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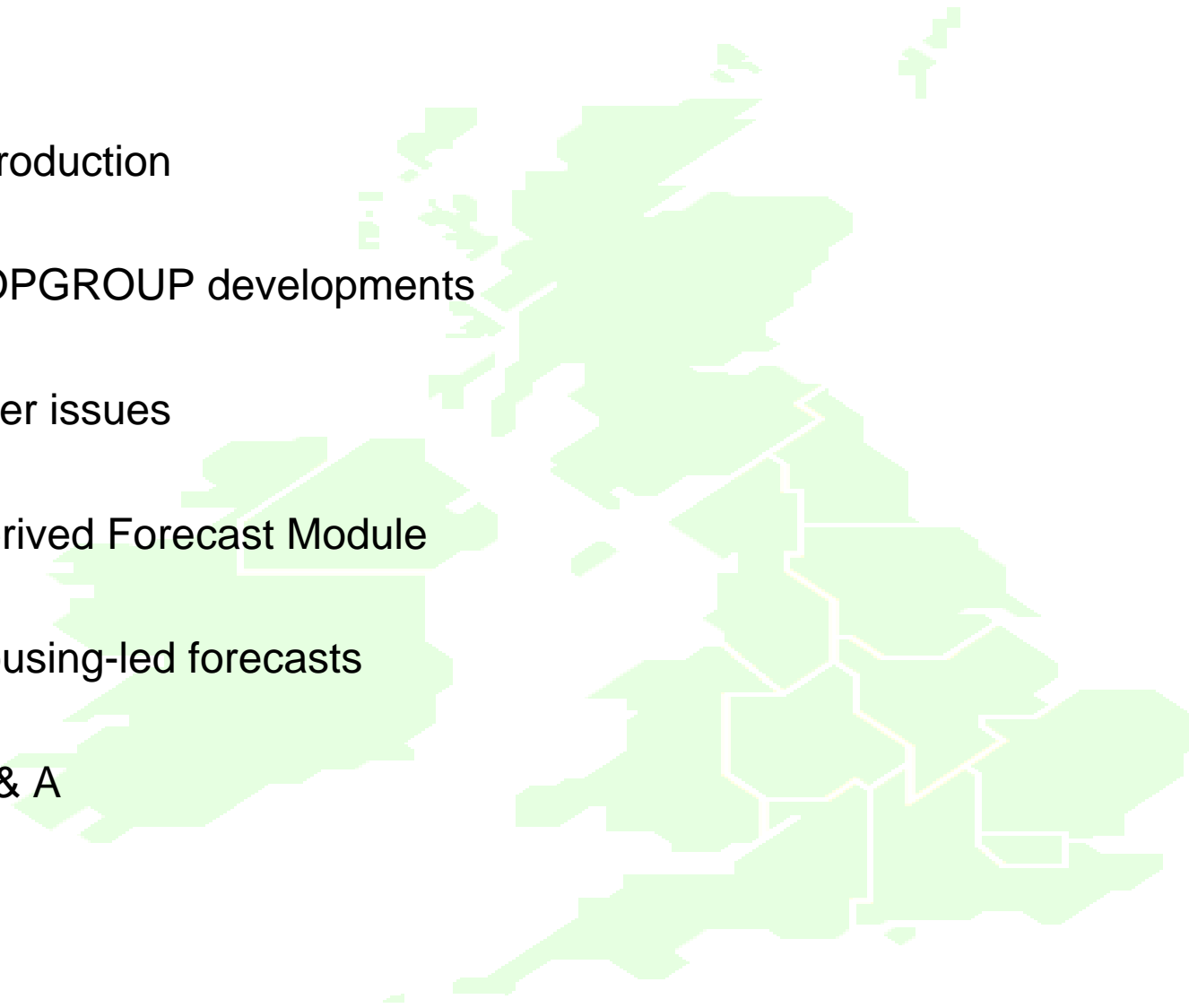
edge analytics



POPGROUP User Group (Scotland)

Ladywell House, Edinburgh
January 2012

- Introduction
- POPGROUP developments
- User issues
- Derived Forecast Module
- Housing-led forecasts
- Q & A





- **Edge Analytics** provides expertise in geographical modelling and research with a specialism in demographic forecasting and scenario planning
- This expertise is based upon 20 years experience in the application of modelling methods to support investment, planning and policy development in the public and private sector, both in the UK and internationally
- Edge Analytics is contracted by the Local Government Association (LGA) to support and develop POPGROUP - a suite of demographic forecasting used by local planners across the UK



