

Retail Planner: 2010 version (using 2009 Household and Population Estimates)

Briefing note regarding Experian Revised 2009 Household and Population Estimates and Experian Revised 2009-based Population Projections

1. Why have Experian produced revised Population and Household estimates and revised Population projections?

For the 2010 version of Retail Planner, an optional extra data view of “Experian Revised 2009 Household and Population Estimates, and Experian Revised 2009-based Population Projections” has been made available. These Experian revised estimates and projections differ to the Experian standard 2009 Household and Population Estimates, and Experian standard 2009-based Population Projections, that continue to be used within the conventional (ie standard) 2010 version of Retail Planner.

Experian have produced these revised estimates and projections in order to take into account the following recent releases of Local Authority level data by the Office for National Statistics (ONS):

- Revised mid-2002 to mid-2008 Population Estimates for England & Wales
- Mid-2009 Population Estimates for England & Wales
- 2008-based Sub-National Population Projections (SNPP) for England

ONS released revised Local Authority level population estimates for mid-2002 to mid-2008 to incorporate a package of improvements to migration and population statistics. A key driver of these improvements was work undertaken by the cross-government Migration Statistics Improvement Programme (MSIP). The improvements to methodology and revised mid-2002 to mid-2008 Population estimates have then fed into the recently released ONS mid-2009 Local Authority level Population estimates for England & Wales and the ONS 2008-based Sub-National (Local Authority Level) Population Projections for England.

Whilst the release of these revised and improved ONS datasets was too late to incorporate into the standard Retail Planner update project, a decision was taken to create the additional Experian revised estimates and projections data view. This additional data view provides information allowing clients to easily adjust the provided standard local area estimates of Consumer Retail Expenditure if required.

2. How can the revised estimates be used to produce revised estimates of 2009 Consumer Expenditure for local areas?

Experian assess that the recent ONS releases of revised Local Authority-level population estimates and projections, and mid-2009 Local Authority-level population estimates, as detailed in section 1 above, have the following impact upon Retail Planner national 2009 Consumer Retail Expenditure estimates (in 2009 Prices) :

- National 2009 Consumer Retail Expenditure **will stay constant** (at the standard Retail Planner 2009 estimate of Consumer Retail Expenditure)
- National 2009 Consumer Retail Expenditure per Household **will change** (due to the difference in Households between the Experian 2009 standard estimate and the Experian 2009 revised estimate)
- National 2009 Consumer Retail Expenditure per Capita **will change** (due to the difference in Population between the Experian 2009 standard estimate and the Experian 2009 revised estimate)

For local areas within the UK, the impact is as follows:

- Local Area 2009 Consumer Retail Expenditure **will change** (due to the changing proportion of national households that exist in the small area between the Experian 2009 standard estimate and the Experian 2009 revised estimate of Households)
- Local Area 2009 Consumer Retail Expenditure per Household **will change**.
- Local Area 2009 Consumer Retail Expenditure per Capita **will change**

Whilst changes within the local area estimates are likely to be very small, they can be calculated if required as follows:

Mandatory variables required:

- Nat_Std_2009_HH = National Experian standard 2009 Household estimate
- Nat_Rev_2009_HH = National Experian revised 2009 Household estimate
- SmallArea__Std_2009_HH = Local Area Experian standard 2009 Household estimate
- SmallArea__Rev_2009_HH = Local Area Experian revised 2009 Household estimate
- SmallArea__Std_2009_ConsExp_i = Local Area Experian standard 2009 Consumer Retail Expenditure estimate for merchandise line i.

Optional variable required:

If revised 'Spend per Capita (ie Population)' figures also need to be calculated for the local area then the following additional variable will be required:

- SmallArea__Rev_2009_Popn = Local Area Experian revised 2009 Population estimate

Calculations required:

To calculate $SmallArea_Rev_2009_ConsExp_i$ = Local Area Experian revised 2009 Consumer Retail Expenditure estimate for merchandise line i.

- (a) $SmallArea_Std_ \%_of_National_HH = 100 \times (SmallArea_Std_2009_HH / Nat_Std_2009_HH)$
- (b) $SmallArea_Rev_ \%_of_National_HH = 100 \times (SmallArea_Rev_2009_HH / Nat_Rev_2009_HH)$
- (c) $Adjust_Factor = SmallArea_Rev_ \%_of_National_HH / SmallArea_Std_ \%_of_National_HH$
- (d) $SmallArea_Rev_2009_ConsExp_i = Adjust_Factor \times SmallArea_Std_2009_ConsExp_i$

To calculate $SmallArea_Rev_2009_ConsExp_i_per_HH$ = Local Area Experian revised 2009 Consumer Retail Expenditure estimate per Household for merchandise line i

- (a) $SmallArea_Rev09_ConsExp_i_per_HH = SmallArea_Rev_2009_ConsExp_i / SmallArea_Rev_2009_HH$

