South London Freight Quality Partnership

Sainsbury’s Beckenham/London Borough of Bromley Out-of-hours Delivery Trial

Case Study

The rationale for trialling alternative delivery times

Removing Heavy Goods Vehicles (HGVs) from daytime peaks and increasing ‘out-of-hours’ delivery activity can have a range of positive effects;

For local amenity and the local environment:

• Reducing congestion in urban areas
• Reducing vehicle emissions due to reduced fuel consumption at less congested times (potentially contributing to improved local air quality)
• Reducing visual intrusion
• Reducing safety risk due to less conflict with other road users at peak times

For retailers/operators:

• Improved fleet efficiency due to improved journey times, faster average travelling speeds, reduced idling time and reduced fuel consumption
• Greater stock availability on store opening for trading and an improved shopping experience for customers entering the store at the start of the day, with less replenishment activity still underway. This can also have health and safety benefits for both customers and colleagues

Out-of-hours deliveries therefore make sound logistical and retail sense (particularly for larger stores/retail chains, whose operations are better suited to 24hr activity) and clearly offer potential environmental benefits. But their obvious associated risk lies in potential impact on local residents, which may require mitigation and management.

This case study outlines the process and results of a project which ran from January to June 2009, to trial ‘out-of-hours’ deliveries at a major retail supermarket in Beckenham, in the London Borough of Bromley.

Background to the Trial – South London Freight Quality Partnership

The ‘out-of-hours’ delivery trial was carried out as an initiative of the South London Freight Quality Partnership (South London FQP).
The South London FQP was formed in 2006 and funded by Transport for London (TfL) with the objective of promoting efficient, economic, safe and sustainable freight transport in the eight London Boroughs of:

- Croydon (lead Borough)
- Kingston
- Sutton
- Bromley
- Wandsworth
- Lewisham
- Merton
- Richmond

The FQP undertakes a wide range of both strategic and practical projects to help identify local solutions to local freight issues within the South London sub-region and brings together Boroughs, TfL, the freight industry, local businesses and other stakeholders to work in partnership. (Visit [www.londonsfqps.co.uk](http://www.londonsfqps.co.uk) for more information).

One key project which had been identified in the FQP’s annual business plan for 2008/09 (and approved by TfL and the FQP membership) involved investigating the potential to increase ‘out-of-hours’ delivery activity within South London and, ideally, to set up a trial involving a Member Borough and interested retailer.

Since its formation, the FQP has had close working relationships with a number of retailers, including Sainsbury’s. Given Sainsbury’s known interest and experience in the concept of ‘out-of-hours’ delivery trials, it was agreed that details of stores in South London with ‘local agreements’ on delivery times would be provided with a view to exploring the possibility of a trial at a selected site.

Stores with voluntary ‘local agreements’ (which are established in direct discussion with residents/local Environmental Health Departments) restricting delivery hours were chosen, rather than those with either statutory Noise Notices or Planning Conditions in force, as voluntary ‘local agreements’ were felt to be more easily negotiable and more likely to offer a suitable trial site within the necessary timeframe.

After discussion between the FQP and Sainsbury’s Environment Manager for Logistics, the Sainsbury’s store in High St, Beckenham was chosen from the list of those provided.

**How the Store previously operated**

The local agreement at the Sainsbury’s Beckenham store restricted deliveries prior to 07.00am. As a result, the store received fresh produce deliveries at 07.00am and 08.30am for immediate shelf replenishment, with the store opening for trading at 08.00 from Monday to Saturday.

The store received deliveries from both Sainsbury’s Allington (Maidstone, Kent) and Charlton depots.

The local agreement and its associated curfew times resulted in a lack of availability of fresh stock and inevitable congestion in the store as shelf replenishment continued while customers shopped.
How the trial was established and what was implemented

Following selection of the retail site, an approach was then made in January 2009 to the Environmental Health Department in the London Borough of Bromley, with a subsequent face-to-face meeting held with the Borough’s Senior Environmental Health Officer (EHO).

Reaction was very positive from the outset and the potential benefits of a trial (in demonstrating the positive environmental impacts, particularly in terms of vehicle emissions and the potential wider effect on air quality) were fully appreciated by the officer who had a remit for both Borough noise and air quality issues.

Following this positive response from the Borough and willingness, in principle, to participate in a demonstration trial, a project Working Group was formed.

This Working Group comprised:

- Bromley Senior EHO
- Sainsbury’s Store Manager
- Sainsbury’s Environment Manager for Logistics
- Sainsbury’s Supply Chain
- South London FQP as Chair and Facilitator

An initial working group meeting was held in March 2009 to discuss the potential for the trial. It was agreed that, subject to certain policies, practices and actions being put in place and adhered to by each partner, a trial of alternative delivery times would be feasible at the Beckenham store.

The set of agreed policies, practices and actions developed following the initial working group meeting comprised:

**Trial specifics:**
- 07.00am and 08.30am deliveries to be brought forward to 02.00am and 03.30am
- Trial to run for 7 days per week
- Trial to commence on the 14th April 2009 with the 02.00am delivery and trial duration planned to be 3 months

**General Agreed Actions:**
- Working Group to meet partway through (after 4 weeks) to review progress and to liaise continually throughout the duration of the trial to keep each other updated on issues
- Borough to undertake noise monitoring on site – both pre-trial to establish baseline (undertaken on 6th April 2009) and during the trial
- Borough to offer noise monitoring in residents’ properties in the event of complaints
- All working group members to share details of complaints immediately and respond collectively as a working group – Borough and Store Manager to forge close working relationship
• Store manager contact details to be included within local resident letter drop
• Weekly progress report from Store Manager to advise if any issues have arisen
• Briefing of internal Borough noise team colleagues with contact details for Store Manager to be provided to Borough staff
• Also agreed that any of the working group partners had the right to request cessation of the trial at any time

