

report

meeting	NOTTINGHAMSHIRE AND CITY OF NOTTINGHAM FIRE & RESCUE AUTHORITY COMMUNITY SAFETY COMMITTEE	
date	20 July 2007	agenda item number

REPORT OF THE CHIEF FIRE OFFICER

MOSAIC GEO-DEMOGRAPHIC SEGMENTATION SYSTEM

1. PURPOSE OF REPORT

To provide Nottinghamshire and City of Nottingham Fire and Rescue Authority with an appreciation of how consumer-based demographic data can be used to help inform Community Safety initiatives.

2. BACKGROUND

- 2.1 Over recent years, the Service has invested in a variety of data analysis tools to help identify patterns and trends related to the incidents we attend, notably GIS systems and databases, operated by skilled and committed staff. These systems enable us to produce, in either statistical or mapped form, a picture of how and where incidents have occurred and how they relate to various standard social indices.
- 2.2 This type of analysis is now moving into an area usually associated with the marketing carried out by commercial companies i.e. supermarkets, leisure services etc. By studying the behaviour and lifestyles of social groups, it is believed that we can identify clusters of particular social characteristics using these methods, and therefore further increase our effectiveness in targeting vulnerable groups.

3. REPORT

- 3.1 Experian is one of Nottingham's major employers and is recognised as a world leader in the capture, analysis and provision of information.
- 3.2 Mosaic Public Sector is Experian's geo-demographic segmentation system. It classifies all households and postcodes in the UK into 61 types aggregated into 11 groups. The classification has been devised under the direction of Professor Richard Webber, the UK's leading authority on citizen segmentation.
- 3.3 Currently 54% of the data used to build this dataset is sourced from the 2001 Census. The remaining 46% is derived from 'Lifestyle' data which is collected from a variety of sources such as credit card activity, consumer surveys, store loyalty cards, etc. From this data a detailed picture can be painted of communities, in terms of their socio-demographics, lifestyles, culture and behaviour.

3.4 Examples of the types of data held

Family characteristics	Demographics	Financial	Property characteristics	Health
Household composition No. in household Children Leisure patterns Education	Age Gender Age by gender Ethnicity Religion Marital status Crime	Income Savings behaviour Credit behaviour CCJs Shopping patterns	Owned/rented Length of residency Age of property Property value	Smoker/Non Alcohol use Drug use Diet

3.5 Further examples of the types of data held, and the style in which it can be viewed are available. Bars to the right of the centreline indicate greater than the UK average, bars to the left indicate less than.

3.6 As the Census data gets older, Mosaic's emphasis upon it is reduced, and further value is given to the 'Lifestyle' components to ensure the classification maintains its accuracy.

3.7 Our approach

3.7.1 By combining Mosaic data with our own, historical records of where various types of incidents have occurred, we can draw up a profile of the characteristics of what we feel to be the most vulnerable social groups.

3.7.2 Using geographical information systems, the locations of these social groups will be plotted on a map, providing a visual guide to where initiatives should be concentrated.

3.7.3 For example, by understanding the characteristics of areas and households, the service will be better able to assess the level of likely risk of fire and therefore prioritise Home Safety Checks.

3.7.4 An additional benefit from this data will be to provide suggestions on how we might best deliver Community Fire Safety initiatives. Because the leisure, travel and social activities of each group are described, it will be easier to consider new methods of publicising the fire safety message, e.g. bus shelters, local taxis, bingo halls, etc. Fire safety is, after all, our 'product', and we shall be using modern techniques to market this to our 'target audience'.

4. FINANCIAL IMPLICATIONS

Mosaic is currently available to us through the 'Jupiter in Notts' (JiN) data sharing partnership, originally at output area level but now at postcode and individual household level.

5. PERSONNEL IMPLICATIONS

There are no personnel implications surrounding the use of this product

6. EQUALITY IMPACT ASSESSMENT

There are no specific equality impact implications surrounding this report as all interventions used in conjunction with Mosaic are individual equality impact assess.

7. RISK MANAGEMENT IMPLICATIONS

Mosaic when combined with Service data provides the Service with sound intelligence on the communities that are at risk and ensures that the Authority meets its aspirations as laid out in the Community Safety Plan. Failure to undertake these initiatives and reduce deaths from accidental dwelling fires in line with Government targets could lead to potential intervention

8. RECOMMENDATIONS

That Members welcome the use of Mosaic as a tool that ensures the Service has a sound evidence-based intelligence led approach to prioritising delivery of Home Safety Checks and other safety initiatives.

9. BACKGROUND PAPERS FOR INSPECTION

None.

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