Competition Commission

Somerfield / Morrisons Inquiry

Verification and Independent Analysis

Summary of Results

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EXECUTIVE SUMMARY

GeoBusiness has undertaken a verification of the local competition analysis produced for the Somerfield/Morrison Inquiry.

In addition GeoBusiness have provided extensive independent analysis of the local competition for the 115 acquired stores under investigation.

The analysis consisted of four steps. At each step a store was either determined to be a potential issue or was passed on to the next step of the analysis.

The first step concerned an examination of the number of competing fascias within the drive time limit of the acquired store, the extent of the drive time limit being determined by the size and location of the acquired store.

The following table summaries the drive time limit definitions:

Store type			Location	Drive time limit
Convenience	Less than 280 sqm	Less than ~3000 sqft	Urban	1mile radius
Convenience	Less than 280 sqm	Less than ~3000 sqft	Rural	1mile radius
Mid-range	280 sqm to 1400 sqm	~3000 sqft to ~15000 sqft	Urban	5 minutes
Mid-range	280 sqm to 1400 sqm	~3000 sqft to ~15000 sqft	Rural	10 minutes
One-stop	1400 sqm or larger	~15000 sqft or larger	Urban	10 minutes
One-stop	1400 sqm or larger	~15000 sqft or larger	Rural	15 minutes

The second, third and fourth steps perform identical analysis around effective competitor stores, population centres and census output areas, respectively, that lie within the drive time limit of the acquired store.

An acquired store was raised as a potential problem if there was a reduction in effective competitor fascias around the location of interest (i.e. within the drive time limit around the acquired store, within the drive time limit around each census output area in output area re-centring etc.) of 4 to 3, 3 to 2 or 2 to 1.

GeoBusiness found 32 stores to be potential problems after the completion of the analysis centred on the acquired store, an additional 8 stores after competition re-centring, one more after population re-centring and finally an additional 26 after output area re-centring.

The total number of potential problem stores found by GeoBusiness is then 67. These are listed in Table 20 in the report.

Further analysis is provided in the form of the fraction of the population affected by a fascia-reduction due to the acquisition and also an analysis of the change in the HHI measure of competition before and after acquisition. Both these measures confirmed the earlier analysis and can give further insights into those stores on the borderline.

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1 INTRODUCTION

1.1 Background

This document relates to the acquisition by Somerfield plc of 115 stores from William Morrison Supermarkets plc.

The acquisition has been referred to the Competition Commission ("CC") by the Office of Fair Trading ("the OFT").

The Competition Commission commissioned GeoBusiness Solutions ("GeoBusiness", "GBS") to carry out the following work as part of the inquiry:

- Verification of the local competition analysis undertaken by Somerfield.
- Verification of the subsequent local competition analysis undertaken by the OFT
- Carry out an independent analysis based on existing Competition Commission rules for local competition analysis.

The principle objective of these requirements is to:

- Identify which of the 115 stores are deemed to be competition issues and subsequently divestment opportunities, based on the current ruling.

1.2 Scope and Purpose of Document

This document provides a discussion on the verification of the Somerfield and OFT analysis and the independent analysis conducted by GeoBusiness.

Section 2 discusses the results of the verification exercise and highlights any significant differences.

Section 3 provides a summary and discussion on the independent analysis conducted by GeoBusiness.

Section 4 provides details of the provided spreadsheets with a brief description of their contents.

Appendix A provides the results of the analysis in tabular form. Where applicable the tables contain columns that describe whether or not that store has been raised as an issue by the OFT or by the CC (the column contains the number "1" or a blank if it is an issue or not respectively). The later tables also contain columns that describe at what stage of the analysis the store is raised as an issue.

Note: All store sizes in this document are given in square feet.

1.3 Glossary of Terms and Abbreviations

A list of the terms and abbreviations used within this document:

One-stop store	Stores of at least 1,400 square metres sales area (15,000 sq feet). These stores cater for the full range of grocery shopping trips, including convenience shopping and One-stop shopping
Mid-range store	Stores of at least 280 square metres sales area but less

	than 1,400 square metres sales area (3,000 to 15,000 sq feet)
Convenience store	Stores of less than 280 square metres sales area. Also referred to as 'small' stores. These stores carry a limited product range of predominantly convenience or 'impulse' goods
'Smaller store'	Term adopted by the Competition Commission to describe any store smaller than a One-stop store
DLUA	Developed Land Use Areas
IGD	Institute of Grocery Distribution
ONS	Office for National Statistics
ODPM	Office for the Deputy Prime Minister
PAF	Postal Address File
'Point-in-polygon'	The assignment of data held as geographical 'point' locations to boundaries (polygons). For example, to calculate the number of people within an area.

2 VERIFICATION

GeoBusiness performed a verification exercise in the following areas relating to the Somerfield and OFT analysis:

2.1 Drive time comparison

GeoBusiness compared the drive time matrix supplied by Somerfield to the OFT with the drive time matrix supplied by Somerfield to the CC.
A number of differences were found the detail of which is contained in the spreadsheet “DrivetimeComparison.xls” and the document “DrivetimeComparison.doc”. Here we will summarise the results.

These files contained the store-to-store drive times from all the acquired stores, which we label as “source”, to all stores (i.e. all competitor stores, all Somerfield stores and all the acquired stores), which we label as “destination”.

2.1.1 Destination stores

There are a number of differences between the two files regarding the destination stores i.e. those stores that could lie within the drive time limit of the acquired stores. It is not clear why these differences exist but could simply be due to the opening and closing of stores in the time between the creations of each file.

There are 7 Somerfield stores and 1 competitor store (a Tesco) that appear as destination stores in the matrix submitted to the OFT but not in the matrix submitted to the CC (see Table 2 in Appendix A).

There are 40 acquired stores that appear as destination stores in the matrix submitted to the CC that do not appear as destination stores in the matrix submitted to the OFT (see Table 3). The acquired stores, it appears, were not used as destination stores in the OFT file. However in terms of the acquired store-centred fascia-reduction analysis this would not alter the results. It may have impacted on the latter stages of the analysis. However we understand that the interested parties did not complete this part of the analysis.

Also there are 6 competitor stores (2 Tesco stores, an Asda, a Kwik Save, an Iceland and a Safeway) and one Somerfield store that appear as destination stores in the matrix submitted to the CC that do not appear in the matrix submitted to the OFT (see Table 4). These may simply be due to opening/closing and sale of existing stores.

2.1.2 Source to Destination store combinations

Each entry in the drive time matrices represents the time taken to get from the source (acquired store) to the destination (a competitor, Somerfield or a different acquired store). This section provides a summary of those combinations that are different between the matrices.

The OFT matrix provided drive times up to, but not including, 15 minutes. The CC matrix has drive times up to 30 minutes. To perform this comparison GeoBusiness compared the 15 min OFT matrix with those entries in the CC matrix of 15 minutes drive time or less.

The large majority of differences between the matrices are due to those stores highlighted above i.e. the difference in the drive time matrix occurs due to a different set of competitors.

There are seven Somerfield stores and one Tesco store that appear in the OFT matrix but not in the CC matrix. These are the same eight stores that are described in the previous section.