Aberdeen City	Cornwall	Herefordshire	North Ayrshire	Salford City	The Vale of Glamorgan
Aberdeenshire	Cumbria	Highland	North Yorkshire	Leeds University	Torfaen
Argyll & Bute	Denbighshire	Kent	Northamptonshire	Sheffield	U.S. Census Bureau
Birmingham City	Derbyshire	Leeds City	Northern Ireland Statistics &	Shropshire	University of Manchester
Blackburn with Darwen	Dorset	Leicestershire	Research Agency	South Lanarkshire	University of Strathclyde
Blaenau Gwent	Dudley	Luton	Northumberland	Southern California	University of West of
Bournemouth	East Sussex	Marja-aho Arkkitehdit Oy	One North East	Association of Governments	England
Bradford	Fife	Merseyside Information	Oxfordshire	South West Observatory	Warwickshire
Brighton & Hove	Flintshire	Service	Pembrokeshire	Staffordshire	West Northamptonshire JPU
Buckinghamshire	General Register Office for	Midlothian	Pima Association of	Stirling	West Sussex
Caerphilly	Scotland	Milton Keynes	Governments	Stoke on Trent	Wiltshire
Cardiff	Glasgow & Clyde Valley	Monmouthshire	Poole	Swindon	Worcestershire
Carmarthen	Glasgow City	Nathaniel Lichfield &	Powys	Tameside	Wrexham
Ceredigion	Gloucestershire	Partners	Renfrewshire	Teeside Valley JSU	Yorkshire & Humber Public
Cheshire West & Chester	Greater London Authority	National University of	Rochdale	Telford & Wrekin	Health Observatory
City of Edinburgh	Gwynedd	Singapore	Royal Borough of Windsor &	The National Assembly for	
Conwy	Hampshire	Neath Port Talbot	Maidenhead	Wales	

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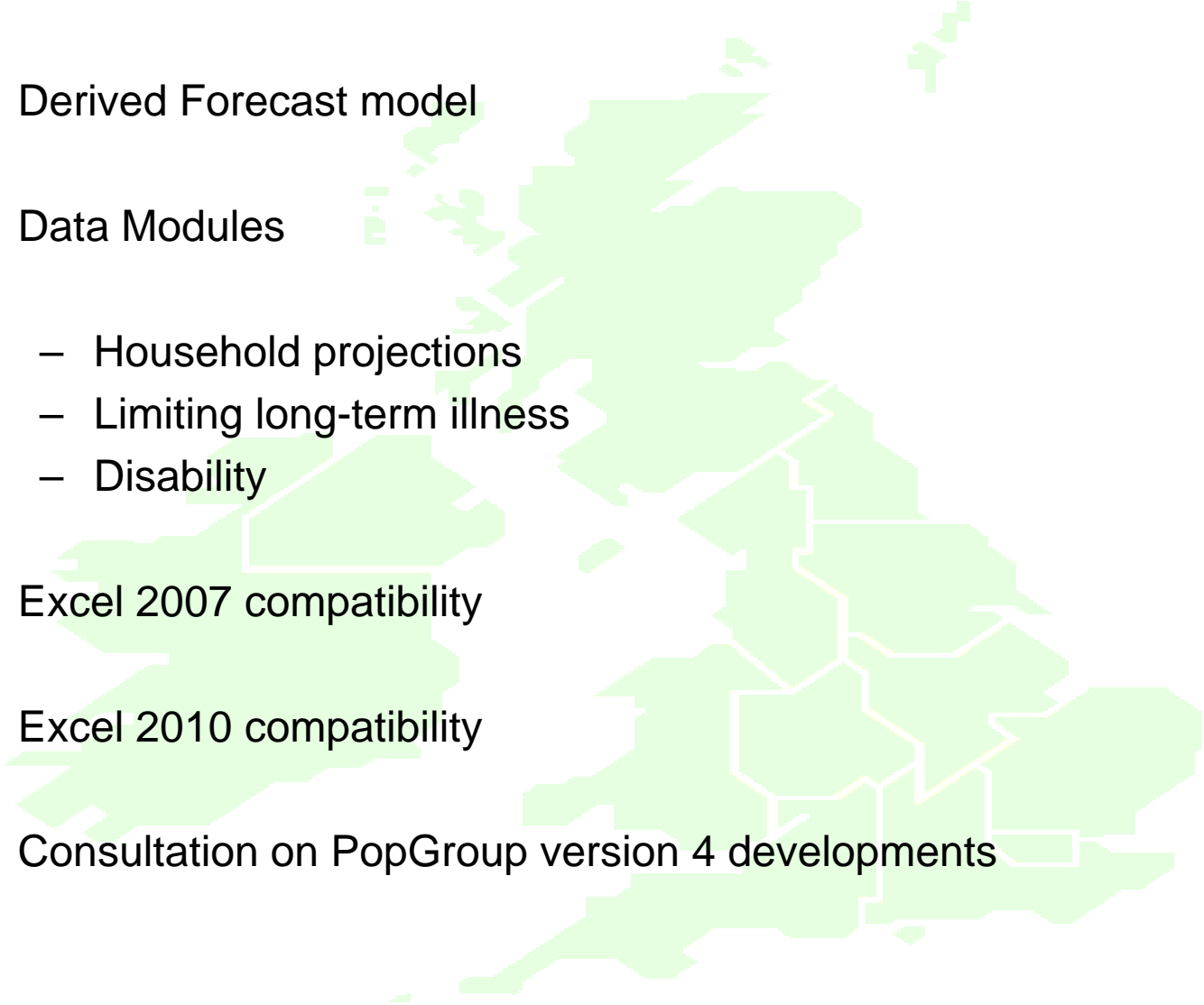
- Model development
- Configuration & calibration
- Distribution
- Technical support

