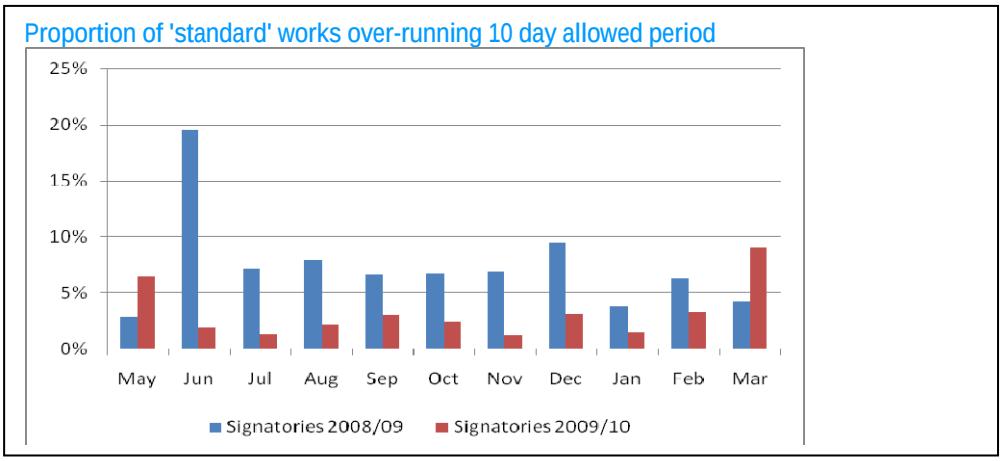
It is unlikely that the proportion of interim reinstatements will reach zero as there are occasions when this approach is necessary (and its use unavoidable) to minimise disruption.

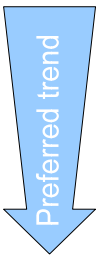
## 8 - Good practice

*"Encourage and share good practice."*

The development, sharing of and implementation of good practice will help to ensure works are planned and undertaken efficiently for the benefit of both the works promoter and the road user. Applying best practice to the provision of accurate information, adherence to permit conditions, and, in particular, the accurate assessment of likely works durations, will help to minimise the traffic disruption caused by roadworks. The cumulative affect of multiple roadworks in the same area is well-known and can be avoided through careful planning.

Late running works not only prolong the disruption they cause but can overlap with other projects due to start. This can trigger serious traffic disruption and leave the public with a poor opinion of the planning credentials of all parties involved.




Accuracy in assessing the duration of works is measured by looking at the proportion of 'standard' works which fail to end within the allowed ten day period (Standard Works run from four to ten days). Signatories to the code have, on the whole, improved the accuracy of their notices for Standard Works, although this has been difficult during the hard winter when working conditions have been poor.

There were 642 days of works over-runs on the TLRN in 2009/10, down 6% from 686 days of works over-runs in 2008/9.

## Additional sections for the second year of the Mayor's Code

During the year, two new sections were developed for the Mayor's Code, to be added for its second year, commencing April 2010. Measures for these new sections are being developed and will reported in future annual reviews.

### Improved reinstatement

Regular inspections can easily check the surface of a roadway above a completed work site. Often, however, problems lie deeper and can only be revealed by taking test cores of the excavation.

Common experience of authorities undertaking coring programmes is that as many as four out of five sites show that the reinstatement falls short of the quality required.

This means the fabric of the road can be left weakened and creates either a need for repairs by the utility (avoidable works) or requires earlier highway works (more frequent works).

Signatories to the Code will share coring data to understand why the incidence of 'site failure' is so high. This could have significant long term benefits with less need for repair or remedial works that could further disrupt traffic.

### Responding to roadway surface defect notices

A utility is allowed until the end of the next working day to respond to information about an observed, non-dangerous road-surface defect, either agreeing on a repair, challenging that a defect exists or agreeing to an on-site discussion within 10 days.

If there is no response (and there are no penalties prescribed for non-response), a repeat inspection by the authority is required. Overall, the failure to respond to the first notice of defect creates inefficiencies and increased administrative costs for road authorities. Measures to address this issue are being explored.