When considering those stores that appear in the CC matrix but not the OFT file we see three distinct groups. The first are those stores listed in the previous section i.e. these differences in the matrices are due to a different set of competitors used in the drive time software. These are 40 of the acquired stores, two Tesco stores, one Asda, one Kwik Save, one Iceland, one Safeway and one Somerfield store. These 47 stores lead to 86 additional rows (some stores appear within the drive time limit of more than one acquired store).

There are seven rows in the CC matrix that do not appear in the OFT matrix due to a difference in the location used for the Leeds - Chapel Allerton store in each drive time matrix. This discrepancy will be examined in the following section.

It should be noted that the OFT matrix only includes stores with a drive time of strictly less than 15 minutes i.e. a store with a drive time of 15 minutes would be excluded from the OFT submission.

2.1.3 [✂]

When comparing the two drive time matrices it was noted that for one store, [✂], it appears that the store location used was different between each run. The OFT file appears to be based around the postcode of the store i.e. [✂]. The CC file has used a different location that GeoBusiness are unable to identify. GeoBusiness cannot determine which location is “correct” but have based our drive times on the location determined by the postcode [✂].
The additional stores that appear in the CC file but not the OFT file are given in Table 5.

In terms of the acquired store-centred analysis the issue remains the same i.e. a 4 to 3 fascia reduction. However the stores involved are different in each case.

Within the drive time limit the CC file contains three Somerfield owned stores, a Co-op and a Tesco. The OFT file contains one Somerfield one Sainsbury store and one Co-op.

2.2 Comparison of Urban/Rural definitions.

GeoBusiness has performed a comparison between urban/rural allocations of stores as provided by Somerfield, and that determined using ODPM settlement area boundaries (see section 3.3 for fuller explanation) and assuming a minimum population of 10,000 (census 2001) for an area to classify as urban. Of the 115 stores, 13 were found to differ, of which 12 were classified as urban using ODPM boundaries and as rural in the Somerfield data and 1 defined as rural using ODPM boundaries but urban in the Somerfield data (see Table 6). The implications of these differences will be discussed later in this document.

3 INDEPENDENT ANALYSIS

3.1 Overview

The methodology used by the Competition Commission to assess the local competition problems in the recent inquiry into the potential merger of Safeway Stores Ltd with Asda (Wal-Mart), Wm Morrison, J Sainsbury and Tesco forms the basis of the GeoBusiness analysis with a few minor changes. The most significant is the use of point-to-point drive times rather than isochrones. In an isochrone analysis the isochrone determines the extent of, say, a 10-minute drive time in any direction, Point-to-point drive times provided the time (or distance) between two points. This approach reduces the computation time without any loss of accuracy.

The first stage is to determine the store type based on sales area, i.e. One-stop, Mid-range or Convenience. The second stage is to determine the location i.e. whether or not the store is in an urban or rural setting. These two attributes determine the drive time limit within which the majority of a store's custom is assumed to travel as described in Table 1.

Store type	Location type	Drive time/distance limit
Convenience	Urban	1mile radius
Convenience	Rural	1mile radius
Mid-range	Urban	5 minutes
Mid-range	Rural	10 minutes
One-stop	Urban	10 minutes
One-stop	Rural	15 minutes

Table 1 Drive Time/Distance limits by store type and location type

The next stage of the analysis is to perform a fascia-reduction analysis about four different types of location for each acquired store: the acquired store itself; local competitor stores; local population centres; and Census Output Areas.

To perform a fascia-reduction analysis about a particular location the drive time from that location to all stores in the vicinity are calculated. The fascias of all stores whose drive time is less than the drive time limit are then determined. If the acquisition results in a reduction in the number of fascias from 4 to 3, 3 to 2 or 2 to 1 it is considered a potential issue.

The following locations are then used as centres:

- **Acquired store.** The first step is to perform a fascia-reduction analysis centred on the acquired store. If the store is flagged as an issue in this step it is added to the potential problem list. If it is not flagged it goes on to the next stage of the analysis.
- **Competitor store.** A fascia-reduction analysis is performed about each of the effective competitors determined in the previous step. If the store is flagged as an issue it is added to the potential problems list, if not it goes on to the next step.
- **Population.** A fascia-reduction analysis is performed about any population centre within the drive time limit of the acquired store. If the acquired

store is flagged as an issue under this analysis it is added to the problem stores list. If not it goes on to the final stage.

- **Census Output Area.** The final stage is output area re-centring. A fascia-reduction analysis is performed about every Census Output Area within the drive time limit of the acquired store. If the acquired store in question is flagged as an issue after this analysis it is added to the problem store list. If it is not considered a problem at this stage it is not considered a problem at all.

The following sections will describe the results of the GeoBusiness analysis. The stores that are raised as issues will be given at each stage along with CC and OFT opinions on those stores.

3.2 Store Type Definitions

Each store is defined as one of three types: One-stop, Mid-range and Convenience.

If a store has a sales area of greater than, or equal to, 1400 square metres it is defined as “One-Stop”. If a store has a sales area of between 280 square metres and 1400 square metres it is defined as “Mid-Range”. A store less than 280 square metres is defined as “Convenience”.

GeoBusiness, using the store sizes provided by Somerfield, have found there to be 101 Mid-range stores, 12 One-Stop stores and 2 Convenience stores.

At this stage we note that the submission to the CC and OFT has three convenience stores listed. The store in question is Maybole, which GeoBusiness has classified as Mid-Range. For completeness GeoBusiness conducted analysis for this store under both definitions and it was found not to be an issue in either case.

In summary, with the exception of Maybole, all the stores are classified the same way by GeoBusiness and in the provided CC and OFT files.

3.3 Urban and Rural Definitions

3.3.1 Definition of urban and rural areas

The definition of urban and rural areas adopted by GeoBusiness follows that laid out by the Competition Commission in the Safeway inquiry[1]. An urban area will be defined as an area with a population of at least 10,000 (Census 2001). A rural area is any area not defined as urban.

3.3.2 Identifying urban areas in England and Wales

Settlement area boundaries for 2001, as issued by the ODPM for England and Wales, have been used by GeoBusiness to identify an area for consideration. Areas with a (Census 2001) population of at least 10,000 are classified as urban.

[1] Safeway plc and Asda Group Limited (owned by Wal-Mart Stores Inc); Wm Morrison Supermarkets PLC; J Sainsbury plc; and Tesco plc: A report on the mergers in contemplation http://www.competition-commission.org.uk/rep_pub/reports/2003/481safeway.htm

3.3.3 Identifying urban areas in Scotland

ODPM Settlement boundaries do not exist for Scotland. GeoBusiness have used Developed Land Use Area boundaries (DLUAs) as defined by the Ordnance Survey. The population for these DLUAs has been defined using a "Point-in-Polygon" process of allocation of 2001 Census population figures to each DLUA.

As for England and Wales, an urban area is defined as a DLUA with a population of at least 10,000.

3.4 Effective Competition Definitions

For the competitor re-centring the effective competitor set is dependant on the acquired store type and is defined as follows.

3.4.1 Effective competition for One-Stop stores

When the acquired store is defined as One-Stop the effective competition is will be defined as all stores of 1,400 square metres (or at least 75% of the acquired store under consideration) or larger, belonging to: Asda, Booth, Budgens, Co-op, Morrisons, Sainsbury's, Somerfield, Tesco and Waitrose. Iceland is not considered a competitor for one-stop stores

3.4.2 Effective competition for Mid-Range stores

When the acquired store is defined as Mid-Range the effective competitor stores are defined as all stores of 280 square metres or larger, belonging to: Asda, Booth, Budgens, Co-op, Iceland, Morrisons, Sainsbury's, Somerfield, Tesco and Waitrose.

