



RTPI
Royal Town Planning Institute

PLANNING FOR CONSTRUCTION SAFETY

Reducing the impacts of construction traffic with
the Construction Logistics and Community
Safety (CLOCS) Standard

In collaboration with:



CLOCS

Construction
Logistics and
Community Safety

**RTPI
Practice
Advice**

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1. Introduction

In 2016 463 pedestrians, pedal cyclists and motorcyclists were killed or seriously injured in collisions involving heavy goods vehicles across all UK roads. 38-54 percent of these incidents involved construction specific heavy goods vehicles¹. There is a pressing need to regulate the impact of construction vehicles on UK roads, and prioritising safety on new developments should be paramount to the planning process.

The national Construction Logistics and Community Safety (CLOCS) Standard was developed in 2012 by the construction industry as a response to this problem. It is a set of requirements for construction vehicles and construction traffic operations designed to eliminate collisions with vulnerable road users and mitigate the negative community and environmental impacts of construction traffic. It is reviewed and revised every two years.

Given the current Government targets on housing and infrastructure growth, it is timely to embed strategies to mitigate the impacts of construction traffic into the planning process, in the same way that other impacts are routinely addressed. Planners have a unique opportunity to do this with the CLOCS Standard to achieve the following benefits:

1. **Safer roads** for pedestrians and cyclists, with less risk of HGV collisions.
2. **Reduced congestion** caused by HGV's; particularly during rush hour and in local hotspots.
3. **Improved local air quality** following a reduction in volume and duration of HGV journeys.

Implementing CLOCS requires the use of a construction logistics plan (CLP), which is a tool to plan vehicle and resource movements for a building site in order to reduce its impact on the road network and local community. Construction logistics plans are often requested as a planning condition. They allow planners to impose restrictions, control the impact of construction traffic, and ensure the burden of maintaining this falls to developers and construction contractors.

Transport for London direct vision standard consultation

In 2018 Transport for London undertook a public consultation on whether the vision available to HGV drivers in cabs is sufficient to prevent collisions. 92 percent of public respondents agreed that vision standards should be improved with wider and lower windows, and that this would reduce the road risk to pedestrians and cyclists. It demonstrates the strong public opinion in favour of regulating and reducing the road impacts of HGVs².

¹ MAST 2016: <http://roadsafetyanalysis.org/>

² TfL (2019) direct vision consultation results: <https://consultations.tfl.gov.uk/roads/direct-vision-standards-phase-2/>

2. Policy context

The planning policy context relating to the traffic impacts of developments varies across the UK. There is an important distinction between the transport impacts created by a finished development and those during the construction phase. There are national variations on whether planners are required to address construction traffic, however there is a common mandate across the UK that all major developments must submit a transport assessment that considers the traffic impacts and safety of a development in its entirety. This can form the basis of construction specific conditions.

Wales

Planning Policy Wales (PPW) requires local planning authorities to request a transport assessment for all major planning applications, which should include ‘measures to limit or reduce levels of air and noise pollution³’. Along with these broader impacts, Welsh transport assessments must make explicit reference to the local impacts of construction traffic: ‘transport assessments... should cover the transport impacts during the construction phase of the development’. This puts the opportunity in place to implement the CLOCS Standard.

Scotland

Scottish Planning Policy (SPP) states that, ‘development plans and development management decisions should take account of the implications of development proposals on traffic, patterns of travel and road safety⁴’. It goes on to set a clear requirement for Scottish planners to include restrictions upon construction traffic in their planning permissions: ‘Consideration should be given to appropriate planning restrictions on construction and operation related transport modes when granting planning permission, especially where bulk material movements are expected’. This gives the opportunity to implement CLOCS into planning conditions.

England

The National Planning Policy Framework (NPPF) requires all major development applications to submit a transport assessment, detailing the likely local traffic impacts of a project. It places the responsibility upon planners to consider how the traffic impacts of a development proposal can be mitigated: ‘[planners] should ensure that any significant impacts on the transport network or on highway safety, can be cost effectively mitigated to an acceptable degree⁵’. Although this does not explicitly reference traffic at the construction phase, it gives scope for more specific requirements to appear in local plans.

