



## Data Quality Audit

Prepared For : The Anycompany  
Job Name : 5000

Date Prepared : 29/12/2017  
Input Filename : Sheet1\$.csv  
Records Supplied : 5,058

Addresses	Indicates the quality of the names and addresses in your data. This tests against the Royal Mail's PAF file.		Num Records	%
	Records postally correct before PAF cleansing		747	14.77%
	Records postally correct after PAF cleansing		4,066	80.39%
	Records postally correct to at least building level after PAF cleansing		4,139	81.83%

Telephone Numbers	Indicates the success of appending telephone numbers onto the names and addresses supplied.		Num Records	%
	Records with telephone numbers from BT OSIS (using your supplied names)		943	18.64%
	Records with telephone number from BT OSIS (using Enhanced Edited Electoral Roll)		41	0.81%
	Landline telephone numbers from other data sources (predicted after validation)		1,054	20.84%
	Mobile telephone number from other data sources (predicted after validation)		655	12.95%
	Existing numbers on Telephone Preference Service (TPS)		1,685	45.79%

\* All new telephone numbers are provided before we apply the TPS. As an indication, a typical file of telephone numbers would have 70-80% of telephone numbers on the TPS.

Residency	Indicates the success of verifying the names and addresses supplied against the Enhanced Edited Electoral Roll.		Num Records	%
	Name & address supplied has been verified		1,796	35.51%
	Residency verified and alternative name available		0	0.00%
	Residency NOT verified, but alternative name available		1,181	23.35%

Suppressions	Indicates how much of your file can be improved by using our various suppression files.		Num Records	%	
	Records on Mailing Preference Service (MPS)		N/A	N/A	
	Records identified as deceased		33	0.79%	
	Unnecessary duplicate records		66	1.30%	
	Using Movers?	Yes	Records identified as goneaway if all movers are purchased	875	17.30%
		No	Records for which we can provide a new address	0	0.00%
	Records identified as goneaway		875	17.30%	

Verification	Indicates how much of your file can be verified by using our services.		Num Records	%
	Unusable/Salacious records		572	11.31%
	Invalid telephone numbers		1,527	36.80%
	Invalid e-mail addresses		N/A	N/A

RoI	Indicates the potential saving to be made by cleansing your data.		Value
	Estimated return on investment for a single mailing		£701.07
	Estimated total CO <sub>2</sub> savings		270.55 kg

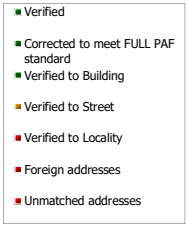
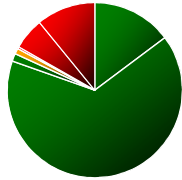
Please see the Return on Investment sheet for full details

This summary shows details of initial level matches. See the detail tabs for information about other match levels.

**Name & Address**

Addresses

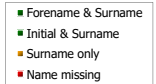
The addresses in your data are checked against the Royal Mail's Postcode Address File (PAF), which is the primary reference for all address data in the UK. Any addresses with missing or incorrect data such as postcodes or misspelt street names are corrected, increasing the chance of your mail being delivered to the correct address and reducing your mailing costs.



Records validated against the Postcode Address File (PAF)		Num Records	%
Verified		747	14.77%
Corrected to meet FULL PAF standard		3,319	65.62%
Verified to Building		73	1.44%
Verified to Street		54	1.07%
Verified to Locality		18	0.36%
Foreign addresses		296	5.85%
Unmatched addresses		551	10.89%

Existing Names

This section shows how much name information is available from your supplied data. We can match your data against our reference files with either Surname, Initial or Forename level matches as required. We recommend that you use Initial level matches unless your data contains a large number of records that only contain a surname.