Note: there is no 75% of the acquired store rule for the mid-range analysis.

3.4.3 Effective competition for Convenience stores

When the acquired store is defined as Convenience the effective competitor stores are defined as all stores, irrespective of size, belonging to: Asda, Booth, Budgens, Co-op, Iceland, Morrisons, Sainsbury's, Somerfield, Tesco and Waitrose.

3.5 Population Definitions

Settlement area boundaries for 2001, as issued by the ODPM for England and Wales, have been used by GeoBusiness to identify areas to act as centres for population re-centring. Each population centre must have a (Census 2001) population of at least 5,000 to be valid.

As for the definition of urban areas ODPM Settlement boundaries do not exist for Scotland. GeoBusiness have used Developed Land Use Area boundaries (DLUAs) as defined by the Ordnance Survey. The population for these DLUAs has been defined using a "Point-in-Polygon" process of allocation of 2001 Census population figures to each DLUA.

As for the ODPM boundaries each DLUA must have a population of at least 5,000 to be valid.

3.6 Output Area Definitions

Census Output Areas were specifically designed for the 2001 census and represent areas of approximately equal population and hence are a useful geographic unit to use when the considering the impact of an acquisition on the general population.

3.7 One-stop store analysis

One-Stop stores are defined as any store of at least 1,400 square metres sales area.

Effective competitors will be defined as all stores of 1,400 square metres (or at least 75% of the acquired store under consideration) or larger, belonging to: Asda, Booth, Budgens, Co-op, Morrisons, Sainsbury's, Somerfield, Tesco and Waitrose. Iceland is not considered a competitor for one-stop stores.

3.7.1 Step 1 –Acquired Store-centred analysis

The first stage of the analysis to be completed is defined as follows.

"Determine all competitor stores that are within 10 or 15 minutes drive time from the acquired store, depending on whether it is urban (10 minutes) or rural (15 minutes).

Implement the fascia reduction rule (4 to 3, 3 to 2 and 2 to 1 fascias constitutes a potential problem) to determine whether the acquired store is a problem."

The GeoBusiness analysis found that at this stage that a single one-stop store, Johnstone Houston Sq (see Table 7), was determined to be an issue at this first stage.

Johnstone Houston Sq is a 3 to 2 issue as there is a Co-op and a Somerfield within the drive time limit of this store. This store was not flagged as an issue in either the CC submission or OFT submission.

3.7.2 Step 2 – Competition re-centring

"Determine all competitor stores that are within 10 or 15 minutes drive time from each competitor store identified in step 1.

Implement the fascia reduction rule in each of these to determine whether the acquired store is a problem."

The GeoBusiness analysis found no additional stores with issues at this stage.

3.7.3 Step 3 – Population re-centring

"Determine all competitor stores that are within 10 (urban) or 15 (rural) minutes drive time from any relevant population centre that lies within 10(urban) or 15 (rural) minutes from the acquired store.

Implement the fascia-reduction rule to determine whether the acquired store is a problem

Relevant population centres – (ODPM settlement boundaries for England and Wales, and DLUA boundaries for Scotland) of at least 5000 population (census 2001)."

The GeoBusiness analysis found no additional stores with issues at this stage.

3.7.4 Step 4 – Census Output Area re-centring

"Determine all competitor stores that are within 10 (urban) or 15 (rural) minutes drive time of all, or a selection of, census Output Areas that lie within 10(urban) or 15 (rural) minutes from the acquired store.

Implement the fascia reduction rule in each of these instances to determine whether the acquired store is a problem."

GeoBusiness analysed all Output Areas within the drive time limit of the acquired store. This enabled us to quantify the effect of the acquisition on the population surrounding the store.

Four additional one-stop stores became issues under this rule: [✄].
However it should be noted that for each of these store only a small number of Output Areas within the drive time limit created an issue. This is detailed in Table 8. In this table the column "count_OA" is the number of Output Areas that lie within the drive time limit of the acquired store, "Total_Pop" is the population that live in these Output Areas. "Affected_OA" is the number of Output areas, which, under Output Area re-centring, raised an issue, and "Affected_Pop" is the population that lives in these Output Areas. The two columns "%OA%" and "%Pop" are the percentage of Output Areas and population, respectively, that are affected by the acquisition. Johnstone Houston Sq is included for comparison:

None of these store were flagged as issues in the submission to the CC or the OFT.

3.7.5 One-Stop analysis summary

No One-stop stores were flagged as issues in either the CC or OFT files. GeoBusiness has found 5 stores that might be raised as issues under the CC rules. Of these Johnstone Houston Sq is the most significant having failed the fascia reduction rule in the acquired store-centred analysis and having an impact on approximately 45% of the local population. Of the remaining 4 stores only 2 may need further examination [✄] however the opinion of GeoBusiness they should only be considered issues if there are particular situations on the ground in these areas which are not highlighted by this analysis.

3.8 Mid-range store analysis

Mid-Range stores are defined as any store of at least 280 square metres and less than 1,400 square metres sales area.

Effective competitor stores are defined as all stores of 280 square metres or larger, belonging to: Asda, Booth, Budgens, Co-op, Iceland, Morrisons, Sainsbury's, Somerfield, Tesco and Waitrose.

Note: there is no 75% of the acquired store rule for the mid-range analysis.

3.8.1 Step 1 – Acquired store-centred analysis

"Determine all competitor stores that are within 5 or 10 minutes drive time from the acquired store, depending on whether it is urban (5 minutes) or rural (10 minutes).

Implement the fascia reduction rule (4 to 3, 3 to 2 and 2 to 1 fascias constitutes a potential problem) to determine whether the acquired store is a problem."

The GeoBusiness analysis found that 30 mid-range stores were determined to be issues under this rule.

The columns headed "CC Submission" and "OFT Submission" in Table 9 represent the results as submitted to the CC and OFT by Somerfield during the inquiry.

3.8.2 Step 2 – Competition re-centring

"Determine all competitor stores that are within 5 or 10 minutes drive time from each competitor store identified in step 1.

Implement the fascia reduction rule in each of these to determine whether the acquired store is a problem."

Eight additional mid-range stores have now been flagged as an issue under competition re-centring, one of which was flagged in the submission to the OFT see Table 10.

3.8.3 Step 3 – Population re-centring

"Determine all competitor stores that are within 5 or 10 minutes drive time from any relevant population centre that lies within 5 or 10 minutes from the acquired store.

Implement the fascia-reduction rule to determine whether the acquired store is a problem

Relevant population centres – (ODPM settlement boundaries for England and Wales, and DLUA boundaries for Scotland) of at least 5000 population (census 2001)."

One additional store is included as an issue based on population re-centring (see Table 11).

3.8.4 Step 4 – Census Output Area re-centring

"Determine all competitor stores that are within 10 (urban) or 15 (rural) minutes drive time of all, or a selection of, census output areas that lie within 10(urban) or 15 (rural) minutes from the acquired store. Implement the fascia reduction rule in each of these instances to determine whether the acquired store is a problem."