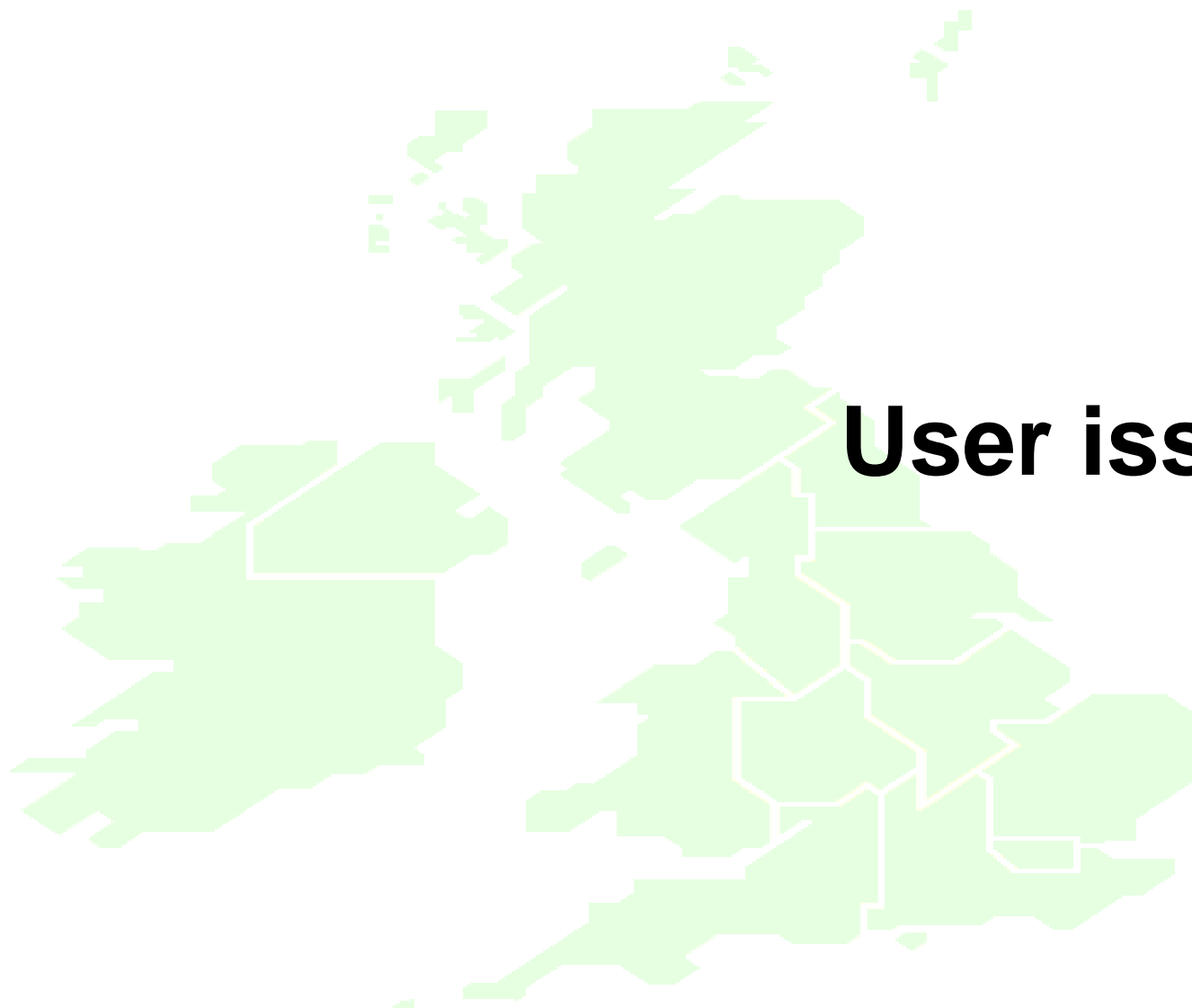
Key demographic issues

Population Growth
Smaller households
Population ageing
Ethnic change



POPGROUP Developments

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- Derived Forecast model
 - Data Modules
 - Household projections
 - Limiting long-term illness
 - Disability
 - Excel 2007 compatibility
 - Excel 2010 compatibility
 - Consultation on PopGroup version 4 developments