Existing Name Information		Num Records	%
Forename & Surname		26	0.51%
Initial & Surname		4,921	97.29%
Surname only		109	2.16%
Name missing		2	0.04%

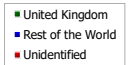
Gender



Gender Results		Num Records	%
Male		2,335	46.16%
Female		1,137	22.48%
Unknown		1,586	31.36%

Country Detection

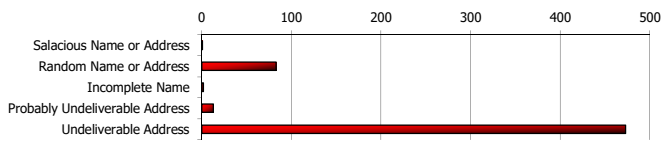
Country Detection identifies the country that the address in each record is from, or whether there is insufficient address information to identify the country.



Country Data		Num Records	%
United Kingdom		4,762	94.15%
Rest of the World		N/A	N/A
Unidentified		N/A	N/A

Salacious / Undeliverable

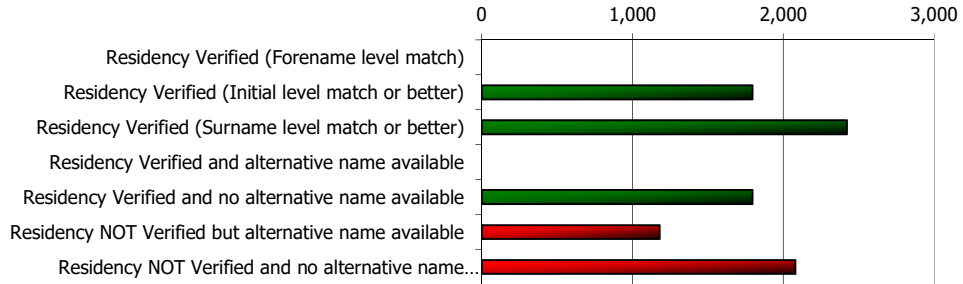
Unusable Records indicates records that appear to have been maliciously or accidentally entered in an effort to avoid being contacted. It allows you to exclude records from a mailing that include salacious name or address details, or where the name or address is incomplete and would render the mailing undeliverable.



Unusable Records		Num Records	%
Salacious Name or Address		1	0.02%
Random Name or Address		83	1.64%
Incomplete Name		2	0.04%
Probably Undeliverable Address		13	0.26%
Undeliverable Address		473	9.35%

### Residency Verification

The names & addresses in your data are checked against our Enhanced Edited Electoral Roll (EER) to confirm residency. This contains approximately 40m individuals living at 22m UK addresses. The data is updated regularly, and refreshed quarterly.



Residency Verification

Residency Verification against Enhanced Edited Electoral Roll	Num Records	%
Residency Verified (Forename level match)	0	0.00%
Residency Verified (Initial level match or better)	1,796	35.51%
Residency Verified (Surname level match or better)	2,422	47.88%
Residency Verified and alternative name available	0	0.00%
Residency Verified and no alternative name available	1,796	35.51%
Residency NOT Verified but alternative name available	1,181	23.35%
Residency NOT Verified and no alternative name available	2,081	41.14%



**Telephone Numbers**

Producing up to 1 number per record, with uplift. Existing numbers are excluded - an existing number will not be appended again

Combined Telephone Numbers	Ignoring effects of TPS and validation		Num Records	%
	Existing		N/A	N/A
	BT OSIS		307	20.40%
	Consented Landlines		634	42.13%
	Consented Mobiles		564	37.48%

Combined Telephone Numbers	Excluding TPS numbers but ignoring effect of validation		Num Records	%
	Existing		N/A	N/A
	BT OSIS		77	8.55%
	Consented Landlines		299	33.19%
	Consented Mobiles		525	58.27%

Combined Telephone Numbers	Ignoring effects of TPS but estimating effect of validation on consented numbers		Num Records	%
	Existing		N/A	N/A
	BT OSIS		307	20.40%
	Consented Landlines		380	25.25%
	Consented Mobiles		338	22.46%

Combined Telephone Numbers	Excluding TPS numbers and estimating effect of validation on consented numbers		Num Records	%
	Existing		N/A	N/A
	BT OSIS		77	8.55%
	Consented Landlines		179	19.87%
	Consented Mobiles		315	34.96%

Existing Telephone Numbers

The chart below indicates the number of records with an existing telephone numbers in each of your telephone number columns.