³ Welsh Government (2018) Planning Policy Wales: <https://bit.ly/2BSAK8U>

⁴ Scottish Government (2014) Scottish Planning Policy: <https://bit.ly/2GXptrK>

⁵ MHCLG (2018) NPPF: <https://bit.ly/2X6bdlk>

Northern Ireland

The Strategic Planning Policy Statement for Northern Ireland (SPPS) states that where a development is likely to generate a significant traffic impact in the local area, developers should submit a transport assessment. The SPPS make no mention of planning for traffic at the construction phase. Therefore it would be up to local planning authorities to develop upon this by addressing construction traffic impacts in their local development plans⁶.

3. The CLOCS Standard

The Construction Logistics and Community Safety Standard is a framework for managing construction traffic safety that operates between planning authorities, construction clients, contractors and fleet operators, who have decided to take responsibility for construction traffic safety. The Standard covers a wide range of issues including precise urban routing for deliveries, site access/egress, and controlled delivery times, heavy goods vehicle driver vision, and vehicle safety features. It was developed by organisations and businesses from across the sector and until recently was solely funded by Transport for London, due to the need for action in London.

Many places across the UK have similar numbers of fatal and serious injury collisions in proportion to the population size⁷. The CLOCS Standard is applicable across the UK, and now there is the opportunity for a country wide rollout to happen.

Any planner, construction client or principal contractor can choose to implement CLOCS on individual projects, but many make a commitment by becoming a CLOCS Champion. Each sign a 'memorandum of understanding' in which they agree to adhere to the CLOCS Standard, initially on at least 20 percent of their sites, with a clear plan to bring the majority of their sites under them within two years. The long term aim of CLOCS is for it to apply to all major construction sites, and all fleets operating vehicles over 3.5 tonnes.

Planners and policy makers are encouraged to⁸:

- Embed the requirement for CLOCS compliance into policy and guidance documents;
- Ensure the planning process requires submission of a construction logistics plan that addresses construction traffic impacts;

⁶ Department for Environment (2015) SPPS for Northern Ireland: www.planningni.gov.uk/index/policy/spps_28_september_2015-3.pdf

⁷ MAST 2016: <http://roadsafetyanalysis.org/>

⁸ CLOCS (2019) CLOCS Standard: www.clocs.org.uk/resources/clocs_standard.pdf

- Ensure contractors are responsible for their own monitoring and compliance with CLOCS;
- Have in place effective enforcement mechanisms should a breach of standards occur.

Challenges can arise from contractors and developers who do not fully understand the requirements of CLOCS. Therefore it is essential that planners make supporting materials on CLOCS readily available if they are going to require contractors to meet the Standard.

A detailed list of supporting CLOCS guides can be found here: www.clocs.org.uk/resources.php

FORS - Fleet Operator Recognition Scheme

The Fleet Operator Recognition Scheme (FORS) is a voluntary accreditation scheme for fleet operators to improve and demonstrate the safety, efficiency and environmental standards of their vehicles. It is structured into bronze, silver and gold standards. FORS is likely to be encountered, and it is important to understand the relationship between CLOCS and FORS as some contractors may not be aware of both schemes, or misunderstand the schemes' relevance to each other. The CLOCS Standard in regards vehicle safety was designed to align fully with the FORS Silver standard, so fundamentally if a fleet operator is FORS silver accredited, procurers can be confident their journeys will also be CLOCS compliant⁹.

⁹ CLOCS (2018) FORS moves to demystify the FORS and CLOCS relationship:
www.clocs.org.uk/newsarticle/62/NewsArticles

4. CLOCS in the planning process

Creating an early requirement for CLOCS within planning policy is key to ensuring the successful implementation of the Standard onto developments. Planners can insert CLOCS into development plans in explicit terms that gives them the jurisdiction to require contractors to meet the Standard. This can be achieved through a number of avenues.

