Food Outlet Mapping in the London Borough of Newham

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For further information please refer to the planning policy website
www.newham.gov.uk/planning/planningpolicy

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1 Introduction

Purpose of the report

1.1 The purpose of this food mapping report is to set out some initial analysis of data collected in 2009-10 recording the number, location and nature of outlets in Newham who sell food and drink, including hot food, alcohol and/or fresh fruit and vegetables. It is hoped that this will showcase the data collected, and encourage further work linking mapped variables to others, particularly health data.

1.2 The mapping was commissioned by the Health Partnerships Team and Spatial Planning Team within Newham Council and NHS Newham, with project steering input from the Council’s Business Development Team, Geospatial Team and Newham Food Access Partnership.\(^1\)

1.3 The particular interest in commissioning the mapping was in identifying ‘hot spots’ of unhealthy food and drink, (which may also contribute to noise, litter, and town centre problems) and ‘cold spots’ of poor access to healthy food. This was related to the need to provide an important evidence base for the Local Development Framework, in order to develop new retail policies concerning isolated shops and hot food takeaways, whilst also providing an evidence base for the commissioning of appropriately targeted interventions to support improved access to healthier eating options for residents.

1.4 The mapping will also be an important tool to assist in the assessment of planning applications, in particular concerning new takeaways. However, the data collected has many other potential uses in relation to community safety, food safety and business development work amongst others.

Structure of the report

1.5 The report is structured as follows:

- The remainder of the introduction explains the rationale behind food mapping, and the Newham context, as well as giving some details on the methodology.
- The next 3 chapters provide the main analysis within the report, concerning the distribution of hot food takeaways, food stores including those selling fresh fruit and vegetables, and stores selling cheap alcohol.

\(^1\) Newham Food Access Partnership (NFAP) are a charity based in Newham concerned with improving residents’ access to affordable fresh produce. In achieving this NFAP develop and deliver innovative projects to both educate residents and consumers enabling informed food purchase decisions and work with retailers and service providers to improve access to, and the quality of, fresh fruit and vegetables.
The conclusion chapter draws this analysis together, identifying the potential policy and project interventions that the project steering group will investigate taking forward, together with further research and analysis suggestions.

**What is food mapping?**

1.6 Food mapping can be defined as the process of finding out where people can buy and eat food, and what the food needs of local people are. It is a type of needs assessment that aims to identify the geographical areas or communities that have the greatest needs in terms of inadequate access to food, typically known as ‘food deserts’. This generally relates to access to affordable fresh fruit and vegetables and other healthy foods. However, food mapping may also be used to identify the availability of other specific types of food, e.g. local produce or ethnic food, (Bowyer et al, 2006) or conceivably, as proposed here, unhealthy food (hot food takeaways and cheap alcohol). The most extensive project recently undertaken in London is Bowyer et al’s in Hackney.

1.7 The interest in food mapping has generally been driven by the acknowledgement that poor diet is a key determinant of ill health and obesity, and the promotion of ‘accessibility planning’ which arose out of the Labour Government’s Neighbourhood Renewal Unit’s and Social Exclusion Unit’s work on contributors to multiple deprivation (PAT 13, 2000; Social Exclusion Unit, 2003). However, this needs to be understood within the context of the 5 factors influencing food choice: access, affordability, awareness, acceptability and appropriateness (Bowyer et al, 2006). Thus location of outlets is only one parameter to consider in food mapping: others include price, cultural acceptability and convenience. In turn, a variety of policy interventions can be informed by the findings including health education, the planning of new development, protection of existing uses and business development/community enterprise.

**The context to food mapping in Newham**

1.8 Newham is the most culturally and ethnically diverse borough in London with over 60% of Newham residents from a non-White British ethnic background and multiple different languages spoken in schools (ref PLASC, 2009). It is also amongst the most deprived local authority areas in the country. Beyond casual observation of what is sold in the shops, markets, cafes, restaurants and takeaways, access to different foods has been subject to little systematic and comprehensive scrutiny locally². What we do know however, is that approximately one quarter of the population of Newham is overweight, and the population as a whole suffers disproportionately from ill health, and at least some of this is attributable to diet factors (LB Newham/NHS Newham, 2009).

1.9 Considering this in the context of the factors affecting food choice, together with particular local concerns as regards:

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² An exception is Foster et al 2006, though this is now considered dated and only looked at fruit and vegetables. It also did not result in an accurate GIS-based dataset, nor did it cover every street in Newham.
• the apparent proliferation of hot food takeaways, especially chicken shops and their links to poor environmental amenity, ill health and poor town centre offers (LB Newham 2008, 2009);

• the link between alcohol and late night opening and anti-social behaviour; and

• the question of whether or not Newham continues to have ‘food deserts’ and whether isolated shops need protection

...gave an obvious food mapping agenda. As mentioned above, the concern was to map not only access to a variety of fresh, affordable fresh fruit and vegetables, but also to cheap alcohol and hot food takeaways, including those that sold healthier options.