Records with existing telephone numbers		Num Records	%
Records with primary telephone number		3,680	72.76%
Records with secondary telephone number		N/A	N/A
Records with third telephone number		N/A	N/A

Telephone Preference Service

If you are contacting people for marketing purposes and you do not have their express permission to call them for that purpose, you must screen telephone numbers against the Telephone Preference Service (TPS). Failure to screen against the TPS could result in a large fine and loss of brand reputation. Unfortunately, due to the licensing restrictions imposed by our data suppliers, we cannot give you an accurate figure for the number of additional telephone numbers that we can supply that are also on the TPS until you purchase those numbers.

Telephone Preference Service (TPS) status		Num Records	%
Callable existing telephone numbers		1,995	54.21%
Non-callable existing telephone numbers		1,685	45.79%
Callable new telephone numbers (estimated)		246	25.00%
Non-callable new telephone numbers (estimated)		738	75.00%

**Suppressions**

The Mailing Preference Service (MPS) contains a list of people and households that would prefer not to receive direct marketing mail. DMA Best Practise is to screen all data against this file before sending out a mailing. The chart below indicates the number of your records that can be found on the MPS.

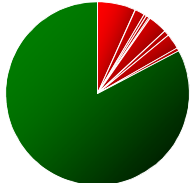
Mailing Preference Service (MPS)

- Personal records on MPS
- Family records on MPS
- Deceased records on MPS
- Records not on MPS

Mailing Preference Service (MPS) status		Num Records	%
Personal records on MPS		N/A	N/A
Family records on MPS		N/A	N/A
Deceased records on MPS		N/A	N/A
Records not on MPS		N/A	N/A

Around 10% of people in the UK move house every year, leading to a large quantity of wasted, undeliverable mail being sent out to old addresses. We have a wide selection of some of the best goneaway reference files available in the UK, giving us the ability to remove the largest possible number of uncontactable records from your database.

Goneaways



- disConnect
- NCOA Suppress
- Purity
- GAS
- Information Works
- QinetiC
- SmartDepart
- The Ark
- Data8 Goneaway
- Records not matched as goneaway

Goneaway Service	Forename Match	Initial Match	Surname Match
disConnect	0	242	520
NCOA Suppress	0	87	79
Purity	0	23	26
GAS	0	25	63
Information Works	0	12	15
QinetiC	0	172	729
SmartDepart	0	48	120
The Ark	1	137	273
Data8 Goneaway	0	29	44
Records not matched as goneaway	5,057	4,183	3,179
Records matched as goneaway	1	875	1,879
Percentage matched as goneaway	0.02%	17.30%	37.15%

\* New addresses for movers were not followed when producing this report. If you re-process the data with the new addresses, these figures will be reduced.

In some cases it is possible to find the new address for a person that is identified as a goneaway, enabling you to keep in contact with that person and retain them as a valuable customer. We use three reference files to provide the movers information - Royal Mail's National Change of Address (NCOA) Update file, The READ Group's GAS Reactive file and Equifax's reConnect file. We can provide details of telephone numbers, deceaseds etc. at the new address from the NCOA Update file immediately, but the details from GAS Reactive and reConnect are only available once the data has been purchased.