User issues

- A decade of change (2001-2007)
 - Housing boom
 - High mobility
 - EU expansion
 - Rising fertility
- A decade of change (2008-2012)
 - Financial crisis
 - Economic recession
 - Low mobility
 - Housing development decline



- A new administration
- Decentralisation - localism
- Demographic uncertainty
 - Fertility rise peaked?
 - Significantly reduced mobility
 - Reduction in EU migration
 - Points Based System – impact?
- ONS revisions to MYE, new SNPP
 - new Census data still 2 years away
- RSS targets now redundant
- Robust and local demographic statistics are key to renewed planning efforts



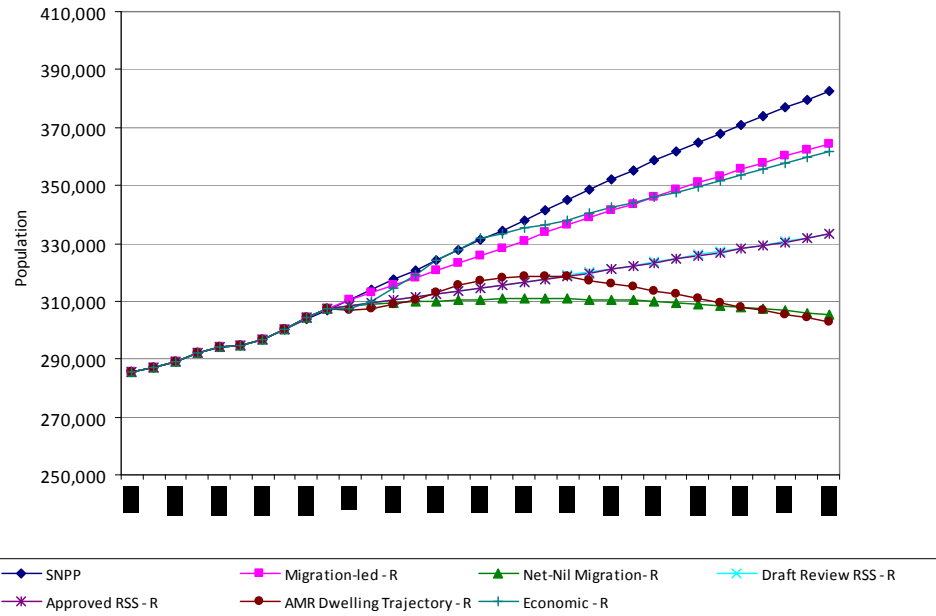
Localism
Policy Working Group

Example 1 – scenario development

	Scenario	Change 2006-2026				Average per year ²		
		Population		Households ¹		Net Migration	Dwellings	Jobs
		Change	%	Change	%			
High	Employment - Scenario A	110,990	35%	56,534	43%	2,912	3,052	3,403
	SNPP (WAG 2008-based)	106,448	33%	55,193	42%	2,443	2,920	3,214
	Employment - Scenario B	93,458	29%	49,346	37%	2,061	2,617	2,688
Medium	Max CR	83,696	26%	45,242	34%	1,532	2,368	2,304
	Migration-led recalibrated	79,365	25%	43,484	33%	1,330	2,261	2,133
	Employment - Scenario C	73,974	23%	41,360	31%	1,112	2,133	1,893
Low	SNPP (WAG 2006-based)	61,174	19%	36,081	28%	600	1,860	1,602
	5yr CR	57,939	18%	34,677	26%	314	1,728	1,275
	10yr CR	56,006	18%	33,885	26%	222	1,680	1,198
	Natural Change	46,814	15%	33,069	25%	0	1,631	561
	15yr CR	49,484	15%	31,211	24%	-88	1,518	938