Construction logistics plans

A construction logistics plan (CLP) is the main vehicle for planners to implement the CLOCS Standard. A CLP is produced by developers and contractors, and approved by planners before planning consent is given. It forecasts the volumes and frequency of construction traffic to and from a site, and plans the logistics of this traffic in such a way that minimises its impact on the local area. A CLP often forms part of a wider construction management plan (CMP), but refers specifically to the traffic and logistics aspects of the construction phase. Local planning authorities are responsible for reviewing and approving CLPs and bringing any community concerns forward.

CLPs can create dramatic improvements in behaviour, traffic and environments where they are implemented. An effective CLP maximises benefits to the local authority and community, balanced with developer needs, such that the CLP is largely self-enforced by the developer and contractor. The CLOCS Standard can be embedded throughout the CLP, requiring that all vehicles and operations relating to the construction site in question are compliant with the Standard. The CLP requires contractors to commit to specific planned measures that align them with CLOCS, such as timed deliveries, last mile routing, holding zones, consolidation centres and traffic marshals.

Planned measures in a CLP should be SMART: *specific, measurable, agreed, realistic, and timely*; and easily interpreted, implemented and monitored¹⁰.

Largely consistent CLP document templates used by all boroughs and projects reduces workload for planners and developers alike. CLOCS has created a template CLP guide and tool that can be adapted to reflect local circumstances available here <https://bit.ly/2TFWbDW>.

Reasonable requirements

It is important that the requirements of a construction logistics plan are reasonable and achievable for contractors. Some planning authorities have attempted to implement CLPs, only for their conditions to be challenged by contractors and subsequently overturned. Part of the reason for this is onerous conditions that make the functioning of the construction site difficult or impossible.

¹⁰ Transport for London (2017) Construction Logistics Plan Guidance: <http://content.tfl.gov.uk/construction-logistics-plan-guidance-for-developers.pdf>

Conditions should aim to restrict construction activities that have a large traffic impact, without impeding essential activities. For example, planners might restrict deliveries to a site between the hours of 7:30 – 9:30am to remove construction traffic from the morning rush hour, but make an exception for concrete deliveries due to the large daytime window needed for concrete to cure.

Case study: Croydon construction logistics plan

The London Borough of Croydon have a large area of growth and redevelopment in their town centre that led to approximately 700 additional town centre HGV trips per day during 2017/2018¹¹. They have successfully managed this potentially disruptive and hazardous traffic by requiring construction logistics plans for all projects. Owing largely to the effectiveness of these construction logistics plans, these trips have occurred without a single collision or incident over that time period, and caused negligible effects on local congestion¹².

To achieve this Croydon require submission of a construction logistics plan as a condition of planning permission. Their planning condition contains the following wording:

- “Prior to the commencement of any building or engineering operations, a construction logistics plan shall be submitted to the local planning authority for approval. The Statement shall include the following information for all phases of the development, which shall only be implemented as approved;
- (a) hours of construction, (b) hours of deliveries, (c) parking of vehicles associated with deliveries, site personnel, operatives and visitors, (d) facilities for the loading and unloading of plant and materials, (e) details of the storage facilities for any plant and materials, (f) the siting of any site huts and other temporary structures, including site hoardings, (g) details of the proposed security arrangements for the site.”

Developers and contractors are also provided with a short, standardised CLP guidance document which lays out specified requirements for how the CLP should address each of these phases, according to the CLOCS standard. If these measures are not agreed to then planning permission will not be given. Croydon update this guidance document every 3 months reflecting upon where requirements need to become stricter or more relaxed.

¹¹ Croydon council (2019) data from construction logistics plans, provided in conversation to the author.

¹² Croydon council (2019) in conversation with the author.

Journey reduction

The safest journey with the least impact is the one that doesn't happen. To this end an effective technique for engaging with CLOCS is to take measures to reduce the number of vehicle journeys at source. While this is often a first priority, it is also often difficult to deliver due to infrastructural challenges.