Movers



- NCOA Update
- reConnect
- GAS Reactive
- Smartlink
- QinetiC
- Records where a new address is not available

Mover Service	Forename Match	Initial Match	Surname Match
NCOA Update	N/A	N/A	N/A
reConnect	N/A	N/A	N/A
GAS Reactive	N/A	N/A	N/A
Smartlink	N/A	N/A	N/A
QinetiC	N/A	N/A	N/A
Records where a new address is not available	5,058	5,058	5,058
Records where a new address is available	0	0	0
Percentage of records with a new address available	0.00%	0.00%	0.00%

\* This audit was produced without following the movers, so you are not able to purchase these new addresses. If you require the new addresses for movers, please re-process your data with the option to follow mover addresses selected.

Addressing mail to the recently deceased can cause great distress to the bereaved as well as damaging your brand reputation and wasting resources. We have collected some of the best deceased reference files available in the UK, allowing us to remove the largest possible number of deceased records from your database with a high degree of accuracy.

Deceased



- disConnect
- Mortscreen
- The Bereavement Register (TBR)
- National Deceased Register (NDR)
- QinetiC
- Records not matched as deceased

Deceased Service	Forename Match	Initial Match	Surname Match
disConnect	0	10	10
Mortscreen	0	8	8
The Bereavement Register (TBR)	0	1	1
National Deceased Register (NDR)	0	14	14
QinetiC	0	0	0
Records not matched as deceased	4,183	4,150	4,150
Records matched as deceased	0	33	33
Percentage matched as deceased	0.00%	0.79%	0.79%

Having duplicate records in your database can cause you to send multiple copies of mailings to customers unnecessarily, wasting resources and damaging your brand image, and make it more difficult to extract useful analysis from your database. Our advanced matching routines can identify and remove duplicates for you, giving you a more accurate picture of your real customer base.

De-duplicate



- Duplicates (Forename level match)
- Duplicates (Initial level match)
- Duplicates (Surname level match)
- Duplicates (Premise level match)
- Completely unique records

Duplicate status	Num Records	%
Duplicates (Forename level match)	0	0.00%
Duplicates (Initial level match)	66	1.30%
Duplicates (Surname level match)	101	2.00%
Duplicates (Premise level match)	130	2.57%
Completely unique records	4,928	97.43%

**Validation**

**Email Validation**

We have been able to verify the following number of email addresses. We check that the email address "syntax" or structure is correct, and that the "domain" (to the right of the @ symbol) is a live mail server. We can also validate individual mailboxes if required during the purchase process.

- Valid email addresses
- Blank email addresses
- Catch-all email addresses
- Grey listed email addresses
- Inconclusive email addresses
- Invalid email addresses

Validation status	Num Records	%
Valid email addresses	N/A	N/A
Blank email addresses	N/A	N/A
Catch-all email addresses	N/A	N/A
Grey listed email addresses	N/A	N/A
Inconclusive email addresses	N/A	N/A
Invalid email addresses	N/A	N/A

**Telephone Validation**

We check whether a telephone number is the correct length based on the exchange (some exchanges for smaller areas only have 5 digit local numbers, while most have 6) and falls into a valid range (most exchanges have only allocated certain ranges of the possible numbers, for example the 01234 exchange does not allow any numbers starting with 1, except those starting 159).



- Valid telephone numbers
- Blank telephone numbers
- Foreign telephone numbers
- Invalid telephone numbers

Validation status	Num Records	%
Valid telephone numbers	2,623	63.20%
Blank telephone numbers	0	0.00%
Foreign telephone numbers	0	0.00%
Invalid telephone numbers	1,527	36.80%

### Mailing Return on Investment

The return on investment calculations are based on the following values, which you can modify to update the return on investment estimate.

Item	Value
Cost of identifying duplicates	£27.82
Cost of MPS	N/A
Cost of suppressing goneaways	£262.50
Cost of suppressing deceased	£11.55
Cost of suppressing unusable/salacious	£32.88
Cost of printing postcard & address	£0.10
Cost of postage	£0.47
Cost of capturing a return	£0.10

We are assuming that you are mailing a "Letter" sized item, weighing approx 35g via Mailsort 1400 2nd class. We are also assuming that you are purchasing suppressed results. If you were to purchase flagged results and mail the same data several times, your return on investment would increase substantially.