1.10 A further context to this work however, was the inadequacy of existing Council datasets concerning food outlets. Data is held on food outlets by a number of LBN Service areas, including Public Safety, National Non Domestic Rates (Business Rates), and the Business Development Team’s own business directory. Each of these databases is independent from the others, with addresses collected in differing formats, with some geo-coding present and some missing. These inconsistencies, along with lack of identification of where outlets have closed or opened, meant that the council’s own datasets did not provide an adequate, holistic picture of what food provision is available across the borough.

Methodology

1.11 The fieldwork was carried out between June and July 2009, with quality control work undertaken in January-February 2010. The main fieldwork was supervised by Groundwork East London, who recruited and trained local field workers from Newham’s Workplace, with the advantage that they had local knowledge, including various ethnic languages.

1.12 To aid spatial accuracy, mobile GIS units were used in the data collection process. Each unit was loaded with Ordnance Survey mapping of the borough and ArcPAD 8.0 (GIS software), together with the known outlets from existing datasets to be checked and added to, rather than starting from scratch. Data collected, in addition to accurately recorded locations of outlets selling food included:

• primary and secondary business type and planning classification
• the range and quality of fruit and vegetables on sale (if any)
• the price of selected fruit and vegetables and types of alcohol
• type of takeaway food sold including takeaway menus (if available).

1.13 Quality control work was undertaken by planners and a Geospatial Analyst from the Council, together with GIS officers from Groundwork UK, involving desk-based checks and a certain amount of re-surveying to ensure the accuracy of the basic database of food/drink outlets.

1.14 For the purposes of spatial analysis, positional accuracy was ensured by linking the survey data to the council’s Local Land and Property Gazetteer (LLPG), which contains co-ordinates for every addressable building in the borough. Beyond this we have most confidence is the planning and business
classifications, availability of otherwise of fresh fruit and vegetables, and alcohol. Pricing data and qualitative assessments were more date specific, and not quality assured to the same extent, so these components of the dataset have to be viewed with an acknowledgement of potential inaccuracies. Collection of takeaway menus to assess availability of healthy options also proved inadequate, so this data-field is not currently available; the primary type of takeaway food sold however provides a reasonable proxy.
2 Analysis – The Distribution of Hot Food Takeaways (A5 Outlets)

1. Clustering of Hot Food Takeaways

Figure 1: Distribution of A5 (hot food takeaway) outlets

Explanation of mapping

2.1 Hot food takeaways were defined using primary nature of business classification in the data-set and these outlets were mapped to show locational clustering (i.e. indicated by groups of green dots). If secondary uses were included, an additional 54 outlets would have formed part of this data layer, largely adding to the existing cluster pattern. They have been excluded for clarity of mapping, and because they are of less concern from an impact perspective.

2.2 The next step was to look at areas likely to be most affected by the operation of takeaways and access to them, by mapping overlapping takeaway ‘catchments’. Using a catchment of 400m, a proxy for a 5 minute walk, it is possible to work out how many takeaways are accessible on this basis in one area – another type of spatial clustering. Spatial Analyst (a GIS tool) has been
used to calculate this and translate it into a visual scale, whereby darker brown areas indicate areas with highest density overlaps/hotspot.

2.3 The greatest number of overlapping 400m catchments is 19, occurring on both Barking Road (Plaistow) and Leyton Road. This contrasts with an average catchment overlap of 9.4

Background Data

2.4 The total number of hot food takeaway outlets in the borough is 258, of which approximately 28% are fried chicken shops, and the next biggest categories are Chinese, Indian and Kebab shops (10-15% each).

2.5 The proportion of fried chicken shops is notable, as these are the subject of particular concern by members and local residents. Many of these are halal, and it is thought that their growth in areas such as Newham indicates a growing desire to eat more western food amongst those from a Muslim background, as well as Caribbean traditions, the availability of cheap chicken, and the fact that when fried it becomes a convenient filling meal or snack at low cost (Pati, 2008). Further links can be made with the availability of cheap sometimes illegal, migrant labour, and the relative ease of start-up: ideal for small-scale entrepreneurs, perhaps excluded from the wider labour market by language and other barriers.

2.6 As well as their mixed reputation from an economic perspective, and their impacts on the local environment, takeaways are of particular concern from a health perspective due to their propensity to serve unhealthy food, particularly deep fried food and other food which is mainly composed of high density carbohydrate and fat and lacking vitamin and fibre content. Takeaway foods are also often sold with sugar-heavy fizzy drinks. As well as the obesity statistics mentioned above, key diet-related health facts reported in the Joint Strategic Needs Assessment 2009 relevant to this are:

- One of the highest rates of diabetes in the country, a health risk compounded by the ethnic makeup of the population, which is already more vulnerable to diabetes\(^3\); in 2005-07 Newham had the 11\(^{th}\) highest rate of mortality from diabetes in the UK.
- Stroke has a much bigger impact on the morbidity of the people of Newham than would be expected for such a young population. People are having stroke much younger and many are dying or experiencing significant disability after a stroke.
- Rates for hospital admissions for congestive heart failure and coronary atherosclerosis (both cholesterol-related) in 2001/2-2008/9 were 50% higher than national rates, the 2\(^{nd}\) highest in London.