Under Output Area re-centring we find an additional 22 stores are determined to be issues (see Table 12).

Two of these stores, [✄], were flagged as issues in the submission to the CC. In addition to these two stores [✄] was flagged as an issue in the submission to the OFT.

The stores in Table 11 have been ordered by the percentage of Output Areas affected by the acquisition and we see that the top 9 stores have over 10% of the population within the drive time limit adversely affected by the acquisition.

3.8.5 Mid-Range analysis summary

The mid-range analysis conducted by GeoBusiness has highlighted a number of stores as potential issues that did not appear in the previous submissions to the CC or OFT.

Only one store was raised as an issue by the CC or OFT but was not found by GeoBusiness at any stage of the analysis. That store was [✂], store number [✂], and was raised as an issue by the OFT alone.

Table 13 lists those stores that GeoBusiness did not determine to be issues after the first stage of the analysis, i.e. acquired store-centred fascia-reduction, but that were issues in either the CC or the OFT submissions.

In this list we see that, with the exception of [✂], the remaining four stores are raised as issues at a later stage of the analysis. [✂] is raised as an issue under competition re-centring with the final three stores become issues under output area re-centring.

3.9 Convenience store analysis

Convenience stores are defined as those stores less than 280 square metres in size.

Effective competitor stores are defined as all stores, irrespective of size, belonging to: Asda, Booth, Budgens, Co-op, Iceland, Morrisons, Sainsbury's, Somerfield, Tesco and Waitrose.

The competition is assessed within a one-mile radius of the acquired store.

3.9.1 Step 1 – Acquired Store-centred analysis

For the convenience store analysis we only concern ourselves with the area around the store itself. No subsequent re-centring is carried out.

A potential issue is defined as a decrease from 4 to 3, 3 to 2 or 2 to 1 fascias within one mile of the acquired store as a result of the acquisition of said store.

Under these rules one convenience store has been flagged as an issue. Both the submission to the CC and to the OFT flagged this store also (see Table 14).

3.10 Impact of Urban/Rural Definitions

As noted earlier in this document there are thirteen stores for which the urban/rural definition provided by CC/OFT differs from that produced by GeoBusiness using ODPM settlement area boundaries in England and Wales and DLUA boundaries in Scotland (see section 3.3). In this section we consider what, if any, impact this change in definition would have on the acquired store-centred analysis. The results are given in Table 15.

Of the thirteen stores where a difference exists, GeoBusiness found that under the GeoBusiness definitions i.e. ODPM/DLUA-based definitions, seven are potential problem stores and six are not.

Under the original definitions as supplied by CC/OFT GeoBusiness found that two stores are potential problems and eleven are not.

Of these two issue stores Poole Bearwood was not an issue under the GeoBusiness definitions but becomes one under the original definition.

The other problem store, Yarm, is an issue under both definitions.

Six stores would not be considered issues under the original urban/rural definition but are issues under the GeoBusiness definition.

The remaining five stores are not issues for either definition.

3.11 Comments on Output Area re-centring

Output Area re-centring provides a method of quantifying the impact of an acquisition on the local population. Comparing those Output Areas within the drive time limit that fail the fascia reduction rule with those that don't we can see what proportion of the local population is affected.

If we only consider the Output Area re-centring we see that 67 stores have at least one Output Area that is a potential problem (see Table 16). In general there is a reasonably strong relationship between those stores that are issues due to the acquired-store centred analysis (step 1), the competition re-centring and population re-centring to those raised as issues under Output Area re-centring.

It is clear that if a store is only raised as an issue in one Output Area then it is unlikely to be an issue. The question then is at what stage do we flag a store as an issue under Output Area re-centring? It is likely that we must analyse the locations of those Output Areas that are affected. If they are concentrated in one area near the acquired store then this is more of an issue than if the same number are evenly spread throughout the acquired stores catchment.

As an example, if we take the 25% point as a cut off point we see that of the 67 stores, 33 are below this point. Of these 33, three were raised as issues in the acquired store-centred analysis (step 1), an additional 5 under competition re-centring and one more under population re-centring.

[✀]

[✀]

[✀]

Other interesting points to consider are those stores that were only raised as issues under Output Area re-centring. 26 stores fall in to this category and of these 26, 10 have over 10% of the population affected by the acquisition and of these 4 have over 20% of the population affected by the acquisition. These 10 stores are given in Table 17 (note: this is simple a selection from Table 16)

3.12 Use of Herfindahl-Hirschman Index for measuring competition

The Herfindahl-Hirschman Index (HHI) relates market share to the level of competition. The HHI is calculated by summing the squares of the percentage market shares held by the respective companies. The higher the value, the closer the market is to a monopoly situation (maximum value is 10,000).

GeoBusiness is unable to obtain a value for market share of a store in terms of pounds sterling and so the share of sales area was used to approximate the market share.

There is an increase in the HHI within the drive time limit, i.e. a reduction in competition, for 42 stores, see Table 18. The 32 stores that GeoBusiness found were issues on fascia reduction at the acquired-store centred analysis (step 1) are all contained in this list of 42. The store at [✂] appears in this list but had not previously been flagged as an issue.

For 16 stores there is a decrease in the HHI within the drive time limit suggesting an increase in competition, see Table 19.
For the remaining 57 there is no change in the HHI (see Table 20). This occurs where there is no Somerfield and no additional Morrisons within the drive time limit.

4 SUMMARY

4.1 The Issue Stores

Table 21 lists all 67 stores that are determined to be issues by GeoBusiness. Of these stores, 1 is convenience, 17 are rural mid-range, 44 are urban mid-range, 4 are urban one-stop and one is rural one-stop. Also provided are flags to highlight those stores raised as issues in the OFT or CC analysis.
The column headed "GBS_prim" is a flag to show if the store is raised as an issue in the acquired-store centred analysis, the column headed "GBS_Comp" shows a store is raised as an issue after competition re-centring, the column headed "GBS_Pop" shows whether a store is raised as an issue under population re-centring and finally the column headed "GBS_OA" shows which stores are flagged as issues under Output Area re-centring.

4.2 Stores with no Issues

Table 22 contains the 48 stores that GeoBusiness do not raise as issues. The table contains 1 Convenience store, 21 rural mid-range stores, 19 urban mid-range stores and 7 urban one-stop stores. Note in this list is the acquired store [✂] which was flagged as an issue by the OFT analysis.

APPENDIX A RESULT TABLES

This section contains the results that accompany the GeoBusiness analysis detailed in Sections 2 and 3.