The Delivery Process:

• Only middle delivery bay door to be used for delivery, with adjacent doors closed to minimise noise
• No scissor-lift to be used
• No salvage to be loaded onto vehicles delivering at trial times
• Radio within store to be switched off
• Cab radio auto switch-off on door opening
• Fridge motor to be switched off at a distance, in advance of arrival at store
• Only Sainsbury’s own drivers to be used for trial deliveries, no agency drivers
• Special briefing of store colleagues and drivers to ensure adherence to agreed practices
• Servicing of the access gate prior to trial start date
• Servicing of the shutter door and pull-up mechanism prior to trial start date
• Servicing of the dock levellers prior to trial start date
• Introduction of a ‘quiet’ hand pallet truck prior to trial start date
• Planned introduction of a dock curtain (although trial voluntarily ceased before introduction)

The Working Group members agreed the policies, practices and actions and the trial started on 14th April, 2009 with the 02.00am delivery.

The first two weeks of the trial ran without incident.

There then started to be a number of minor complaints from local residents made both directly to the Store Manager and to the Borough Senior EHO. These related to residents being disturbed by vehicle arrivals during the night. Initially residents seemed satisfied that the deliveries were being undertaken as part of a trial and were being closely monitored by the Borough. As the trial progressed, however, elected members (both Ward Members and the portfolio holder for Environment and Transport) became involved. It became clear that the level of resident and elected member complaints was growing and the working group partners decided voluntarily to bring the trial to a close.

The trial ran for a total of 10 weeks and was finished voluntarily on 28th June 2009.

The main issue of complaint appeared to relate to vehicle manoeuvring in the yard adjacent to residents’ properties (approximately 10-15 metres distant from the service yard), coupled with a very low ambient noise level in the area at the times of trial delivery. Additional measures could have been introduced to further mitigate the noise – like full yard enclosure – but would have been prohibitively expensive.
Deliveries returned to their normal schedule, in line with the local agreement, following the completion of the trial.

**What were the benefits identified during the trial?**

During the trial’s 10 week duration, a package of operational, retail and environmental benefits were identified.

**Operational:**

A comparison of daytime versus night-time fleet vehicle fuel consumption across 66 shifts from the Sainsbury’s Allington depot demonstrated fuel savings resulting from the night-time delivery activity.

Night-time operations demonstrated a lower average fuel consumption measured in kms/litre than day time operations, which equated to a 4.95% improvement.

Journey times improved due to the benefits of reduced traffic and congestion during night-time travelling – by up to 64 minutes for a Charlton round trip (particularly significant, given Charlton depot is only approximately 9 miles from Beckenham store, demonstrating the extensive travelling time in morning peaks on congested London roads) and up to 20 minutes for an Allington round trip.

**Store:**

In terms of retail performance, during the 10 week trial period, 10 availability checks were undertaken. Product availability (including fresh produce) was 97.6% versus 95.6% in the comparable preceding period.

In terms of sales, fresh had increased by 2% above store average and produce by 3%.

Labour efficiencies were also identified, with night replenishment activity being more productive.

**Environmental:**

The 4.95% fuel saving per round trip was experienced purely as a result of improved vehicle fuel consumption due to night-time running in reduced traffic, with faster average travelling speeds and less idling time.

At 2.68kgs CO$_2$ per litre of diesel, improvements in fuel consumption equated to a night-time per round trip saving of 3.86 kgs CO$_2$.

Assuming two full vehicle deliveries from Allington per night, seven days per week, this would equate to a saving of 2.8 Tonnes of CO$_2$ per annum.

Reductions in other vehicle emissions (NOx, particulates etc) would also be achieved through reduced fuel consumption and reduced idling time for these rescheduled trips.

In addition, removing these vehicle movements from daytime peak periods could also be assumed to have a positive impact on congestion reduction and road safety in a busy urban High St environment.
Lessons learned

All working group members agreed that the project had demonstrated very positive partnership working between retailer at both store and supply chain levels and the local authority Environmental Health Department.

The very positive response to the prospect of the trial from the Borough EHO was seen as refreshing by the retailer. In turn, the retailer’s willingness to trial alternative delivery hours and practices under test conditions and in partnership was seen as a positive by the Borough EHO.

All parties adhered to the agreed policies, practices and actions and it became clear that operational, retail and wider environmental benefits could be derived from out-of-hours deliveries but that some sites are particularly difficult and the cost of necessary mitigation measures (to reduce the impact on local residents from vehicle manoeuvring and loading/unloading activity) may simply be too expensive to make commercial sense.

It was also felt to be important to notify elected members and local residents’ associations at an early stage of the intention to run a trial in an attempt to secure their support and to ensure they understand and appreciate the significance and potential for wider environmental benefits.

Although the trial ceased voluntarily in advance of its planned completion date, it was acknowledged by all partners as being an extremely useful exercise. At the final trial review meeting, both the Borough and Sainsbury’s confirmed their continued interest in considering other trial locations.

London Borough of Bromley Senior Environmental Health Officer:

‘As a Borough, we were interested in participating in this trial particularly because of the potential air quality benefits which could be derived from removing HGVs from traffic during daytime peak periods. Our objective for participation was to investigate ways to enhance environmental performance, safety and efficiency, while protecting the interests of our residents. The trial offered a very useful opportunity to work in close partnership with a local retailer, which was a positive experience and one on which we can build.’

Sainsbury’s Environment Manager for Logistics:

‘We knew that this store would be a more difficult one than we had previously tried but the benefits would have been worth it had we been able to secure a permanent change. The interest in being involved in trials like this remains as we learn so much from them and whilst overnight deliveries are important to us, we need to be able to do this without detriment to our local residents.’

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