Spatial Analysis and Implications

2.7 Hot food takeaways are located throughout the borough, but are particularly clustered around major and district centres, such as East Ham, Stratford, Forest Gate and Green Street. In addition, main roads such as Barking Road, South Asian people are 6 times as more likely to develop diabetes, whilst those from an African or Caribbean background are 3 times more likely to develop it (LB Newham/NHS Newham, 2009).
High Street North (northwards from East Ham), Leyton Road (northwards from Stratford), Plaistow Road/High Street, and Romford Road (Manor Park section) also show a high concentration, with smaller clusters present on others such as Prince Regent Lane. These areas are the prime locations within Newham where the footfall and passing trade from buses and cars is constantly high, remaining busy throughout the day and into the evening. The shift in main food shopping from smaller shops to superstores has also meant that many Victorian and Edwardian-era shops are now surplus to retail requirements, and are available for other uses, which many local entrepreneurs have seen the potential of.

2.8 In contrast, areas of more recent development near West Ham/ Canning Town North, Beckton and North Woolwich show the lowest density of hot food takeaway outlets, which can be seen to relate to the lower availability of commercial units in these areas, as well as fewer attractors of passing trade. In addition, there is the influence of continued presence of large areas of unpopulated industrial and former industrial land around the Docks and Lower Lea Valley.

2.9 Overall the map shows that very little of residential Newham is not within a 5 minute walk of a takeaway, and in many areas cumulative impact must be a relevant consideration in assessing the acceptability of further takeaway development. Moreover, in assessing cumulative impact, both spatial proximity and catchment overlap should be considered, as impacts may be felt both in the immediate vicinity and in surrounding areas where people may pass en route to/from takeaways, dropping litter, creating noise etc. In health terms too, access to a choice of takeaways within 5 minutes’ walking distance may encourage more frequent purchase of takeaway food as people are bombarded with publicity, takeaways compete on price, and food preferences are more likely to be met.

2.10 At town centre level, East Ham, Green Street, Forest Gate and parts of Stratford and Canning Town all stand out as clear hot food takeaway hotspots, with large clusters evident. Green Street, East Ham and Forest Gate are most affected, particularly by clustering at the gateways of the town centre close to the town centre boundaries. This could have a negative impact on people’s impression of the town centre, which can seem to lack variety as well as suffer from littering/trade waste problems, late night crowds, and a deadening effect during the day when takeaways are often not open beyond lunchtime. Local centres including Abbey Arms, North Woolwich, Greengate and those in Plaistow can also be seen to be suffering from similar effects, as highlighted by GVA Grimley in the borough-wide Town Centre and Retail Study (2010).

2.11 Ironically, this distribution can be attributed to a large extent to long-standing policies seeking to protect the quality of the prime retail areas of town centres (primary shopping frontages). These policies have directed most changes of use from retail to other planning use classes (such as hot food takeaways) to more secondary, out of centre, and local centre units, which are also likely to be attractive to new businesses due to cheaper rents. Analysis of historic planning records also suggests that many outlets have had planning permission for takeaway use for many years, (even if more recently they have become chicken shops as opposed to other types of takeaway) partly due to the historic conflation of the A3 (restaurants and cafes) and A5 (hot food takeaways) use classes. It is likely that it was easier to get planning
permission for A3 use, before the growth in the fast food industry made it desirable to regulate them separately.

2.12 The legacy of this is that the distribution to a large extent can only be tackled indirectly. Key measures of this type include regeneration efforts, which should eventually result in other occupants of units or land more profitable; and other regulatory/management action seeking to better control the impacts of such premises, perhaps making them less viable. This may include stricter enforcement of planning permissions, trade waste agreements, and by-laws. Enforcement with economic implications may be particularly relevant given the high levels of clustering: it must be questionable that a business with 19 competitors within 5 minutes’ walk can be profitable.
2. Secondary Schools and Hot Food Takeaways

Explanation of mapping
2.13 The mapping described above was extended by adding the borough’s secondary schools and buffering these with a 5 minute walk distance (400m).

Background Data
2.14 In recent years, concern has grown particularly about children’s diet, and in Newham, that school-children, particularly those of secondary school age are key customers of takeaways. This is readily observable around school closing time, when they can be seen to leave a trail of litter in their wake. Indeed, surveys of young people in Newham indicate just how often they eat takeaways:

- 7% of young people responding to the Newham Household Panel Survey 2007/08 ate fast food every day, or nearly everyday, 42% about once a week.

- The 2010 Youth Survey of 13-14 year olds found that 12% of pupils surveyed eat fast food every day, or nearly everyday; 38% eat it about once a week.
2.15 This reflects observations made elsewhere in London by the Nutrition Policy Unit at London Metropolitan University (Sinclair and Winkler, 2008) which found that (particularly local, independent) takeaways near schools often adapt their offer to appeal to children e.g. with child-sized portions and prices, and more staff at school closing times. They also found that shops (including takeaways) near schools, particularly those at the end/start of journeys to school, were the most common source of food during the school day, even more so in schools allowing pupils out at lunchtime. Such outlets were used on average, once a day.