Trend-led
Jobs-led
Dwelling-led

Example 2 – scenario development

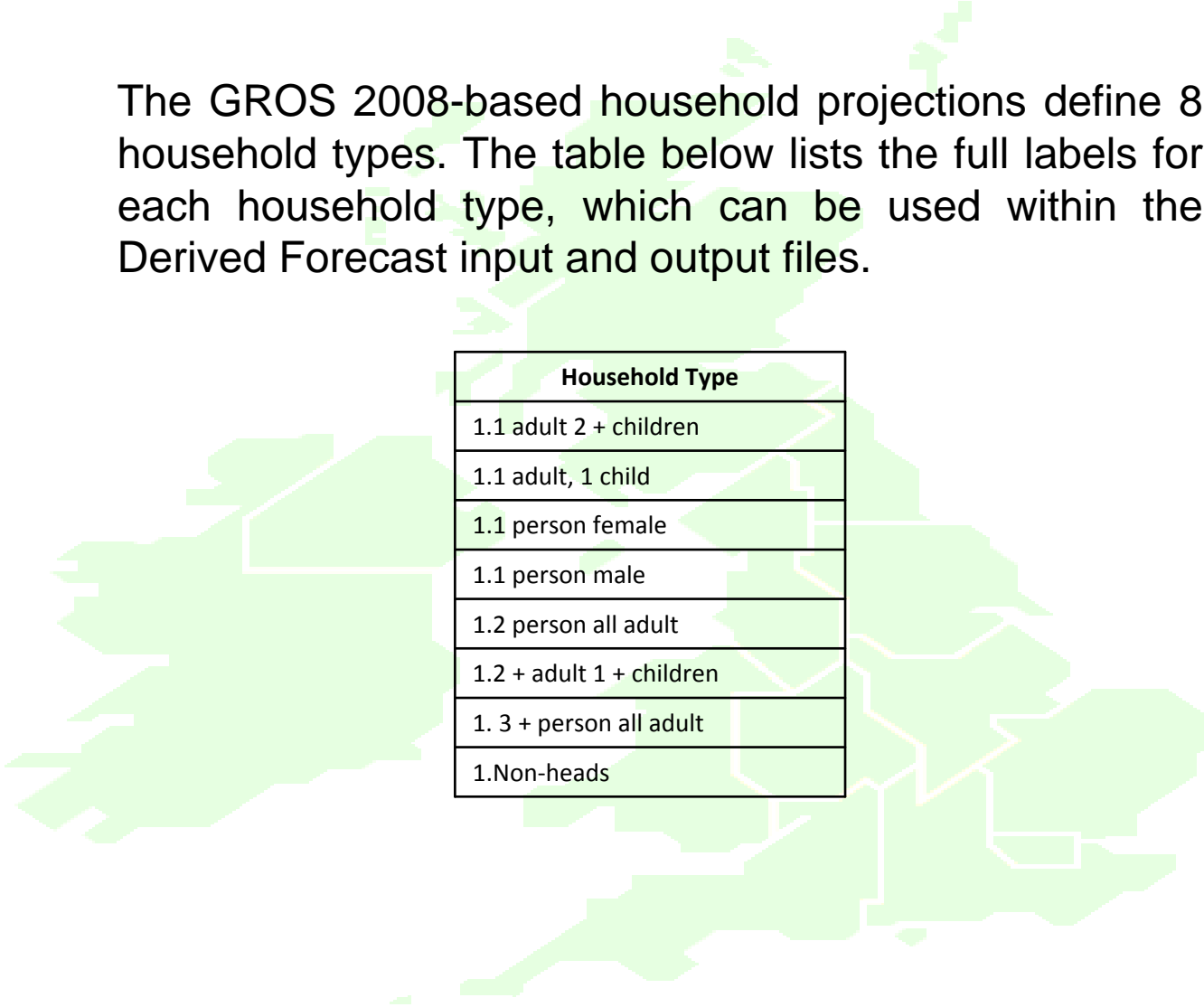


Scenario	Change 2010 - 2033				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
SNPP	75,315	24.5%	41,502	32.0%	2,499	1,855	1,250
Migration-led - R	56,885	18.5%	37,730	29.9%	2,135	1,688	934
Economic - R	54,150	17.6%	36,735	29.1%	2,035	1,642	803
Draft Review RSS - R	25,630	8.3%	25,134	19.9%	937	1,120	262
Approved RSS - R	25,515	8.3%	25,086	19.9%	933	1,118	261
Net-Nil Migration - R	-2,384	-0.8%	8,976	7.1%	0	399	-581
AMR Dwelling Trajectory - R	-4,672	-1.5%	12,363	9.8%	-301	550	-413