To calculate $SmallArea_Rev_2009_ConsExp_i_per_Popn$ = Local Area Experian revised 2009 Consumer Retail Expenditure estimate per Capita for merchandise line i

- (a) $SmallArea_Rev09_ConsExp_i_per_Popn = SmallArea_Rev_2009_ConsExp_i / SmallArea_Rev_2009_Popn$

Appendix

An example of using the Experian revised mid-2009 Household and Population estimates to create revised 2009 Consumer Expenditure Estimates for a Local Area within the UK

1. Objective

To obtain an estimate of 2009 Consumer Expenditure for 'Books & Stationary' in the Nottingham Postal Area (NG) that takes account of recent ONS releases of revised Local Authority-level population estimates and projections.

2. Input Data Required

All of the required input data can be obtained by producing the following Retail Planner 2010 version (using 2009 'Household and Population' estimates) reports for a target area of NG Postal Area compared to a National base:

- **Standard Retail Planner data view** (using Experian standard 2009 Household and Population estimates and Experian standard 2009-based Population Projections)
- **Optional extra Retail Planner data view** (containing Experian Revised 2009 Household and Population Estimates, and Experian Revised 2009-based Population Projections).

The variables required from each data view are as follows :

(a) From the standard Retail Planner data view

- Nat_Std_2009_HH (National standard 2009 Household estimate) is **26,569,236**
- SmallArea__Std_2009_HH (Local Area standard 2009 Household estimate) is **506,154**
- SmallArea__Std_2009_ConsExp_i where i = Books & Stationary, is **£129, 676,638**
(Local Area standard 2009 Consumer Retail Expenditure estimate for merchandise line i.

(b) From the optional extra Retail Planner data view

- Nat_Rev_2009_HH (National revised 2009 Household estimate) is **26,522,644**
- SmallArea__Rev_2009_HH (Local Area revised 2009 Household estimate) is **503,503**

..and assuming that we want to calculate revised spend per capita...

- SmallArea__Rev_2009_Popn (Local Area revised 2009 Population estimate) is **1,149,682**

3. Calculations and revised output

$$(a) \text{ SmallArea_Std_}\% \text{ of_National_HH} = 100 \times (\text{SmallArea_Std_2009_HH} / \text{Nat_Std_2009_HH})$$

$$= 100 \times (506,154 / 26,569,236) = 1.905038 \%$$

$$(b) \text{ SmallArea_Rev_}\% \text{ of_National_HH} = 100 \times (\text{SmallArea_Rev_2009_HH} / \text{Nat_Rev_2009_HH})$$

$$= 100 \times (503,503 / 26,522,644) = 1.898389 \%$$

$$(c) \text{ Adjust_Factor} = \text{SmallArea_Rev_}\% \text{ of_National_HH} / \text{SmallArea_Std_}\% \text{ of_National_HH}$$

$$= 1.898389 / 1.905038 = 0.996510$$

$$(d) \text{ SmallArea_Rev_2009_ConsExp}_i = \text{Adjust_Factor} \times \text{SmallArea_Std_2009_ConsExp}_i$$

$$= 0.996510 \times \text{£}129,676,638 = \underline{\text{£}129,224,067}$$

That is, the revised estimate of 2009 Consumer Expenditure for Books & Stationary in Nottingham Postal Area (NG) is £129,224,067

To estimate $\text{SmallArea_Rev_2009_ConsExp}_i \text{ per_HH}$ (Local Area Experian revised 2009 Consumer Retail Expenditure estimate per Household for merchandise line i) the calculation is....

$$(a) \text{ SmallArea_Rev09_ConsExp}_i \text{ per_HH}$$

$$= \text{SmallArea_Rev_2009_ConsExp}_i / \text{SmallArea_Rev_2009_HH}$$

$$= \text{£}129,224,067 / 503,503 = \underline{\text{£}256.65}$$

To estimate $\text{SmallArea_Rev_2009_ConsExp}_i \text{ per_Popn}$ (Local Area Experian revised 2009 Consumer Retail Expenditure estimate per Capita for merchandise line i) the calculation is....

$$(a) \text{ SmallArea_Rev09_ConsExp}_i \text{ per_HH}$$

$$= \text{SmallArea_Rev_2009_ConsExp}_i / \text{SmallArea_Rev_2009_Popn}$$

$$= \text{£}129,224,067 / 1,149,682 = \underline{\text{£}112.40}$$

For Books & Stationary in Nottingham (NG) Postal Area, the impact of the revised Experian Household & Population estimates can therefore be summarised as follows :

Variable	Standard Retail Planner value (before revision)	Revised value
2009 Consumer Expenditure (Books & Stationary)	£129,676,638	£129,224,067
2009 Consumer Expenditure (Books & Stationary) per HH	£256.20	£256.65
2009 Consumer Expenditure (Books & Stationary) per capita	£112.27	£112.40