2.16 In Newham, high levels of takeaway consumption is of concern in relation to some key health facts, although it is acknowledged that it is not only takeaway consumption that is a contributing factor:

- In Year 6 children, levels of obesity are the 4th highest in London, (24.6% as opposed to 21.3%) significantly higher than the national average (18.3%) (National Child Measurement Programme, 2008/09).
- Diabetes is particularly related to obesity, and of serious concern is that type 2 diabetes, (usually related to diet) which doesn’t normally present until middle age, is being seen in teenagers who are overweight (LB Newham/NHS Newham 2009).
- Overweight children tend to become overweight adults, with associated health issues including higher rates of heart disease, cancer, hypertension, and orthopaedic problems (LB Newham/NHS Newham, 2009).

Spatial Analysis and Implications

2.17 All secondary schools are within 4-500m of at least one takeaway, and several schools are in key takeaway hotspots around Canning Town, Green Street, Forest Gate, Stratford and East Ham. These would benefit most from a policy stance focusing on cumulative impact, health education and the promotion of healthy options in existing takeaways. Generally, those in the south of the borough have less access to takeaways: these may benefit from a policy stance that is more restrictive of takeaway development in the vicinity of schools, as well as health education and the promotion of healthy options in existing takeaways. Such a policy stance has recently been supported by a high court decision in relation to a takeaway close to a school in Tower Hamlets, where the ruling indicated that proximity to a school was a relevant material consideration (Planning Resource, 14/6/10).

2.18 Most scope looking forward to prevent this kind of pattern developing in the future will be around new secondary school provision proposed in the Olympic Park, though it is also conceivable that this kind of mapping could be used as one consideration in school site scoping if any further sites are proposed in the south of the borough, or in the Lower Lea Valley. Beyond this, educational and school management measures will be important responses (see e.g. Sinclair and Winkler, 2009).

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4 Sinclair and Winkler (2008) also highlighted that of key concern was the sugar-heavy snacks and drinks bought from convenience stores close to schools. Physical activity is another key indicator of relevance, and this has shown improvements in recent years (LB Newham/NHS Newham, 2009).
3 Analysis - Access to Food Shops and Fresh Fruit & Vegetables

Figure 3: A1 (retail) Outlets Selling Food and Access to Shops Selling Fresh Fruit and Vegetables

Explanation of mapping
3.1 A1 food outlets (retail shops selling food, including markets) were defined using primary nature of business and planning classification in the dataset and these outlets were mapped to show their distribution.

3.2 The next step was to look at areas likely to have least access to outlets (which in some cases included non-A1 units) selling fresh fruit and vegetables by mapping overlapping outlet ‘catchments’. Using a catchment of 400m, a proxy for a 5 minute walk, it is possible to work out how many such A1 food outlets are accessible on this basis in one area – a type of spatial clustering. Spatial Analyst has been used to calculate this and translate it into a visual scale, whereby lighter blue areas indicate areas with highest density overlaps, and dark blue areas are effectively ‘healthy food deserts’ with no access to outlets selling fresh fruit and vegetables.
3.3 The greatest number of overlapping 400m catchments is 18 on Woodgrange Road, Forest Gate, whilst the average number of overlapping catchments is 7.6. Forest Gate generally has high overlaps, whilst 5 of the top 10 overlapping catchments are in East Ham (Barking Road).

Background Data

3.4 The total number of A1 food outlets in the borough is 446. The table below shows the counts of the different food types. Significantly, many (over 90%) are independent shops rather than part of the ‘big 4’ (Tesco, Sainsbury, Asda, Morrisons) or other larger multiples (Iceland, Co-op/Somerfield, Londis, Lidl etc), and whilst only a small proportion (approx. 8%) are specialised vendors of fruit and vegetables, many offer some fresh fruit and vegetables for sale (around 50%) as do some other types of outlets. However, in many cases, this is priced by the bowl or bag, rather than by weight as would be legally-compliant.

3.5 This pattern mirrors the London-wide picture, whereby diverse, specialist ethnic retail needs and the ‘24 hour city’ pattern of living is reflected in a well-populated local convenience sector. Further links can be made with the availability of cheap, family labour, and the relative ease of start-up: ideal for small-scale entrepreneurs, perhaps excluded from the wider labour market by language and other barriers. In Newham, the support for this form of retail is evidenced by a recent survey undertaken as part of the borough-wide Town Centre and Retail Study, which identified widespread usage of independent shops (including markets) both within and outside defined centres, for day to day and specialist ethnic retail needs (GVA Grimley, 2010).

3.6 In terms of diet, low levels of fruit and vegetable consumption across the population is a health concern in Newham (LB Newham/NHS Newham 2009). Key statistics are:
- Less than a third of respondents to the Newham Household Panel Survey 2007/09 ate their 5 a day recommended amount of fruit and vegetables, and one quarter ate it only once or twice a week or less.
- According to the 2007/08 Tellus Survey of young people, only 19% of children and young people in Newham are achieving their recommended 5 a day, compared to 23% nationally, and 6% do not have any in contrast to 4% nationally.
- 43% of 13-14 year olds surveyed in the 2010 youth survey eat fresh fruit and vegetables only once a week or less.
Moreover, it is thought that generally such surveys over-state rather than under-state healthy food consumption.