## Looking ahead - timetable for the delivery of actions

During the first year of the Mayor's Code of Conduct for Roadworks the signatories developed a list of actions that would be carried forward under the second year of the Code, along with the addition of two further sections to the Code itself. This programme of actions and a timetable for their completion are listed below.

| Code section | Action | Month |
|---|---|---|
| Permitting | Utilities and authorities will collaborate in the development of simple processes that focus first on the key aspects of the permitting system and the effective and efficient flow of information between utility and authority. Workshops will be held to exchange experiences, identify problems and develop mutually appropriate solutions.<br><br>Workshops<br><br>Measure identified | <br><br><br><br><br>June 2010 & November 2010<br><br>March 2011 |
| Sharing long term plans | Local Authorities and utility companies will continue to share their long term plans for upgrade, maintenance and new connections across London. An increased number of early notices received as forward planning notices would increase efficiency of works coordination. Additionally works promoters will target sharing plans for works on the Olympic Route Network and collaborate with the Clearway 2012 project.<br><br>Protocols established<br><br>Specific measure developed after first six months and a target agreed for the remaining six months of the year<br><br>Progress against targets reported in the Annual Report | <br><br><br><br><br>September 2010<br><br><br>May 2011 |
| Plating | All works promoters will consider the use of plating at sites where its use is safe and can reduce network occupancy at sensitive times, and will report the number of such sites by using the term 'plating use' in their notice/permit documentation. This will temporarily and rapidly return the carriageways and footways to use by road users and pedestrians.<br><br>Workshop held to raise awareness support | <br><br><br><br><br>June 2010 |
| Working outside peak hours | Works promoters will endeavour to work at the times of the day which minimise disruption to keep London moving and reduce excessive traffic delays. In planning works, and with due regard for the safety of operatives and the public, consideration will be given to 24 hour working, 7 days a week at locations where environmental concerns can be overcome and disturbance to residents kept to a minimum.<br><br>Review progress during first half of year. | <br><br><br><br><br>October 2010 |

| Code section | Action | Month |
|---|---|---|
| Standard information signage | Works promoters will agree a standardised form of enhanced public information provision, and TfL will modify its inspection procedures, to monitor its presence on major and standard works, against a target of 90% presence. The public register will be actively publicised.<br><br>Standardised form agreed<br><br>Inspection procedures modified<br><br>Progress against target reported in next Annual Report | <br><br><br><br>August 2010<br><br>September 2010<br><br>May 2011 |
| Inspections | Utility companies to agree timeline with TfL for sharing information garnered from their own inspection regimes.<br><br>New process agreed and implemented | <br><br><br>October 2010 |
| First time reinstatement | Works promoters will reduce the delay to traffic by implementing speedy reinstatements. The target is that by October 2010 at least 90% of works in a month will have permanent reinstatements.<br><br>Review progress in annual report | <br><br><br>May 2011 |
| Good practice | Authorities and works promoters will encourage their contractors to adopt good practice, and will volunteer examples of good practice for peer review to their industry associations and will contribute to the wider sharing of good practice through OneRoadNetwork.org (ORN.org, formerly LondonStreetWorks.net).<br><br>Survey of members of ORN.org to identify areas of concern and exponents of good practice, to develop online information and support materials. | <br><br><br><br>September 2010 |
| Improved reinstatement | To ensure the road is reinstated to a good standard after roadworks take place, all authorities and utilities will share their coring data, to determine the reasons for failures and develop a prioritised action plan for improvement.<br><br>Action plan agreed<br><br>Measure identified and implemented | <br><br><br><br>October 2010<br><br>March 2011 |
| Responding to roadway surface defect notices | Authorities and works promoters will together review examples of past practice for identifying and reporting surface defects caused by roadworks and by October 2010 agree a schedule of defect types and the timeframe and type of response appropriate to each type.<br><br>Damaged or failed apparatus such as manhole covers and control boxes can present a public safety hazard. Works promoters and authorities will assist the Highway Authorities and Utilities Committee (UK) to finalise, by April 2011, a process where the apparatus owner acknowledges receipt of the defect information, implements standard response times for repairs and provides regular progress reports until the defect is remedied.<br><br>Schedule agreed | <br><br><br><br><br><br><br><br>October 2010 |