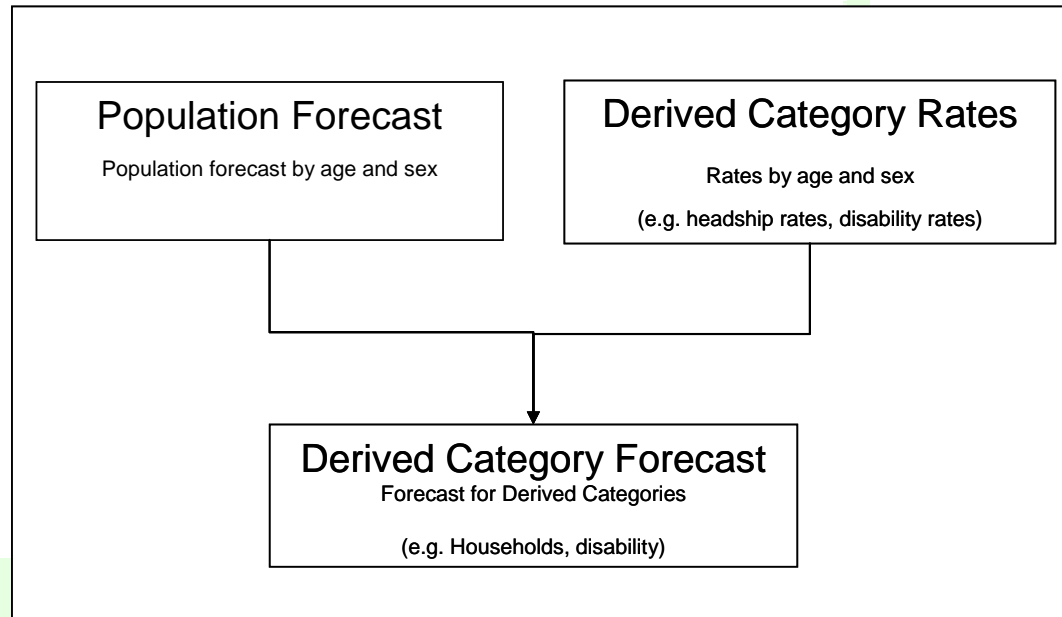


Derived Forecast Module

The GROS 2008-based household projections define 8 household types. The table below lists the full labels for each household type, which can be used within the Derived Forecast input and output files.



Household Type
1.1 adult 2 + children
1.1 adult, 1 child
1.1 person female
1.1 person male
1.2 person all adult
1.2 + adult 1 + children
1. 3 + person all adult
1.Non-heads