Spatial Analysis and Implications

3.7 Similar to the spatial distribution of hot food takeaways, the distribution of A1 food outlets reflects the distribution of town and local centres, with notable clusters in Forest Gate, East Ham, Green Street and Stratford, East Beckton.
and Canning Town have fewer however, reflecting Stratford’s stronger position as a comparison shopping destination, with fewer small shops, and Canning Town and East Beckton’s general weaknesses, with Canning Town having suffered considerable decline, and East Beckton dominated by Asda. In addition, main roads such as Barking Road, High Street North and South (north/south of East Ham), Leyton Road, (north of Stratford), Prince Regent Lane, (south of the A13 Newham Way) Plaistow Road/High Street, and Romford Road also show good levels of foodstore provision. Again these are the prime locations in relation to footfall, passing trade and linked trips, and we also see the legacy of extensive networks of smaller shops within the fabric of Victorian and Edwardian residential areas, as well as local entrepreneurialism.

3.8 However, the findings also show that whilst true healthy food ‘deserts’ are rare for the most part, (the darkest blue areas are unpopulated currently) large areas of the southern and western parts of the borough are less well served by the 400m catchment of outlets selling fresh fruit and vegetables. This mirrors the general lack of A1 food outlets overall in this area. As with takeaways, this can again be related to the nature of the urban structure, and less passing trade. This is all the more significant due to the barrier effect of the docks, A13 and the general impermeable urban structure, which inhibits easy access to the better-served areas. In addition, it is notable that many of the shops selling fresh fruit and vegetables in this part of the borough are larger supermarkets, detached from residential areas rather than small stores within local neighbourhoods, particularly in the East Beckton area and beyond. This suggests that people in the south of the borough are more likely to shop by car or public transport, rather than cheaper, more active modes, with implications both for health, affordability and sustainability. Indeed, southern residents may also be less likely to access fresh foodstuffs used to make traditional ethnic meals, as the specialist fresh food ranges of such shops may be smaller.

3.9 There are additional pockets of poor access to healthy food in the north/north-east of the borough. However, these may be of less concern as in this area people are probably more likely to be prepared to walk more than 400m to larger centres to access fresh food. Following this logic though does suggest that the convenience offer of these centres, including smaller shops (not just supermarkets) is something that continues to be important and deserving of protection. The long-standing policy objectives to create new local centres close to West Ham and Plaistow stations also appear to be of continued relevance in this context, enabling people to easily buy food as part of other journeys they need to make within their day. It may similarly be appropriate to work to improve existing local centres at key current and future transport nodes, such as Manor Park, Freemasons Road/Custom House and to consider the further scope for local centres in relation to new DLR stations in the west of the borough. Likewise, at a more local level, it may be appropriate to protect some groups of shops outside current designated centres but filling important gaps in the network with a local shopping parade designation (e.g. groups of shops along Katherine Road, which falls between the town centres of East Ham and Green Street).

3.10 Beyond this, there is also scope to work with some food shops that can be seen on the above map close to some healthy food deserts, that don’t currently sell fruit and vegetables, to encourage them to do so. Two stores
are immediately obvious targets for this kind of work – one to the east of North Woolwich, and one on Prince Regent Lane between Newham Way and Barking Road, to the north east of Canning Town (both sited within the darkest blue areas). Where improvements to local centre provision are not planned, in the next tier of less-well served areas it may also be appropriate to protect existing shops that are clearly important, (perhaps with encouragement) or potentially important in meeting food needs. These may either be isolated shops, or, where clustered, potential new local shopping parades. This is likely to apply particularly in (western and southern parts of) Beckton, southern parts of East Ham and Plaistow and parts of North Woolwich/Silvertown. Equally, where new development is proposed in this area, the suitability of including small scale retail provision for local needs could also be considered in relation to the need indicated on this map. However, the potential of mobile facilities should also not be ignored: Community Food Enterprise currently operates a mobile food outlet in Newham that visits a number of locations in West Ham, Canning Town, Forest Gate and Plaistow\(^5\).

\(^5\) A current timetable can be downloaded from [http://www.c-f-e.org.uk/pages/content/index.asp?PageID=49](http://www.c-f-e.org.uk/pages/content/index.asp?PageID=49)
4 Analysis – Cheap Alcohol Hot Spots

Figure 4: Distribution of Outlets Selling Low Cost Alcohol

Explanation of mapping

4.1 Alcohol outlets were defined using the primary nature of business classification in the dataset, (both shops and bars/pubs) which were filtered to display only those that were selling lager or wine at less than the Government Chief Medical Officer’s recommended minimum prices of 50p per unit. These outlets were mapped to show locational clustering (i.e. indicated by groups of yellow dots).

4.2 The next step was to look at areas likely to be most affected by the availability of cheap alcohol, by mapping overlapping cheap alcohol outlet ‘catchments’. Using a catchment of 400m, a proxy for a 5 minute walk, it is possible to work out how many such cheap alcohol outlets are accessible on this basis in one area – a type of spatial clustering. Spatial Analyst has been used to calculate this and translate it into a visual scale, whereby darker red areas indicate areas with highest density overlaps/ hotspot.

