Appendix B

Food Access Radar – Using the Toolkit

Production of the Food Access Radar – The Oxfordshire Experience

Oxfordshire County Council’s Trading Standards Service has been running a project on food poverty and access to food in Oxfordshire. The project has been using a software toolkit called “Food Access Radar”, incorporating some adjustments to reflect the county, which has previously been successfully used by Staffordshire County Council. As well as the toolkit, the following software has been used on the project:

> MapInfo Professional - a desktop GIS program
> DfT “Accession” - Routing program
> PlanWeb - an Intranet GIS using MapXtreme
> MapInfo Proviewer - a free GIS viewer.

Accession was trialled to determine its suitability but in this instance it was found not to bring any additional value to the project.

The following datasets were also used:

> An extract of all the food stores from the Trading Standards database
> The road and footpath network used by the SCANA package in Learning and Culture which is based on the Integrated Transport Network from Ordnance Survey
> 2001 census data
> OS Address Point data
> Parish Boundaries
> Bustop data
> OS Code Point data

Food Access Radar in Oxfordshire

The data from the trading Standards database was geocoded using the post code field and matching against the Code Point dataset. Data from the 2001 census was mapped at Ward, Super Output Area (SOA) and Output Area (OA) levels. The Road and footpath network and food store locations were loaded into Accession and the foodstores were designated as origins. A 250m grid was created and this was designated as destinations. Accession then calculated the 400m and 800m isochrones and these were exported as shape files which could then be translated into MapInfo format.
These data sets were then made available to PlanWeb. PlanWeb was then used to thematically map the Census Data to highlight those areas where there may be a high concentration of people who have access difficulties. The Isochrones and food stores can be overlaid on top together with bus stops and it becomes apparent which areas may have a problem.

Interpreting the Outputs

The area chosen by the Food Action Group and the Food Access Radar was Cutteslowe (located on North Oxford, Oxford City Wolvercote Ward, and Cherwell Vale PCT), as shown below:

Area Map: Cutteslowe

Area in red shows a high proportion of older adults in this area.
Isochrone Map

The following socio-economic statistics are found within this area:

- 16-74 year olds who are permanently sick or Disabled (2.1%)
- Persons who have access to car or van (21%)
- Older Adults (22%)
- Persons classed as income deprived (4.6%)
- Unpaid carers (10.3%)

From the above map Cutteslowe is seen to have two small food businesses, highlighted as blue boxes. Using the Isochrone system the residents in the red area of the map would be required to travel over a kilometre to access these food businesses. However, further investigation found that one of these premises is a food business run from a home, providing no access to food for the general public and the other was a small store that had recently closed. Therefore, access to the nearest food shop for residents living in any part of this area now, is either to travel to Summertown to the south or Kidlington to the north, both over 1.8km away. The public transport system on the major roads around Cutteslowe is very good. However, the service inside the area is poor.

As seen by the previous map and the socio-economic statistics there is a high percentage of older adults, a small percentage of permanently sick or disabled persons and a reasonable percentage of unpaid carers. The group identified as being most likely to suffer from ‘food poverty’ according to the Radar is the older adults. More investigation was therefore required in this area to find out the extent of any problems with the access of affordable, healthy food.
Assessing Theoretical Food Access Problems in Practice

Once the 'food access-poor' areas had been theoretically identified by the Food Action Group and through the use of the Food Access Radar, the next step was to assess the extent of the problems affecting the community.

Investigation

The Food Action group decided to use the following methods to determine the extent of the problem and to start collating solutions to any problems highlighted by the community:

- An informal group discussion - this involved a discussion about the access, attitude and costs of a particular basket of food.
- A questionnaire, that asked questions relating to the basket of food. The answers to this questionnaire became documented primary evidence for the discussion above.
- A three-day diet sheet. This would give an insight into what individuals/families ate and how much over a three day period.

Engaging with the Community

Through the contacts the food action group had it was able to set up a focus group with the Cutteslowe Seniors. As indicated earlier, the Radar identified this group of older persons as most likely to suffer from food poverty. The results of the consultation with this group were as follows:

Cutteslowe Seniors Consultation

Highlights of the informal discussion and of the responses to the questionnaire are listed below:

- All shopped at a supermarket.
- 15 items of fruit & vegetables were chosen as regular purchases from basket of food.
- All stated they cooked at home.
- Half of the respondents purchased ready meals regularly.
- Concerns at foods shops included quality of ingredients, use of chemicals and fair trade issues.
- Concerns raised about the food they ate included the amount of salt and additives found in foods, cost and non-availability and where the food comes from and how long has it been in the shop. The most highlighted problem was the fact the local shop had recently closed down so the group were reliant on public transport to get to the nearest supermarket.

The ages of the respondents were 66-80.
Diet Sheet
The results of the diet sheets were as follows:

Negatives:

> Too many ready meals were being consumed.
> There was a high Salt intake as it was added to vegetables and then sauces and gravy were added to the meals that also contain lots of salt.
> There was a high intake of sugar as it was used on fresh fruit.
> A lack of calcium was detected, as there was a low amount of dairy produce being consumed.
> A variety in fruit was also detected as being required.
> Too much white bread and cereal was being consumed and not enough wholegrain and whole-wheat.
> Breakfast was being missed.
> Healthier snacks were required.
> There was not enough regular fluids being taken.
> Fried foods were being eaten regularly and so the diets would contain a high fat content.

Positives:

> There was a lot of home cooking taking place particularly the baking of fish!
> The respondents were not adding sugar to drinks.
> The cooks were using steamer/pressure cookers to help retain the vitamin and mineral content in vegetables.
> There was a good range of vegetables being used but not fruit.
> Some showed they had regular meal times.
> A few grew their own fruit & vegetables.