Store ID	Store name	Owner
	Tesco : Croydon - Thornton Heath	Tesco
	Littlehampton - High Street	Somerfield
	Bedlington	Somerfield
	Dunfermline	Somerfield
	Brechin	Somerfield
	Montrose	Somerfield
	Kelso	Somerfield
	Blyth	Somerfield

Table 2 Destination stores in OFT drive time file but not CC drive time file

Store ID	Store name
	Poole Bearwood
	Kilwinning
	Ponteland Main St
	Edinburgh - Davidson's Main
	Cottingham King St
	Glasgow - Muirend
	Whickham Oakfield Rd
	Wimborne
	Glasgow - Byres Road
	Ryton
	Stockton-On-Tees
	Leeds Headingley
	Beverley
	Bridge Of Weir
	Edinburgh - Shandwick Place
	Glasgow Ca D'oro
	London Kilburn
	Paddington - Edgware Road
	Croydon George St
	London S. Norwood
	London Camberwell
	London Sydenham
	Glasgow - Rutherglen
	London Southwark
	Middlesbrough Linthorpe

✄	Glasgow - Springburn
	Paisley
	Aberdeen - Cornhill
	Aberdeen - Union Street
	Uddingston
	London Kensington
	Saltcoats
	Renfrew
	Glasgow - Knightswood
	Kilbirnie
	Leeds - Oakwood
	Leeds - Chapel Allerton
	Yarm
	Aberdeen - Westhill
	Johnstone Houston Sq

Table 3 Acquired stores not used as destination stores in CC drive time file that are used in OFT file

Store ID	Store Name	Fascia
✄	HULL - HESSLE	Somerfield
	NOTTINGHAM - STAPLEFORD KS	Kwik Save
	Safeway : Southampton - Totton	Safeway
	Asda : Fareham - Newgate Lane	Asda
	Iceland : Sutton	Iceland
	Tesco : Neasden	Tesco
	Tesco : Edinburgh	Tesco

Table 4 Competitor and Somerfield stores in CC drive time but not in OFT file

Competitor ID	Store Name	Fascia	Size	Drive time (min)
✄	✄	Co-op	[✄]	13.8
		Co-op	[✄]	13.4
		Kwik Save	[✄]	14.2
		Lidl	[✄]	13.4
		Morrisons	[✄]	13.4
		Netto	[✄]	14.2
		Netto	[✄]	13.3

Table 5 Additional store drive times for [✄]

STORE_NUM	Store name	Urban_Rural_CC	2001_UrbanRura_
	Bedlington Market Place	RURAL	URBAN
	Bridlington - Martongate	RURAL	URBAN
	Cottingham King St	RURAL	URBAN
	Doncaster Armthorpe	RURAL	URBAN
	Edinburgh - Davidson's Main	RURAL	URBAN
	Haxby	RURAL	URBAN
✂	Newark OT Balderton	RURAL	URBAN
	Ponteland Main St	URBAN	RURAL
	Poole Bearwood	RURAL	URBAN
	Prestwick	RURAL	URBAN
	Ryton	RURAL	URBAN
	Thornbury St Marys	RURAL	URBAN
	Yarm	RURAL	URBAN

Table 6 Urban and Rural definition comparison

store_name	Store_num	sales_area	Location Type	CC Submission	OFT Submission
Johnstone Houston Sq	[✂]	[✂]	urban		

Table 7 Potential problem one-stop store after step one of the analysis

Store_name	**Store_num**	**count_OA**	**Total_Pop**	**Affected_OA**	**Affected_Pop**	**%OA**	**%Pop**	**CC**	**OFT**	**LocationType**
	[✂]	1632	179363	4	518	0.2%	0.3%			urban
✂	[✂]	111	13638	1	135	0.9%	1.0%			rural
	[✂]	1562	168084	51	6606	3.3%	3.9%			urban
	[✂]	793	208650	28	9300	3.5%	4.5%			urban
Johnstone Houston Sq	[✂]	724	82545	322	39114	44.5%	47.4%			urban

Table 8 Potential problem One-Stop stores after Output Area re-centring analysis.

store_name	Store_num	sales_area	Location Type	CC Submission	OFT Submission
[✂]			urban	1	
Bedlington Market Place			urban		
[✂]			rural	1	
[✂]			urban	1	1
[✂]			urban	1	1
[✂]			rural	1	1
[✂]			urban		1
[✂]			urban	1	1
[✂]			urban	1	
[✂]			urban	1	
Kelso Roxborough St			rural	1	1
[✂]			rural		1
[✂]			urban	1	1
[✂]			urban	1	1
Littlehampton Avon Rd			urban		
[✂]	✂		rural	1	
[✂]			urban		
Middlesbrough Linthorpe			urban	1	1
Newark OT Balderton			urban		
Peebles (with PFS)			rural	1	1
Pocklington The Balk			rural	1	1
[✂]			rural	1	1
[✂]			urban		
[✂]			urban	1	
[✂]			urban		
[✂]			urban		
South Shields			urban	1	1
[✂]			urban	1	1
Whitburn West Main St			urban		1
Yarm			urban		

Table 9 Potential problem Mid-Range stores after step one of the analysis. A “1” in column “CC Submission” or “OFT Submission” indicates that either the CC or OFT have raised this store as an issue.

store_name	Store_num	sales_area	Location Type	CC Submission	OFT Submission
✂			urban		
			urban		
			urban		
			urban		
			rural		1
			rural		
			urban		
			urban		

Table 10 Potential problem Mid-Range stores after step two of the analysis, competition re-centring

store_name	Store_num	sales_area	Location Type	CC Submission	OFT Submission
[✂]	[✂]	[✂]	urban		

Table 11 potential problem Mid-Range stores after population re-centring

Store_name	**Store_num**	**count_OA**	**Total_Pop**	**Affected_OA**	**Affected_Pop**	**%OA**	**%Pop**	**CC**	**OFT**	**LocationType**
Poole Bearwood	✂	39	12580	24	7347	61.5%	58.4%			urban
[✂]		321	37879	132	16081	41.1%	42.5%			urban
[✂]		274	71470	86	24197	31.4%	33.9%	1	1	urban
[✂]		102	27923	24	6508	23.5%	23.3%			urban
[✂]		61	18909	12	3709	19.7%	19.6%			urban
[✂]		177	20291	27	2966	15.3%	14.6%			urban
Paisley		417	42802	60	6728	14.4%	15.7%			urban
[✂]		100	29108	12	3597	12.0%	12.4%			urban
[✂]		542	55682	62	6465	11.4%	11.6%		1	urban
[✂]		274	34676	23	2928	8.4%	8.4%			rural
[✂]		380	44864	30	4326	7.9%	9.6%			urban
[✂]		135	35884	9	2145	6.7%	6.0%			urban
[✂]		712	74112	30	3605	4.2%	4.9%			urban
[✂]		97	10946	3	342	3.1%	3.1%			rural

✂	✂	194	23388	6	688	3.1%	2.9%			urban
		52	14962	1	308	1.9%	2.1%			urban
		59	7009	1	123	1.7%	1.8%			rural
		267	66618	4	862	1.5%	1.3%			urban
		67	19777	1	294	1.5%	1.5%			rural
		79	8914	1	134	1.3%	1.5%	1	1	rural
		337	100381	4	1205	1.2%	1.2%			rural
		153	19027	1	166	0.7%	0.9%			rural

Table 12 Potential problem Mid-Range stores after Output Area re-centring

store_name	Store_num	sales_area	Location	Store	CC	OFT	GBS_prim	GBS_Comp	GBS_Pop	GBS_OA
✂			urban	MR		1				
			rural	MR	1	1				1
			urban	MR		1				1
			rural	MR		1		1		1
			urban	MR	1	1				1

Table 13 Stores raised as issues by CC and OFT but not by GeoBusiness

store_name	Store_num	sales_area	CC Submission	OFT Submission
Filey Murray St	[✂]	[✂]	1	1