4.3 The average number of catchment overlaps is 5.9, whilst the maximum number is 15 on Plaistow Road. The top 10 overlapping catchments are all on Plaistow Road and East Ham (High St/Barking Road junction area).
**Background Data**

4.4 The total number of cheap alcohol outlets in the borough is 218, and accounts for most of the outlets for which we have price data for (this is only a proportion of the 363 outlets recording in the dataset selling alcohol).

4.5 The cheap price of alcohol is also of concern in its link to excessive drinking, and associated crime, anti-social behaviour and health impacts, including A&E admissions. Awareness of the effects of alcohol on health is increasing, however the data on who drinks and how much people drink is patchy, often relying on synthetic estimates derived from national survey data, or on small local surveys which may not be very reliable. Thus, whilst synthetic estimates suggest that Newham has the lowest number of hazardous drinkers in England (14.1% of over 16 year olds) statistics produced by the North West Public Health Observatory (NWPHO), suggest that Newham has the 3rd highest rate of alcohol-related hospital admissions in London, and 50th highest nationally, a rate 23% above the English average (2008-09 figures from NHS Newham, forthcoming).

4.6 This also indicates a connection between alcohol and violent behaviour, as is unpacked further in the draft Newham Alcohol Harm Reduction Strategy (LB Newham, forthcoming). This highlights that Newham has the second highest rate of serious violent crime in London, (2008-09 figures) and it was estimated that alcohol was a factor in around 44% of cases, echoing research by Gorman et al (2001) which found that high alcohol outlet densities were associated with high rates of violent crime. The draft Alcohol Harm Reduction Strategy also identifies various hotspots of such crime, including Stratford/West Ham, Barking Road (Canning Town/Plaistow) and Woodgrange (Forest Gate).

**Spatial Analysis and Implications**

4.7 The map shows extensive availability of cheap alcohol across the borough, as well as extensive clustering, particularly in the northern part of the borough and along main roads. This pattern echoes the availability of retail outlets discussed above, and can also be also be seen to mirror the distribution of hot food takeaway outlets, which in business terms can be seen as complementary, meaning co-clustering is advantageous. It can also be seen to largely correspond to the pattern of violent crime hotspots identified.

4.8 Significantly, clustering tends to be more visible when catchments are overlapped than in terms of immediate proximity. Considering this type of proximity (less than 5 minutes’ walk time between outlets) emphasises that cumulative impact is not just experienced in immediate proximity to outlets, but along a street/centre as a whole, and beyond it into residential areas.

4.9 In the pattern in relation to town centres which sees Forest Gate, Green Street and East Ham having the greatest availability of cheap alcohol outlets, the continued influence of small shops and local entrepreneurship responding to particular demands in these centres is evident. Elsewhere, we also see the strength of Stratford, such that lower-cost convenience stores have been
priced out in favour of comparison goods and a higher order convenience and food and drink offer, as well as the dominance of Asda in the East Beckton centre which has excluded other outlets.

4.10 Spatial interventions implied by this distribution relate to consideration of cumulative impact in planning and licensing and continued pursuit of the regeneration of town centres, encouraging retailers to move towards the sale of higher-value goods, and pubs to compete on quality factors rather than price. Ultimately however, national price regulation may be indicated as the key intervention to secure more widespread impact.
5 Conclusions & Recommendations

The distribution of healthy and unhealthy food outlets in Newham

5.1 Overall it can be seen that much of the borough is affected by high levels of either access to certain types of unhealthy food (and drink) or poor access to healthy fresh foods, according to our proxy measures. Interestingly, there is much better access to cheap alcohol vendors than to shops selling fresh fruit and vegetables, which undoubtedly reflects the perceived greater profitability of this area of the convenience sector. Given Newham’s health statistics, we can assume that both of these distributions influence food choices, by capturing not only physical access, but also:

- affordability (cheap alcohol);
- acceptability (people commonly seen to be consuming such foods/drink, due to ease of access, influencing cultural acceptability, also more outlets mean people’s taste preferences are more likely to be met); and
- awareness (visibility within the local area);

making it more likely that an unhealthy diet will be pursued.

5.2 These two categories follow a broad north/south divide (the north being the place of hot spots, and the south the area of coldspots) but with West Ham/north Canning Town and other parts of the regeneration area of Lea Valley falling within the southern, poor access category. This distribution reflects the borough’s urban structure and development patterns. It means that the north is most affected by the externalities associated with the sale of hot food takeaways and low cost alcohol, whilst the south is more generally affected by poor access to community infrastructure. In this respect however, the south (and other regeneration areas) represent more of a blank slate where there is the opportunity to influence on the basis of more informed policy stances, whilst the in north the stance will relate more to managing the existing situation better.