Mailing ROI Details

Item	With Cleansing	Without Cleansing
Records removed	1,546	0
Records sent	3,512	5,058
Cost of removal	£334.75	£0.00
Cost of capturing returns	£0.00	£154.60
Cost of print & postage	£2,001.84	£2,883.06
Total cost of mailing	£2,336.59	£3,037.66

**Return on Investment** **£701.07**

\* This figure is the minimum amount you will save. Another benefit is avoiding causing distress to bereaved relatives and therefore damaging your brand.

The CO<sub>2</sub> Calculator shows your maximum potential CO<sub>2</sub> savings by suppressing your data against services that result in you sending fewer mail items.

Service	Records Suppressed	CO <sub>2</sub> Saved
De-duplication	66	11.55 kg
MPS	0	0.00 kg
Goneaway	875	153.13 kg
Deceased	33	5.78 kg
Unusable/salacious	572	100.10 kg
<b>Total</b>		<b>270.55 kg</b>

The calculation for how much CO<sub>2</sub> is used for each mail item is a complicated equation based on many factors and assumptions including the paper, the ink and the delivery. We have used figures from [www.reduceyourco2.co.uk](http://www.reduceyourco2.co.uk). You can change our assumptions if you want by changing the numbers below.

Weight of each mail item (grams)	35
CO <sub>2</sub> used (grams) per gram of mail	5
Total CO <sub>2</sub> (grams) used per mail item	175

CO<sub>2</sub> Calculator

The quotation and return on investment details shown below are approximate, and selecting, deselecting or changing options for any particular entry may affect other entries.

Service	Unit	Quantity	Price Per Unit	Price
PAF Cleansing	Per Thousand	5,058	£6.50	£32.88
Country Detection	Per Thousand	5,058	£6.00	£30.35
Name Cleansing	Per Thousand	5,058	£4.00	£20.23
Residency Verification	Per Thousand	1,796	£15.00	£26.94
Name Append	Per Thousand	1,181	£32.00	£37.79
Telephone Number Append with XD Flags	Per Thousand	4,834	£42.50	£205.45
Telephone Number Append without XD Flags	Per Thousand	4,834	£37.50	£181.28
Telephone Number Append (non OSIS) Landlines	Per Hit	1,054	£0.18	£184.51
Telephone Number Append (non OSIS) Mobiles	Per Hit	655	£0.18	£114.69
Telephone Number Compare	Per Thousand	5,058	£0.00	£0.00
Telephone Number Validation	Per Thousand	4,150	£6.50	£26.98
Live Telephone Number Validation	Per Thousand	3,164	£40.00	£126.56
Live Mobile Number Validation	Per Thousand	986	£27.50	£27.12
TPS Existing Numbers	Per Thousand	3,680	£35.00	£128.80
TPS New Numbers	Per Thousand	956	£35.00	£33.46
MPS	Per Thousand	N/A	£4.50	N/A
Flagging Goneaways	Per Hit	875	£0.40	£350.00
Suppressing Goneaways	Per Hit	875	£0.30	£262.50
Flagging Deceaseds	Per Hit	33	£0.45	£14.85
Suppressing Deceaseds	Per Hit	33	£0.35	£11.55
NCOA	Per Hit	N/A	£0.55	N/A
reConnect	Per Hit	N/A	£0.55	N/A
GAS Reactive	Per Hit	N/A	£0.60	N/A
De-duplicate	Per Thousand	5,058	£5.50	£27.82
Salacious / Unusable Records	Per Thousand	5,058	£6.50	£32.88
Email Validation	Per Thousand	N/A	£6.50	N/A
Flagging Stop File	Per Thousand	5,058	£6.50	£32.88
Suppressing Stop File	Per Thousand	5,058	£6.50	£32.88

Price Card