

DEVON & SOMERSET FIRE & RESCUE AUTHORITY

REPORT REFERENCE NO.	CSCP/11/5		
MEETING	COMMUNITY SAFETY AND CORPORATE PLANNING COMMITTEE		
DATE OF MEETING	31 AUGUST 2011		
SUBJECT OF REPORT	PREVENTION TARGETTING		
LEAD OFFICER	DIRECTOR OF SERVICE SUPPORT		
RECOMMENDATIONS	That the report be noted.		
EXECUTIVE SUMMARY	This document is intended to show some of the methodologies used by Devon and Somerset Fire and Rescue Service (DSFRS) to target Community Safety activity. This includes use of Experian Mosaic, data sharing with partner organisations and using data held by DSFRS. It also describes some case studies.		
RESOURCE IMPLICATIONS	None		
EQUALITY IMPACT ASSESSMENT	IPACT No potentially negative impact sufficient enough to warrant a full impact T assessment has been identified in the content of this report.		
APPENDICES	None		
LIST OF BACKGROUND PAPERS	None		

1. **INTRODUCTION**

- 1.1 To achieve the maximum impact and efficiency in the delivery of community safety activities, Devon and Somerset Fire and Rescue Service ("the Service") must target its resources.
- 1.2 The Service's targeting and evaluation team form part of the wider community risk intelligence team and use a variety of tools and data sources to create as complete a picture as possible of the risk within Devon & Somerset. This data can then be used to provide a picture of community risk in respect of home safety, road safety and general premises fire safety.
- 1.3 This document provides an overview of some of the different tools and methodologies used to target prevention activities. These tools include 'Experian Mosaic Public Sector', use of data sharing with other public sector organisations and risk profiling. Each of these is explained below.

2. EXPERIAN MOSAIC PUBLIC SECTOR

What is Mosaic?

- 2.1 Mosaic Public Sector is designed to identify groupings of consumer behaviour for households and postcodes. The methodology used is unique to Experian, and has been redefined through many years of creating classifications using data from different sources and different levels of geography. Some of the sources of data include; The British Crime Survey, Hospital Episode Statistics, Index of Multiple Deprivation, Higher Education Statistic Authority, as well as a wide range of authoritative sources of media and market research that allows Experian to build a detailed picture of the nation's sociocultural diversity.
- 2.2 Mosaic classifies households into 15 groups and then subdivides them further into 69 detailed types. The Mosaic codes will be used and their descriptions provided where relevant, with the basic key features for all codes included in the appendices. In each type there are a number of key features which make each category distinctive and are useful to bear in mind when devising communications or treatment strategies targeted at them. These are subjective and are intended to highlight key issues rather than to be comprehensive. Mosaic at household level is being used for these profiles.
- 2.3 Clearly not every one of Devon & Somerset's 755,000 households will match exactly to just one of 69 different Mosaic Types. The description should be recognised as "ideal types", examples to which individual cases approximate only with various degrees of exactness.
- 2.4 Further information can be found on the Experian website www.experian.co.uk/publicsector

What have we already used it for?

- 2.5 The community risk intelligence team have used the Experian Mosaic dataset to identify those households most at risk of an accidental dwelling fire through matching almost 4500 accidental dwelling fires to a mosaic household type.
- 2.6 Through this matching exercise we have been able to identify a number of higher risk mosaic types and then map the areas where these groups are found within the communities of Devon and Somerset to allow targeting of community safety activity.

How is a high risk group identified?

- 2.7 High risk groups and areas are identified by matching of the data sources described above, these are analysed and factors identified which indicate a level of above average risk for accidental dwelling fires. These are then compared against the local populations across Devon & Somerset to give an overall picture of the home safety risk for each of the Service's 12 Group areas. A high risk group is one with that is identified as having a higher likelihood of having a dwelling fire, rather than likely to experience a higher number of dwelling fires.
- 2.8 For example within a certain area, the population and expected number of dwelling fires may be distributed as follows:

Group	No of Households in area	Likelihood Index	Expected Number of Fires	
Z	50	200	5	
Y	200	100	10	
Х	500	50	12.5	

2.9 In this case though both Groups X and Y would have higher numbers of dwelling fires, due to their larger number of households, however, they would not be considered as high risk as those households in Group Z. The benefit in terms of the number of incidents prevented by engagement with households in group Z is clearly much larger (in theory one household in 10 would experience a dwelling fire) than in the other two groups (X would see one in 40, Y one in 20).