$$D_{a,s,u,y,d,g} = P_{a,s,u,y,g} * R_{a,s,u,y,d,g} / 100$$

D =Derived Category Forecast

P =Population 'at risk' Forecast

R =Derived Category Rates

a = age-group

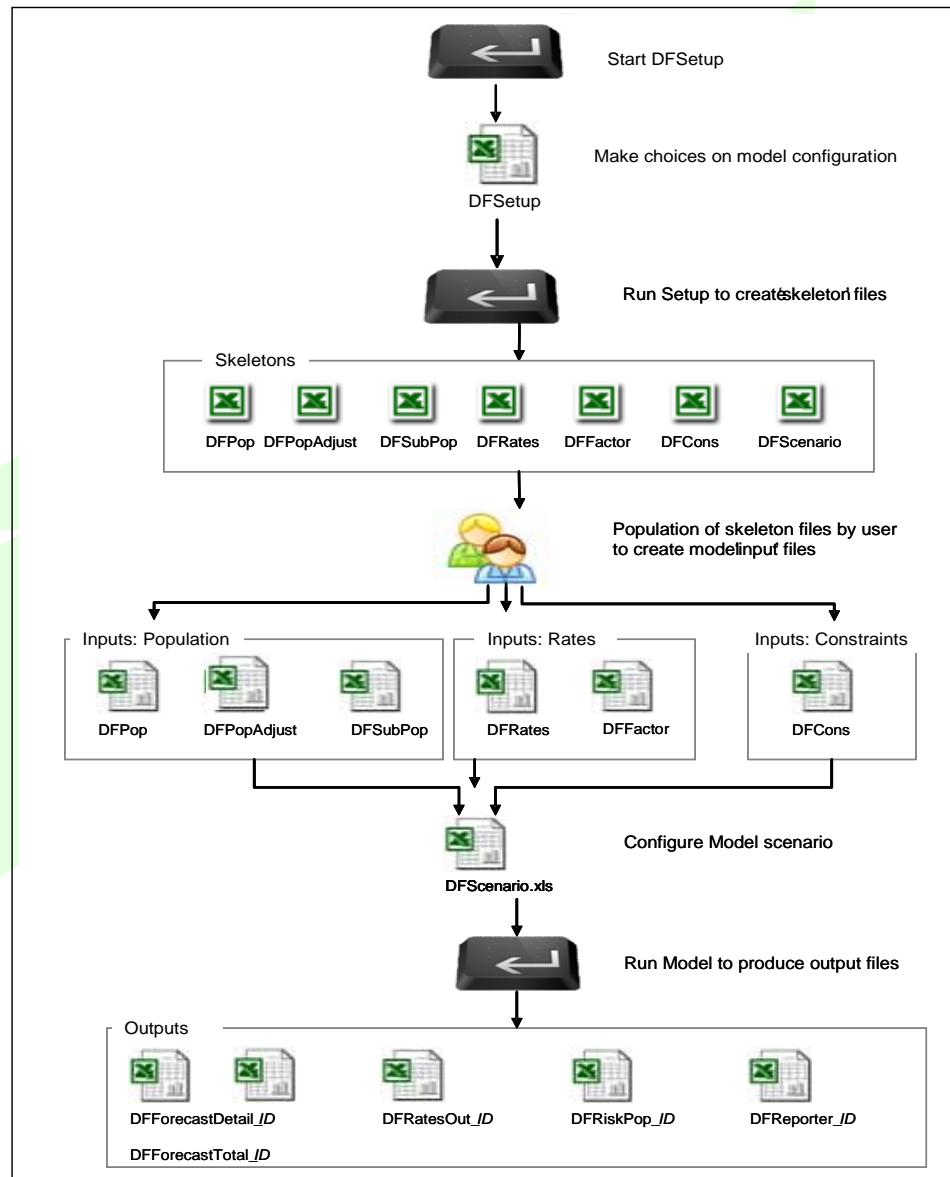
s = sex


u = Sub-population

y = year

d = derived category

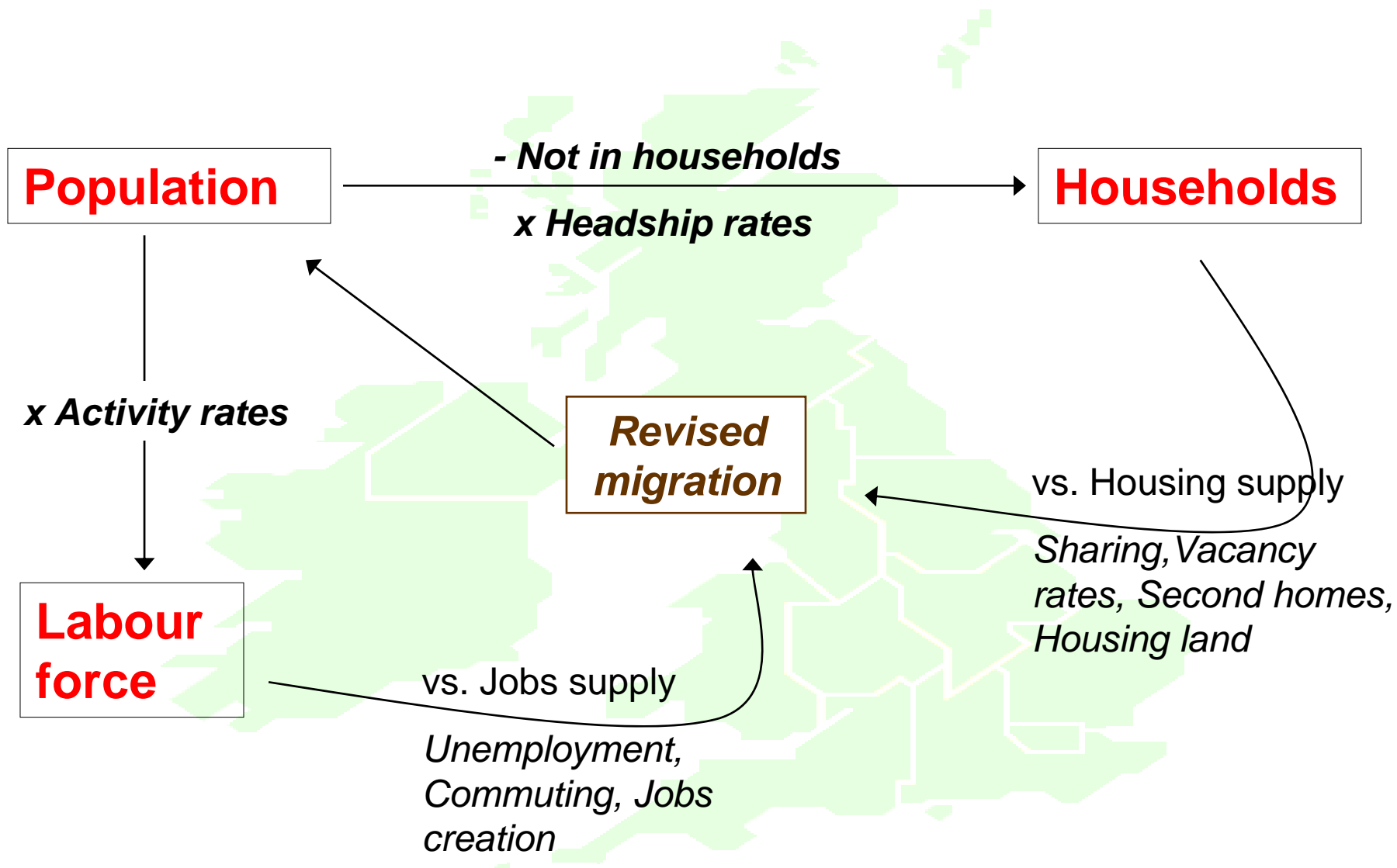
g = group (usually an area, but can be an ethnic group or social group)