Table 14 Potential problem Convenience store

storename	STORE_NUM	sales_area	CC submission	OFT Submission	GBS primary	Original	
Bedlington Market Place	✂				1		no longer issue
✂							still no issue
							still no issue
							still no issue
				1	1		no longer issue
							still no issue
Newark OT Balderton					1		no longer issue

[✂]	✂		1			still no issue
Poole Bearwood					1	new issue
[✂]				1		no longer issue
[✂]				1		no longer issue
[✂]				1		no longer issue
Yarm				1	1	still issue

Table 15 The impact of the differing urban/rural definitions on the analysis results

Store_name	Store_num	LocationType	StoreType	count_OA	Total_Pop	Affected_OA	Affected_Pop	%OA	%Pop	CC	OFT	GBS_Prim	GBS_Comp	GBS_Pop	GBS_OA
[✂]	✂	urban	MR	85	25298	85	25298	100%	100%	1	1	1	1	1	1
Peebles (with PFS)		rural	MR	77	9360	77	9360	100%	100%	1	1	1	1	1	1
Filey Murray St		C	C	24	6468	24	6468	100%	100%	1	1	1	1	1	1
Pocklington The Balk		rural	MR	56	16353	56	16353	100%	100%	1	1	1	1	1	1
[✂]		urban	MR	122	15483	120	15212	98%	98%	1	1	1	1	1	1
Kelso Roxborough St		rural	MR	69	8364	68	8208	99%	98%	1	1	1	1	1	1
[✂]		rural	MR	166	19501	161	19003	97%	97%	1	1	1	1	1	1
[✂]		urban	MR	67	19268	64	18500	96%	96%	1	1	1	1	1	1
South Shields		urban	MR	193	56271	179	52013	93%	92%	1	1	1	1	1	1
Bedlington Market Place		urban	MR	85	24486	77	22013	91%	90%			1	1	1	1
Littlehampton Avon Rd		urban	MR	124	35002	100	27708	81%	79%			1	1		1
[✂]		urban	MR	165	46550	126	35802	76%	77%	1	1	1	1		1
[✂]		rural	MR	346	41654	252	30600	73%	73%	1	1	1	1	1	1
[✂]		urban	MR	200	61702	143	44855	72%	73%	1	1	1	1		1
Whitburn West Main St		urban	MR	135	16952	95	12182	70%	72%		1	1	1	1	1
[✂]		urban	MR	183	21175	129	14573	70%	69%	1	1	1	1		1
[✂]		rural	MR	398	48083	256	31200	64%	65%	1		1	1		1
Middlesbrough Linthorpe		urban	MR	180	55972	117	35697	65%	64%	1	1	1	1	1	1
Yarm		urban	MR	63	19807	38	12357	60%	62%			1	1	1	1
Poole Bearwood		urban	MR	39	12580	24	7347	62%	58%						1
[✂]		urban	MR	105	29666	56	16107	53%	54%			1	1		1
[✂]		urban	MR	291	32785	147	16757	51%	51%			1	1		1
[✂]		urban	MR	255	26996	128	13419	50%	50%	1		1			1
[✂]		rural	MR	443	58198	213	28665	48%	49%		1	1	1	1	1
[✂]		urban	MR	209	24111	100	11523	48%	48%			1	1	1	1
Johnstone Houston Sq		urban	OS	724	82545	322	39114	44%	47%			1	1		1
[✂]		urban	MR	321	37879	132	16081	41%	42%						1
[✂]		urban	MR	180	53325	68	20614	38%	39%				1		1
Newark OT Balderton		urban	MR	70	19661	27	7581	39%	39%			1	1		1

[✄]		urban	MR	366	105262	138	39153	38%	37%			1	1		1
[✄]		rural	MR	101	30562	36	11342	36%	37%	1		1		1	1
[✄]		urban	MR	194	57648	70	21055	36%	37%				1		1
[✄]		urban	MR	274	71470	86	24197	31%	34%	1	1				1
[✄]		urban	MR	408	45048	111	12680	27%	28%	1		1	1		1
[✄]		urban	MR	70	19387	17	4601	24%	24%				1		1
[✄]		urban	MR	102	27923	24	6508	24%	23%						1
[✄]		urban	MR	575	63594	114	12698	20%	20%	1		1		1	1
[✄]		urban	MR	61	18909	12	3709	20%	20%						1
[✄]		urban	MR	197	61349	39	12033	20%	20%				1		1
[✄]		urban	MR	164	18840	25	3138	15%	17%	1		1	1		1
[✄]		urban	MR	265	29278	39	4842	15%	17%		1	1			1
[✄]		urban	MR	212	62300	38	10033	18%	16%				1		1
Paisley		urban	MR	417	42802	60	6728	14%	16%						1
[✄]		urban	MR	99	29940	15	4504	15%	15%					1	1
[✄]		rural	MR	139	41262	21	6125	15%	15%		1		1		1
[✄]		urban	MR	177	20291	27	2966	15%	15%						1
[✄]		urban	MR	104	30597	13	3970	13%	13%				1		1
[✄]		urban	MR	100	29108	12	3597	12%	12%						1
[✄]	✄	urban	MR	542	55682	62	6465	11%	12%		1				1
[✄]		urban	MR	380	44864	30	4326	8%	10%						1
[✄]		rural	MR	274	34676	23	2928	8%	8%						1
[✄]		rural	MR	104	11553	9	892	9%	8%				1	1	1
[✄]		urban	MR	135	35884	9	2145	7%	6%						1
[✄]		urban	MR	712	74112	30	3605	4%	5%						1
[✄]		urban	OS	793	208650	28	9300	4%	4%						1
[✄]		urban	OS	1562	168084	51	6606	3%	4%						1
[✄]		rural	MR	97	10946	3	342	3%	3%						1
[✄]		urban	MR	194	23388	6	688	3%	3%						1
[✄]		urban	MR	52	14962	1	308	2%	2%						1
[✄]		rural	MR	59	7009	1	123	2%	2%						1
[✄]		rural	MR	79	8914	1	134	1%	2%	1	1				1
[✄]		rural	MR	67	19777	1	294	1%	1%						1
[✄]		urban	MR	267	66618	4	862	1%	1%						1
[✄]		rural	MR	337	100381	4	1205	1%	1%						1
[✄]		rural	OS	111	13638	1	135	1%	1%						1
[✄]		rural	MR	153	19027	1	166	1%	1%						1
[✄]		urban	OS	1632	179363	4	518	0%	0%						1

Table 16 Results of the Output area re-centring. All acquired stores for which this raises an issue are listed along with flags to show if they were raised as issues at an earlier step.