Policy and project work implications

5.3 As highlighted in previous reports (LB Newham, 2008, 2009) whilst planning has a key role to play in tackling the implications of these distributions, it has its limitations. These relate to its powers being largely concerned with shaping future investment, rather than able to influence existing distributions, and also the inability to regulate the type of goods sold within particular use classes, except in very particular circumstances (out of town development). Therefore, this section details recommendations to extend the positive influence of planning within this agenda as far as possible, whilst acknowledging the actual and potential roles of other partners both within and outside the Council.
a) Planning

5.4 This report and associated datasets provide an evidence base of use both in development control casework (including enforcement) and planning policy development work. The mapping data will be a key tool to bolster the application of current policy as regards town centre vitality and viability, and hot food takeaway/bar acceptability by giving evidence relating to potential areas likely to be suffering from cumulative impacts. This highlights the importance of keeping the mapping data up-to-date, potentially supplementing it with extant but unimplemented permissions for relevant use classes. The data can also be used to identify target areas for proactive enforcement work; checking premises have planning permission for the relevant use class, and on the basis of site visits, whether they are complying with any planning conditions.

5.5 Recommendations are therefore to:
   i) Make use of the data in planning decision-making and enforcement work.
   ii) Ensure that the data is kept up to date, and investigate the feasibility of supplementing it with extant but unimplemented planning permissions.

5.6 In addition the analysis in the preceding chapters has highlighted some key areas for new, or more sophisticated planning policy interventions, bearing in mind the indirect impacts of some planning policies with other aims on these distributions.

On this basis, the following policy recommendations can be made:
   iii) Cumulative impact – more explicitly refer to cumulative impact considerations (from locational clustering and catchment overlap) in policies regarding new hot food takeaways and pubs/bars, and refer to existing problems of cumulative impact in town centre visions and policies.
   iv) Town centre vitality and viability - recognise the significance of gateways as well as primary/secondary shopping frontage in town centre visions and policies; continue to promote town centre regeneration and diversification to reduce the dominance of existing unhealthy ‘hot spots’.
   v) Local centre vitality and viability – recognise that local centres can also suffer from vitality and viability issues, and need to be managed to ensure a mix of uses are maintained within them, rather than allowing dominance of any one use. This is relevant in managing existing town centres and in planning new ones.
   vi) School children’s access to hot food takeaways - seek to restrict new takeaways opening in the vicinity of secondary schools, and consider existing takeaway clusters in scoping sites suitable for new schools.
   vii) Convenience retail role of town centres – recognise the important (fresh) food access role of the borough’s town centre shops and markets, and that promotion of more comparison or leisure floorspace can potentially crowd this out.
   viii) New and enhanced local centre provision in accessible locations - continue to pursue new local centre provision at West Ham and Plaistow stations, together with other accessible locations as appropriate, to maximise access to fresh fruit and vegetables on
sale, and provide extra demand to support viability from passengers not necessarily from the immediate vicinity.

i

New local shopping provision – consideration should be given, with an understanding of viability and retail impact, to securing new sites for retail development as part of small windfall sites, or larger development proposals in areas otherwise poorly served by existing or planned food retail. It will be important that these are well-thought out in their siting and location to maximise local access.

x

Local shopping parade designation – protect smaller clusters of shops providing access or potential access to healthy food, by recognising them with a new designation, where they are not suitable locations for local centres.

xi

Protection of isolated shops – consider the need to protect small shops in areas of poor healthy food access and a lack of other proposed retail development/enhancement.

xii

Facilitate mobile shops – ensure new street/neighbourhood designs incorporate suitable locations for mobile shops in areas of otherwise poor access to food stores.

xiii

Food access as an important component of healthy urban planning - in considering healthy urban planning more broadly, where relevant in health impact assessment, food access as mapped here should be an important component.

b) Health Partnerships/NHS Newham

5.7 Given the limitations of planning, work needs to be directed at individual factors (knowledge, beliefs and habits), as well as the other structural factors relating to access, costs and availability. Eating and drinking habits are formed at an early age, so work with children and young people is particularly crucial. The report provides the opportunity to target interventions to bring about sustained behaviour change. Coupled with better access, this will enable individuals to make healthy choices.

5.8 Therefore recommendations are:

xiv) Undertake further analysis of data and mapping against health data to determine any other underlying issues and target interventions accordingly (see below).

xv) Actively promote the Healthy Start scheme to residents and retailers selling a reasonable range of fresh fruit and vegetables.

xvi) Continue to develop a good understanding of the population's knowledge, beliefs, motivators and barriers to behaviour change.

xvii) Engage and work in partnership with schools, particularly secondary schools

- target those schools that close early, as some children in these schools are known to have an early lunch and have a takeaway on the way home;
- encourage schools to engage with local takeaways to sell healthier food;
- educate about the cost of takeaways versus the cost of healthy food and where affordable healthy food can be bought;
- promote of food growing, cookery lessons;
- devise peer champions to promote healthy behaviour.

xviii) Engage with and educate parents

6 Healthy Start is an NHS scheme which gives pregnant women and parents with children under 4 on certain benefits free vouchers which can be exchanged in participating shops for fresh fruit and vegetables and milk. See http://www.healthystart.nhs.uk/
- that the afterschool club healthy food offer negates need for takeaway on the way home
- about the need for physical activity and implications of unhealthy food consumption
- promote cooking and eating home-cooked meals together as a family
  xix) Link in with other programmes/interventions in the borough; i.e. Hearty Lives Newham

c) Business Development
5.9 There are various possible Business Development opportunities that may be taken forward in response to the evidence presented within this study. These could include working with retailers to improve availability of fresh food in residential areas that have been identified as cold spots, for instance by promoting a greater understanding of stock rotation and logistics management needed to effectively sell fresh goods, and the Healthy Start vouchers scheme. It is likely that such projects would be undertaken in partnership with others however (e.g. Newham Food Access Partnership – see below) given lack of internal/standalone funding.