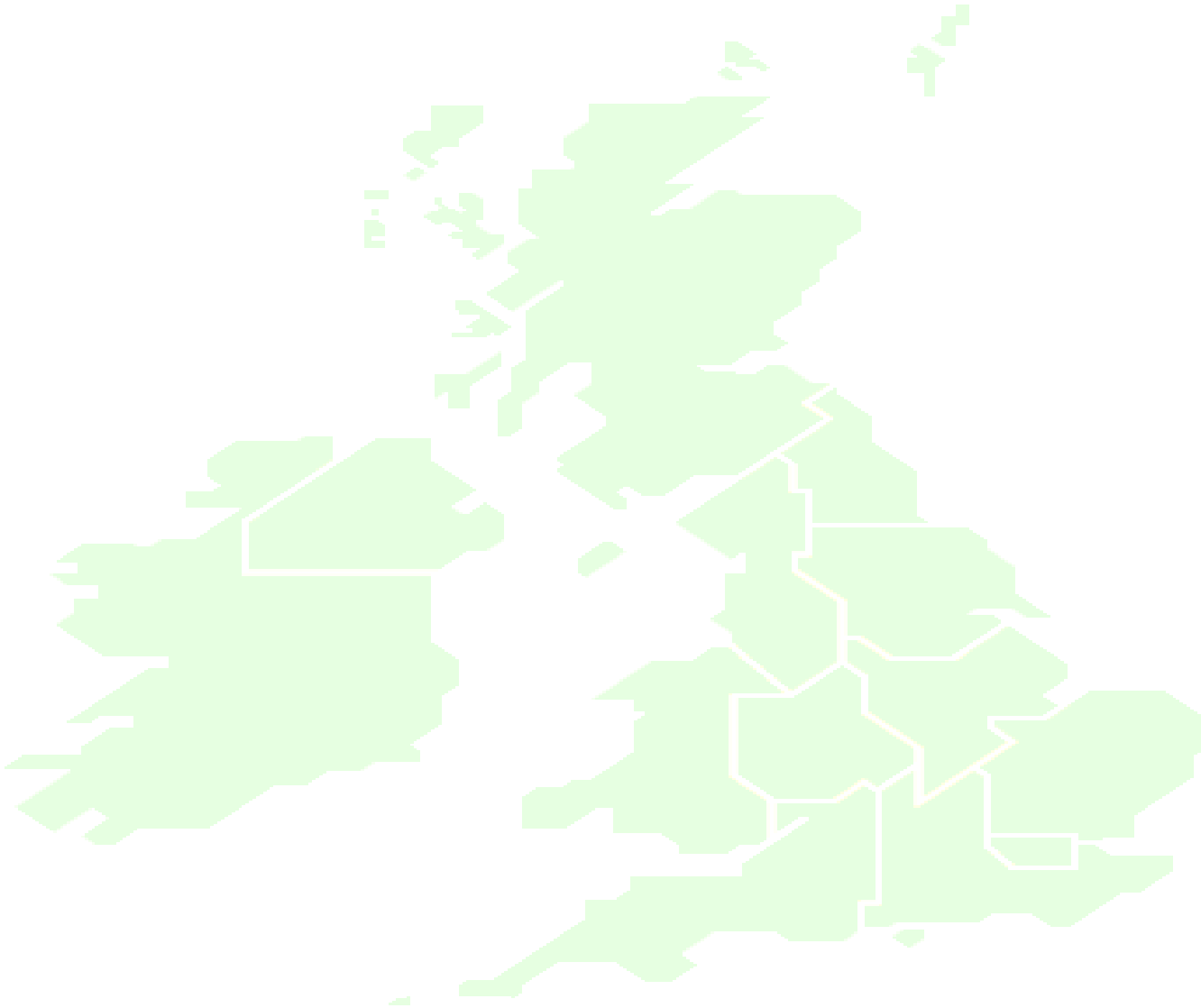
Housing-led forecasts

Jobs-led forecasts





Questions & Answers



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