The construction logistics plan can be leveraged to this end by requesting that, where possible, a proportion of materials be delivered by rail and water freight, and by requesting the use of transport consolidation centres if they exist near the project. A flexible approach to this condition and realistic consideration of the capacity of these alternative freight networks can produce positive results and reduce the number of HGVs entering urban areas. The Mayor of London's transport strategy provides an example of this, with language couched in reasonable terms 'the CLP should show that all reasonable endeavours have been taken towards the use of non-road vehicles'¹³.

To help contractors make informed proposals, TfL created a water freight toolkit. This displays London's water freight infrastructure, however the format could be replicated for other regions <https://wft.wspdigital.co.uk/>

Local plans or local development plans

The local development plan is a useful tool for implementing the CLOCS Standard. It is the first place for a local authority to set out their commitment to reducing the impacts of construction traffic and improving road safety around developments. This can be laid out in general terms related to reducing traffic impacts, for planners to later use as a hook for more specific requirements. It can also be done in a more direct way by specifying that all developments over a locally defined threshold (e.g. £1million) must submit a construction logistics plan that complies with CLOCS. The City of London local plan provides an example of such specific wording.

¹³ Greater London Authority (2018) Mayor's Transport Strategy: www.london.gov.uk/sites/default/files/mayors-transport-strategy-2018.pdf

Case study: City of London Local Plan

The City of London local plan embeds consideration of construction traffic impacts into its policy on the general transport impacts of developments. It specifically states the importance of traffic safety during the construction phase¹⁴, and to address this it requires all major developments to submit a construction logistics plan.

To impose this obligation onto developers, the City of London Corporation then use a standard planning condition that is written into all planning agreements, which requires developers to submit a CLP which references and requires compliances with the CLOCS Standard. The conditions relate back to local plan policies which justify their use. They require CLPs to be made in accordance with the Mayor of London's CLP guidance (2017), and state that the development should not be carried out unless in accordance with the CLP.

'Ignoring the CLOCS Standard could be regarded as a planning breach, but we have yet to encounter any sites that do not want to follow best practice' – Robin Close, City of London¹⁵.

This structure means that City of London have integrated CLPs into their local plan, and they have a robust, standardised way of agreeing to the standards before planning is agreed.

The Mayor's CLP guidance has been altered into a generalised format that could be extended for use outside of London www.clocs.org.uk/resources/clp_guidance_clocs_final.pdf.

Section 106 agreements

Section 106 agreements are often used to reduce the impacts of construction traffic and require compliance with the CLOCS Standard. Planners can use Section 106 to require developers to submit a construction logistics plan which adheres to the CLOCS Standard. This places legal contractual obligations on the developers and moves the burden of upholding and monitoring compliance from the local planning authority to the developer and contractor¹⁶.

¹⁴ City of London (2015) Local Plan, pg. 138: <https://bit.ly/2HoasQB>

¹⁵ Robin Close, City of London (2019): Through email correspondence with the author.

¹⁶CLOCS (2016) Guide: Improving Road Safety Using the Planning Process:
www.clocs.org.uk/resources/clocs_guide_improving_road_safety_using_the_planning_process_july_17.pdf

Case study: London Borough Camden

The London Borough of Camden was the first council to make CLOCS compliance a planning requirement. Camden use section 106 agreements to require developers to submit a CLOCS compliant construction management plan – similar to a construction logistics plan. The plan requires the developer/contractor to outline measures that will ensure that their site is CLOCS compliant, and in so doing minimises the impacts on the community and environment of construction traffic servicing their site¹⁷. Camden also require a £3,136 construction management plan implementation support contribution to be paid by the developer. This offsets the cost to the council's time of reviewing the construction management plan.

Camden requires contractors to define within their construction management plan specifically how they will comply with the CLOCS Standard. For example contractors are required to demonstrate appropriate vehicle routing, control of vehicles at peak times and in relation to school drop-off/pick-up times, safe site access and egress and suitable vehicle loading areas. Contractors are also required to demonstrate their proposed method for checking operational, vehicle and driver compliance as part of site gate checks.