Store_name	Store_num	LocationType	StoreType	count_OA	Total_Pop	Affected_OA	Affected_Pop	%OA	%Pop	CC	OFT	GBS_Prim	GBS_Comp	GBS_Pop	GBS_OA
Poole Bearwood	[✄]	urban	MR	39	12580	24	7347	62%	58%						1
[✄]	[✄]	urban	MR	321	37879	132	16081	41%	42%						1

[✂]		urban	MR	274	71470	86	24197	31%	34%	1	1				1
[✂]		urban	MR	102	27923	24	6508	24%	23%						1
[✂]		urban	MR	61	18909	12	3709	20%	20%						1
Paisley	✂	urban	MR	417	42802	60	6728	14%	16%						1
[✂]		urban	MR	177	20291	27	2966	15%	15%						1
[✂]		urban	MR	100	29108	12	3597	12%	12%						1
[✂]		urban	MR	542	55682	62	6465	11%	12%		1				1
[✂]		urban	MR	380	44864	30	4326	8%	10%						1

Table 17 Stores raised as issues after Output Area re-centring that had not previously been raised as issues in the GeoBusiness analysis

Store_num	store_name	HHIPre	HHIPost	Change	CC	OFT	GBS_Prim	GBS_Comp	GBS_Pop	GBS_OA
	Pocklington The Balk	5003	10000	4997	1	1	1	1	1	1
	Peebles (with PFS)	5016	10000	4984	1	1	1	1	1	1
	Newark OT Balderton	5101	10000	4899			1	1		1
	Filey Murray St	5152	10000	4848	1	1	1	1	1	1
	[✂]	4037	7937	3900	1		1	1		1
	[✂]	3793	6798	3006	1	1	1	1	1	1
	Kelso Roxborough St	3502	6237	2736	1	1	1	1	1	1
	Johnstone Houston Sq	3350	5691	2341			1	1		1
	South Shields	3381	5701	2320	1	1	1	1	1	1
	[✂]	4115	6377	2263	1		1	1	1	1
	[✂]	4146	6390	2244	1		1	1		1
	[✂]	2772	4914	2142		1	1			1
	[✂]	2811	4620	1809			1	1	1	1
	[✂]	3517	5318	1801	1	1	1	1	1	1
	Yarm	3755	5000	1245			1	1	1	1
	Littlehampton Avon Rd	3488	4722	1234			1	1		1
✂	[✂]	3973	5007	1034	1	1	1	1	1	1
	Whitburn West Main St	2801	3775	974		1	1	1	1	1
	[✂]	4077	5020	943	1	1	1	1	1	1
	[✂]	4109	5032	922			1	1		1
	[✂]	4270	5120	850	1	1	1	1		1
	[✂]	2704	3490	785						
	Middlesbrough Linthorpe	3840	4504	664	1	1	1	1	1	1
	[✂]	2818	3464	646				1		1
	[✂]	3802	4387	585			1	1		1
	[✂]	4286	4725	439	1	1	1	1	1	1
	Bedlington Market Place	4889	5254	365			1	1	1	1
	[✂]	4650	5013	363	1	1	1	1		1
	[✂]	6042	6325	282	1		1			1
	[✂]	3856	4115	258				1		1
	[✂]	3577	3832	256	1		1	1		1
	[✂]	3395	3631	236			1	1		1
	[✂]	3478	3713	234	1	1	1	1		1
	[✂]	3735	3953	219				1		1

✂	[✂]	5540	5697	157	1		1	1	1	1
	[✂]	3104	3214	110		1				1
	[✂]	4308	4416	109		1	1	1	1	1
	[✂]	1727	1830	103						1
	[✂]	4958	5057	99		1		1		1
	[✂]	3621	3715	94						1
	[✂]	5631	5710	79				1		1
	[✂]	4081	4122	41				1		1

Table 18 Those stores that experience an increase in their HHI index as a result of the acquisition.

Store_num	store_name	HHIPre	HHIPost	Change	CC	OFT	GBS_Prim	GBS_Comp	GBS_Pop	GBS_OA
✂	Paisley	2927	2925	-2						1
	✂	3863	3804	-58						1
		2357	2296	-61						1
		3622	3440	-182						
		3001	2809	-192						1
		2318	2028	-291						
		2830	2514	-316						
		2756	2437	-318						
		3473	2979	-494						
		3392	2716	-677						1
		4720	4028	-693						
		5039	3882	-1157						
		6726	5501	-1225						
		4893	3582	-1311				1		1
		8740	5777	-2963						1
		8440	4855	-3586						

Table 19 Those stores that experience a decrease in the HHI index as a result of the acquisition.

Store_num	store_name	HHIPre	HHIPost	Change	CC	OFT	GBS_Prim	GBS_Comp	GBS_Pop	GBS_OA
✂		10000	10000	0						1
		5628	5628	0						1
		5848	5848	0						
		10000	10000	0				1		1
		10000	10000	0	1	1				1
		5289	5289	0						
		10000	10000	0				1	1	1
		10000	10000	0				1		1

		3756	3756	0						
		4101	4101	0				1		1
		5004	5004	0						
		4532	4532	0						
		3658	3658	0						
		10000	10000	0						
		6280	6280	0				1		1
		4079	4079	0						
		3718	3718	0						
		5556	5556	0						
		5013	5013	0				1		1
		10000	10000	0						
		5122	5122	0						
		6586	6586	0						
		5342	5342	0						
		10000	10000	0						1
		10000	10000	0						
		10000	10000	0						
		3768	3768	0						
		3249	3249	0						1
		2613	2613	0						1
		3630	3630	0	1	1		1		1
		6868	6868	0						
		5948	5948	0						1
		3960	3960	0						
		10000	10000	0						
		10000	10000	0						
		10000	10000	0						
		5383	5383	0						
		4101	4101	0				1		1
		6003	6003	0						
		10000	10000	0						1
		6559	6559	0						
		3906	3906	0						
		6224	6224	0						
[✂]	Poole Bearwood	10000	10000	0				1		1
		5182	5182	0						
		2434	2434	0						
		6282	6282	0				1	1	1
		5000	5000	0						
		5675	5675	0						
		5149	5149	0						
		5108	5108	0						
		5353	5353	0						1
		5228	5228	0						
		10000	10000	0						
		5324	5324	0						
		5018	5018	0						
		10000	10000	0		1				

Table 20 Those stores for which there is no change in the HHI

store_name	Store_num	sales_area	Location Type	Store Type	CC	OFT	GBS_prim	GBS_Comp	GBS_Pop	GBS_OA
Filey Murray St			C	C	1	1	1	1	1	1
[✂]			rural	MR						1
[✂]			rural	MR						1
[✂]			rural	MR	1	1				1
[✂]			rural	MR						1
[✂]			rural	MR	1	1	1	1	1	1
[✂]			rural	MR						1
Peebles (with PFS)			rural	MR	1	1	1	1	1	1
[✂]			rural	MR		1	1	1	1	1
[✂]			rural	MR	1	1	1	1	1	1
[✂]			rural	MR						1
[✂]			rural	MR		1		1		1
[✂]			rural	MR	1		1	1		1
[✂]			rural	MR						1
Kelso Roxborough St			rural	MR	1	1	1	1	1	1
[✂]			rural	MR				1	1	1
[✂]			rural	MR	1		1		1	1
Pocklington The Balk			rural	MR	1	1	1	1	1	1
[✂]			urban	MR						1
[✂]			urban	MR					1	1
[✂]			urban	MR	1		1		1	1
[✂]	✂		urban	MR	1	1	1	1	1	1
Poole Bearwood			urban	MR						1
[✂]			urban	MR						1
Littlehampton Avon Rd			urban	MR			1	1		1
[✂]			urban	MR				1		1
[✂]			urban	MR	1	1	1	1		1
[✂]			urban	MR				1		1
[✂]			urban	MR				1		1
[✂]			urban	MR		1				1
[✂]			urban	MR		1	1			1
Whitburn West Main St			urban	MR		1	1	1	1	1
[✂]			urban	MR						1
[✂]			urban	MR	1		1	1		1
[✂]			urban	MR	1		1			1
[✂]			urban	MR						1
[✂]			urban	MR						1
[✂]			urban	MR						1
[✂]			urban	MR			1	1	1	1
[✂]			urban	MR			1	1		1
[✂]			urban	MR						1
[✂]			urban	MR				1		1
[✂]			urban	MR	1	1	1	1		1