Likelihood Index

2.10 The likelihood index is a score given to each group or type which gives the relative likelihood of a household in a particular group experiencing a dwelling fire. A group with a risk of fire that is exactly average would have a likelihood index score of 100. A score of above 100 is indicative of an above average risk and a score of below 100 below average risk. Put simply a higher likelihood index for a group means the risk to that group is higher.

Who are the Highest Risk Types?

	Mosaic Type Description	Households	% HHs	Total ADFS %	Likelihood Index
	Students and other transient singles				
G32	in multi-let houses	10764	1.43%	2.88%	202
	Transient singles, poorly supported				
G33	by family and neighbours	18650	2.47%	5.34%	216
	Students involved in college and				
G34	university communities	4107	0.54%	1.45%	267
	Old people in flats subsisting on				
M57	welfare payments	6374	0.84%	1.96%	232
	Less mobile older people requiring a	10000	4.000/	4 = 404	
M58	degree of care	10238	1.36%	4.54%	335
	People living in social				
MEO	accommodation designed for older	0020	1 200/	4 700/	205
IVID9	Tenente in espiel housing flate on	9030	1.20%	4.72%	395
	estates at risk of sorious social				
N60	nrohlems	2828	0 37%	1 31%	351
1100	Childless tenants in social housing	2020	0.0770	1.5170	551
N61	flats with modest social needs	10273	1.36%	4.01%	295
	Multicultural tenants renting flats in	10210	110070		
N63	areas of social housing	82	0.01%	0.02%	212
	Diverse homesharers renting small				
N64	flats in densely populated areas	29	0.00%	0.02%	600
	Childless, low income tenants in high				
N66	rise flats	1310	0.17%	0.69%	398
	Vulnerable young parents needing				
O69	substantial state support	7956	1.05%	2.65%	251

2.11 The above table summarises the highest risk Mosaic Types within Devon & Somerset. The highest risk type is N64 Diverse homesharers renting small flats in densely populated areas, which are 6 times more likely than average to have an accidental dwelling fire.

2.12 All of the types shown in table above are at least twice as likely as average to have an accidental dwelling fire.

3. USE OF DATA SHARING WITH PARTNER ORGANISATIONS

3.1 The Service's partner organisations hold information about some of the most vulnerable people within the community and by sharing this information it can ensure that timely interventions are carried out to support these vulnerable groups.

Case Study (Teignbridge Multi Agency Risk Analysis)

- 3.2 The South Devon & Dartmoor East (SDDE) Group and Targeting & Evaluation team, together with Devon & Cornwall Police, Teignbridge District Council (TDC) and other organisations, have developed a joint risk targeting report which uses various sources of data including the frequent caller data from the Police and Ambulance, DSFRS incident data and vandalism data from TDC.
- 3.3 The report, compiled by the Targeting & Evaluation team, identifies those premises or households which more than one agency has dealt with so that collaborative working can take place. SDDE have offered and carried out Home Safety visits for the majority of the households identified in this way.
- 3.4 The households that have been targeted in this way have invariably been found to be very high risk including one notable example where there had been a minor fire that was unreported to the Fire and Rescue Service previously. Through intervention in cases such as this, it is not difficult to see that resources targeted in this way can be very effective.

4. **<u>RISK PROFILES</u>**

- 4.1 A Community Risk Profile has been created for each of the DSFRS 12 Groups to reflect the distribution of risk within each Group Area. These contain information on where the risks groups are and how they might be engaged with, as well as signposting the reader to sources of further information and other targeting tools.
- 4.2 These profiles draw on the analysis carried out with Mosaic as well as some partner data to create a detailed snapshot of the community at a point in time. The documents are currently held on the service intranet though it is hoped to make them publically available in the near future.

5. **RECOMMENDATIONS**

5.1 It is recommended that the report be noted.

TREVOR STRATFORD Director of Service Support