5.10 Thus an appropriate recommendation for this team is to:
  xx) Help to develop and publicise projects relating to access to healthy/healthier foods with a business development dimension, targeting them as appropriate through this dataset.

d) Newham Food Access Partnership (NFAP)
5.11 As with other steering group members, the provision of a comprehensive database concerning the sale of food across the borough enables projects to be targeted at more businesses, and an evidence base to justify and target new projects. NFAP recognises the need for retail support and business development but also the importance of delivering education to residents to ensure they literally ‘buy into’ any commercial pro-food access changes helping to ensure they are viable.

5.12 The key project of relevance here is the Healthier Options Awards Scheme in partnership with LB Newham and Health Works, which provides support to cafes, restaurants, and takeaways, as well as lunch-clubs, pre-school groups etc to use healthier cooking practices and provide healthier options on their menus. NFAP are also currently looking to develop the Buy Well project piloted in Tower Hamlets, supporting independent retailers (normally convenience stores) to increase provision of fresh fruit and vegetables. Early results from this pilot show an increase in sales of fresh produce in the immediate catchment of the retailer as well as an increase in revenue for the store. Importantly, in undertaking such work, NFAP are in regular contact with both outlets selling food, and local communities, providing another layer of

5.13 Thus the following recommendations apply to NFAP:
  xxii) Help to ensure that the dataset is kept up to date by reporting to the Council any outlet openings/closures that are observed in the course of project work.
xxiii) Continue to work with the Council and other partners to supplement the locational information in the dataset with other intelligence regarding food access and needs.

e) Other service areas and partners

5.14 Other potential users and uses of this data that have been identified include:

- Food health and licensing teams – to review the extent that outlets identified are licensed as food handling and have been inspected for food safety compliance.
- Licensing – to review the extent that outlets identified as vendors of alcohol are licensed and compliant.
- Strategic Service Planning and Improvement – to add to the evidence base used to compile the Alcohol Harm Reduction Strategy and associated action/implementation plans.
- Trade Waste - to review the extent that outlets identified have appropriate trade waste arrangements in place.
- Operational Corporate Enforcement Group – to help plan/target further enforcement work (e.g. around the hot spots where legal profitable operation may be questionable).
- Community Food Enterprise and others involved in social food outlets could use the data, and further work on affordability, quality etc (see below) to review the provision of these outlets, taking forward previous work undertaken in 2004-5

5.15 As such, another important recommendation for the project steering group is to:

xxiv) Promote the awareness and use of the dataset across the Council and its partners to ensure its wider potential is explored, and wider intelligence is drawn upon to develop it and keep it up to date.

Further mapping work and research potential

5.16 The maps in this document are just some that can be generated from the dataset, which also includes information about price of fruit and vegetables, their quality and range, although, as pointed out above, this may be less reliable than that mapped here. There is undoubtedly further analysis that could also be done against health statistics, where these can be obtained on a small enough spatial scale, to potentially make more robust causal arguments. Other environmental causes of poor health such as levels of air pollution, noise, access to greenspace and so on might also be relevant to this exercise. Likewise, a local definition of affordability could be investigated to supplement work on price, and further work to complete the data on menus/healthy food options in takeaways, and to look at sale of crisps, sweets and chocolates close to schools would help support some of the projects above.

5.17 Another direction to take would be to further the research to consider wider dimensions to food access, such as food growing, and access to culturally-appropriate fresh foods (e.g. halal meat, fruit and vegetables important to particular ethnic diets). NFAP are in fact currently scoping some work on food growing in Newham, taking their cue from the Capital Growth project being promoted by Sustain. This will usefully complement the focus here on businesses as sources of food, and should be able to draw on the recent open space survey undertaken by spatial planning as part of the Infrastructure Study. In turn, this will help move the work towards the wider remits of ‘food
planning’ and ‘healthy urban planning’, which include consideration of for instance, the environmental impacts of food supply\textsuperscript{7}, and planning for accessible open space provision and other community infrastructure to encourage more active lifestyles\textsuperscript{8}.

\textsuperscript{7} See for instance, the London Food Strategy (Mayor of London, 2006)
\textsuperscript{8} See for instance, NHS London (2009)
References


The following are corporate surveys, and more information is available from the Corporate Research Team:

Newham Household Panel Survey 2007/08
Tellus Survey 2007/08
Youth Survey 2010

The latest health statistics quoted are available from the Health Partnerships Team, but will also be included within the 2010 Joint Strategic Needs Assessment.