[✄]		urban	MR	1	1	1	1		1
[✄]		urban	MR	1	1	1	1	1	1
[✄]		urban	MR	1	1	1	1	1	1
Bedlington Market Place		urban	MR			1	1	1	1
South Shields		urban	MR	1	1	1	1	1	1
[✄]		urban	MR			1	1		1
Newark OT Balderton		urban	MR			1	1		1
[✄]		urban	MR	1	1				1
Paisley		urban	MR						1
[✄]		urban	MR	1		1	1		1
[✄]		urban	MR						1
[✄]		urban	MR				1		1
[✄]	✄	urban	MR			1	1		1
Yarm		urban	MR			1	1	1	1
[✄]		urban	MR				1		1
Middlesbrough Linthorpe		urban	MR	1	1	1	1	1	1
[✄]		urban	MR						1
[✄]		urban	MR						1
[✄]		urban	MR						1
[✄]		rural	OS						1
[✄]		urban	OS						1
[✄]		urban	OS						1
[✄]		urban	OS						1
Johnstone Houston Sq		urban	OS			1	1		1

Table 21 A list of all the potential problem stores found by GeoBusiness.

store_name	Store_num	sales_area	Location Type	Store Type	CC	OFT
			C	C		
			rural	MR		
			rural	MR		
			rural	MR		
			rural	MR		
			rural	MR		
			rural	MR		
			rural	MR		
	✄		rural	MR		
			rural	MR		
			rural	MR		
			rural	MR		
			rural	MR		
			rural	MR		
			rural	MR		
			rural	MR		
			rural	MR		

	rural	MR		
	rural	MR		
	rural	MR		
	rural	MR		
	rural	MR		
	urban	MR		
	urban	MR		
	urban	MR		1
	urban	MR		
	urban	MR		
	urban	MR		
	urban	MR		
	urban	MR		
	urban	MR		
	urban	MR		
✄	urban	MR		
	urban	MR		
	urban	MR		
	urban	MR		
	urban	MR		
	urban	MR		
	urban	MR		
	urban	MR		
	urban	MR		
	urban	OS		
	urban	OS		
	urban	OS		
	urban	OS		
	urban	OS		
	urban	OS		
	urban	OS		

Table 22 A list of all stores that are not raised as issues in the GeoBusiness analysis.

APPENDIX B DESCRIPTION OF SPREADSHEETS

[✄]

APPENDIX C DECISION TREE FOR LOCAL COMPETITION ANALYSIS OF ACQUIRED ONE-STOP STORES

(I) Identify acquired store	Identify every acquired store greater or equal to 1400 sq metres within the 115 stores under analysis
(II) Size of Drive time	Use 10-minute drive time limit in urban areas and 15-minute drive time limit in rural areas, where an urban area is defined as having a population of at least 10,000 (2001 census)
(III) Identify effective competitor stores	Effective competitors are classified as those stores of 1,400 square metres (or at least 75 per cent of the size of the store under consideration), or larger, belonging to one of: Asda, Budgens, Booth, Co-op, Morrisons, Sainsbury's, Somerfield, Tesco and Waitrose
(IV) Change in competitive conditions as a result of the acquisition	For each acquisition, count the reduction in the number of fascias and deem a reduction in the number of fascias from 4 to 3, 3 to 2, and 2 to 1 within the drive time limit as potential problems

Problem → **POTENTIAL PROBLEM**

Not a problem

(V) Re-centre on all effective competitor stores	For those areas which, up to rule IV, are not considered a problem, re-centre on the effective competitor stores, count the reduction in the number of fascias and deem a reduction in the number of fascias from 4 to 3, 3 to 2, and 2 to 1 within the drive time limit as potential problems

Problem → **POTENTIAL PROBLEM**

Not a problem

(VI) Re-centre on areas of population	For those areas, which up to rule V are not considered a problem, determine areas of population of over 5,000 within the drive time limit centred on the acquired store. Re-centre on these areas of population, count the reduction in the number of fascias and deem a reduction in the number of fascias from 4 to 3, 3 to 2, and 2 to 1 within the drive time limit as potential problems

Problem → **POTENTIAL PROBLEM**

Not a problem

(VII) Re-centre on census output areas	For those areas, which up to rule VI are not considered a problem, determine Output Areas within the drive time limit centred on the acquired store. Re-centre on these Output Areas, count the reduction in the number of fascias and deem a reduction in the number of fascias from 4 to 3, 3 to 2, and 2 to 1 within the drive time limit as potential problems

Problem → **POTENTIAL PROBLEM**

Not a problem

NOT A PROBLEM

APPENDIX D DECISION TREE FOR LOCAL COMPETITION ANALYSIS OF ACQUIRED MID-RANGE STORES

(I) Identify acquired store	Identify every acquired store greater or equal to 280 sq metres and less than 1400 sq metres within the 115 stores under analysis	
(II) Size of Drive time	Use 5-minute drive time limit in urban areas and 10-minute drive time limit in rural areas, where an urban area is defined as having a population of at least 10,000 (2001 census)	
(III) Identify effective competitor stores	Effective competitors are classified as those stores of 280 square metres or larger, belonging to one of: Asda, Budgens, Booth, Co-op, Iceland, Morrisons, Sainsbury's, Somerfield, Tesco and Waitrose	
(IV) Change in competitive conditions as a result of the acquisition	For each acquisition, count the reduction in the number of fascias and deem a reduction in the number of fascias from 4 to 3, 3 to 2, and 2 to 1 as potential problems	Problem → **POTENTIAL PROBLEM**
Not a problem ↓		
(V) Re-centre on all effective competitor stores	For those areas which, up to rule IV, are not considered a problem, re-centre on the effective competitor stores, count the reduction in the number of fascias and deem a reduction in the number of fascias from 4 to 3, 3 to 2, and 2 to 1 within the drive time limit as potential problems	Problem → **POTENTIAL PROBLEM**
Not a problem ↓		
(VI) Re-centre on areas of population	For those areas, which up to rule V are not considered a problem, determine areas of population of over 5,000 within the drive time limit centred on the acquired store. Re-centre on these areas of population, count the reduction in the number of fascias and deem a reduction in the number of fascias from 4 to 3, 3 to 2, and 2 to 1 within the drive time limit as potential problems	Problem → **POTENTIAL PROBLEM**
Not a problem ↓		
(VII) Re-centre on census output areas	For those areas, which up to rule VI are not considered a problem, determine Output Areas within the drive time limit centred on the acquired store. Re-centre on these Output Areas, count the reduction in the number of fascias and deem a reduction in the number of fascias from 4 to 3, 3 to 2, and 2 to 1 within the drive time limit as potential problems	Problem → **POTENTIAL PROBLEM**
Not a problem ↓		

NOT A POTENTIAL PROBLEM