Such post planning requests can encounter resistance where developers have not become sufficiently familiarised with their section 106 obligations. Camden seeks to work proactively with developers to ensure that permissions are discharged and developments progress well, whilst minimising impacts on the local community and the wider transport network¹⁸. Camden use the following the wording in their section 106 agreements:

“4.2.1 [The developer agrees] Not to implement nor allow implementation of the development until such time as the Council has:

- (a) received the Construction Management Plan Implementation Support Contribution in full;
- (b) approved the Construction Management Plan as demonstrated by written notice.

4.2.2 The Owner acknowledges and agrees that the Council will not approve the Construction Management Plan unless it demonstrates to the Council's reasonable satisfaction that the construction phase of the development can be carried out safely and with minimal possible impact on and disturbance to the surrounding environment and highway network.”

¹⁷ London Cycling Campaign (2017) Camden CLOCS up another first: <https://lcc.org.uk/articles/camden-clocs-champion>

¹⁸ Camden council (2019) in conversation with the author.

Supplementary planning documents

Supplementary planning documents (SPDs) can be used to clarify the requirements for compliance to the CLOCS Standard and set out local guidance for how to embed CLOCS into planning permissions. An SPD for promoting the use of the CLOCS Standard could contain:

- Overview and purpose of the CLOCS Standard;
- Preferred planning mechanism for requiring CLOCS (as a condition or in S106);
- Size and type of development that should adhere to CLOCS;
- Advice on how to monitor and enforce compliance.

All CLOCS Champion organisations have an outline plan for how they will implement CLOCS within their own policies/procedures and how they will encourage others to also implement CLOCS. The following link provides an example CLOCS outline communication and implementation plan for a local authority <https://bit.ly/2VjoZzn>

For further advice on embedding CLOCS into the planning process see the “CLOCS Guide: Improving road safety in the planning process” <https://bit.ly/2C5EKmg>.

5. Monitoring

An essential aspect of improving the safety of roads through CLOCS is to effectively monitor the construction traffic of developments operating under a CLOCS agreement. The recommended distribution of tasks between stakeholders is:

- Contractors monitor vehicle journeys to and from the site through CLOCS gate checks of vehicles and drivers;
- Considerate Constructors Scheme monitors the site’s implementation of the CLOCS Standard through site visits;
- Planning authorities have access to relevant CLOCS monitoring reports.

Monitoring compliance with the Standard should primarily be made the responsibility of developers and contractors, and not an additional burden upon local authorities. By agreeing to the CLOCS Standard as a planning condition, developers and contractors accept that failing to comply can be grounds for the termination of the contract and therefore take on the responsibility of ensuring

standards are maintained. Within the planning agreements of current CLOCS Champion councils, such as Camden or Croydon, failure to comply with the Standard is grounds for termination of contract. In the words of one contractor who dealt with Camden:

'That caused our ears to prick up'.¹⁹

A key mechanism for contractors to monitor vehicle journeys are traffic marshals operating gate checks of vehicles as they enter sites, checking for issues such as driver CLOCS training, safety equipment and their approach route. Gate checks can be written into the CLP as a required practice; or where contractors already conduct gate checks, the CLP can simply require that checks for CLOCS standards are added onto them.

Case study: Mulalley CLOCS monitoring app

Mulalley are a construction contractor who adopted the CLOCS Standard wholesale in 2016, after encountering it as a contractual condition from Camden council. They were motivated by the reputational and efficiency benefits, and now stand as an example of how motivation for the uptake and promotion of CLOCS can move from the planner to the contractor when the business benefits are well understood²⁰.

Mulalley undertake gate checks for CLOCS Standard compliance on vehicles entering their construction sites. However they found paper copies of completed gate checklists were unwieldy, often illegible, and easily lost.

To address this they developed an in-house app that digitises the gate check list. It allows them to easily collect gate check data, analyse compliance trends and take informed action with subcontractors whose vehicles are non-compliant. This also provided an evidence base for Mulalley to send to the planning authority as proof of CLOCS compliance, making monitoring a simpler task for the authority too²¹.

This CLOCS monitoring app could easily be replicated by other contractors to streamline CLOCS monitoring for themselves and the local authority.

¹⁹ Unnamed Contractor (2019) in interview with the author.

²⁰ Mulalley (2019) in conversation with the author.

²¹ Considerate Constructors (2018) best practice hub: <https://ccsbestpractice.org.uk/entries/clocs-monitoring-app/>

Considerate Constructors Scheme for CLOCS monitoring

The Considerate Constructors Scheme (CCS) is a long-established independent organisation who monitor construction's impact on communities by undertaking visits to sites that are registered to the scheme; they currently review over half of all construction sites in the UK.

CCS is an essential CLOCS partner because it now provides additional visits to sites to monitor their compliance to the CLOCS Standard²² when requested. There is a small fee charged to contractors for these visits (£200 per visit in 2018) and given the safety and reputational benefits of these CLOCS checks, they have a strong potential to become widespread across the UK.

Planners have the opportunity to utilise planning obligations to require the CCS CLOCS checks as part of the standard construction procedure. This can be done by including in construction logistics plans a requirement that contractors must sign up for CLOCS checks when they sign up for standard CCS monitoring. This embeds enforcement of CLOCS into contractors' existing monitoring, ensuring that the standards will be consistently upheld.

Camden Council is currently making progress with this and aim to include a requirement for CLOCS checks in their standard CLPs²³.

This requirement may encounter pushback from contractors eager to avoid paying the fee. However upholding the CLOCS Standard provides mutual benefits to all parties, so planners can stress the business case to contractors that CCS CLOCS visits improve reputation and reduce the likelihood of collisions.

²² CCS (2019) CLOCS: www.ccscheme.org.uk/clocs/

²³ Camden Council (2019) in interview with the author.

6. Enforcement

Effective enforcement of the CLOCS Standard is one of the most challenging aspects of the process. If there is no recourse for issues of non-compliance among contractors, the positive effect that CLOCS can have on road safety may be significantly reduced.

By making it a planning condition that contractors must submit and follow a construction logistics plan and comply with the CLOCS Standard, planners create an effective precedent to enforce compliance with these conditions. If it becomes apparent that contractors are not complying, then the planning authority is able to enter into an escalating enforcement procedure as with any other breach of planning condition.

It is important to stress that planners do not need to commit significant resources to constant monitoring. The threat of public complaints and enforcement measures, with the negative economic and reputational impacts associated with these, in most existing cases leads to stringent self-enforcement of the CLOCS Standard among developers and contractors. The intrinsic value in helping reduce deaths on UK roads is also often motivation enough for contractors to embrace the Standard.

Case study: Croydon techniques for enforcement

The London Borough of Croydon operate a number of techniques to ensure contractors remain compliant with the construction logistics plan. These are embedded in the standard CLP document, and contractors and developers must agree to these monitoring and enforcement measures as a condition for discharge of planning permission.

1. Croydon requires contractors to install a CCTV system monitoring the site access points, and upon request, provide the planning authority access these recordings. This CCTV system is either rented from the local authority, or provided by contractors themselves, eliminating any additional cost to the local authority. While this does not need to be monitored constantly, it provides assurance that if a non-compliance issue emerges, or a collision happens, there is evidence for the local authority to draw upon for enforcement²⁴.
2. Croydon have also experienced success by requiring all contractors to display posters on their hoardings informing the public of permitted site delivery times, as agreed in the CLP. The resultant public accountability and threat of complaint ensures self-enforcement from the contractors. By facilitating public engagement Croydon have created an effective enforcement strategy that adds no monitoring burden onto the local authority.

²⁴ Croydon Council (2019) in interview with the author.

For more information about RTPI practice advice

www.rtpi.org.uk/knowledge/practice

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