# BRITISH HOUSEHOLD PANEL SURVEY 

## USER MANUAL

## VOLUME A

INTRODUCTION, TECHNICAL REPORT AND APPENDICES<br>edited by<br>Marcia Freed Taylor<br>with John Brice, Nick Buck and<br>Elaine Prentice-Lane

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## Preface to 2018 Edition

This new edition of the British Household Panel Survey data incorporates a number of enhancements and corrections to the data for BHPS waves 1 to 18 since the previous release in 2010. These changes are listed in Appendix 4. In summary the involve a) the addition to the main data set of net income variables, previously released separately; b) the addition variables to assist linkage to the Understanding Society data set which which includes BHPS sample members; c) some enhancements to data included in the XWAVEDAT file, and d) a range of data corrections mainly from user comments: these include limited corrections to income data, fixing issues with employment history and occupation data at wave 18 and some issues with weights.

This volume of documentation has been updated to reflect as far as possible the changes made in this release. It should be noted that the list of publications (Appendix 5) has not been updated. However an up to date list of BHPS publications is maintained at https://www.iser.essex.ac.uk/bhps/publications.

It should be noted that for this release there is now a separation between a standard End User Licence (SN 5151) release and a Special Licence release (SN 8380). The former has some limits on the range of more disclosive variables, either where variables are dropped (e.g. month of birth) or a condensed classification is used (e.g. for occupation variables). Researchers requiring variables only held in the Special Licence will need to apply for access through the UKDS which will require approval from the data owners as per the process required for access to other Special Licences.

The data set documented here is intended for users wishing to use BHPS waves 1 to 18 on their own. The main version of Understanding Society which ISER is now releasing is a harmonised version which incorporates the 18 waves of BHPS data and uses consistent variable naming between the two studies. This version should be used where researchers wish to analyse both BHPS and Understanding Society data together.

## Acknowledgements

This User Manual has been produced by Marcia Freed Taylor, John Brice, Nick Buck and Elaine Prentice-Lane.

Nick Buck designed the User Database in consultation with Randy Banks who designed the Survey Database and its associated data processing system with the support of Frances Williams. The development of aspects of the database, including derived variables, weighting and imputation, involved the active participation of many present and former members of the Institute, including Alan Taylor, Mark Taylor, Jonathan Gershuny, David Rose, Andrew Clark, Shirley Dex, Tony Shorrocks, Jackie Scott, Heather Laurie, Kim Perren, Louise Corti, John Brice and Sarah Jarvis.

The work involved in the creation of the documentation of the User Database has been carried out by many of the staff of the Institute. Particularly dedicated and extraordinary effort in this documentation and in the production of these two volumes was made by Nick Buck, John Brice and Elaine PrenticeLane. Contributions by Adrian Birch, Malcolm Brynin, Judi Egerton, Ann Farncombe, Jay Gershuny, Heather Laurie, Andrew McCulloch, Victoria Nolan, Rachel Smith and Jenifer Tucker are also included in Volume A. Randy Banks provided invaluable support in the production of the volumes. The sections on Weighting, Sampling and Imputation were produced by Alan Taylor and Nick Buck, that on Sampling Error by Alan Taylor; the advice on weighting and sampling of Professor Graham Kalton, Senior Statistician of WESTAT, is gratefully acknowledged.

This revised edition of the data benefited from inputs from many members of the current Understanding Society staff in ISER including Michaela Benzeval, Laura Fumagalli, Nicole James, Graham Jolliffe, Gundi Knies, Alita Nandi and John Payne.

The BHPS Net Income Data which is included in this edition of the data for the first time was originally developed by Stephen Jenkins and Sarah Jarvis. Support for the development of later editions was provided by Elena Bardasi and by Horacio Levy.

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## I. Introduction to the Documentation

This format of this documentation has been designed to make the analysis of the British Household Panel Study easier and more straightforward. We have attempted to make its up-dating, always a rather complex undertaking, as simple as possible. Details of the organisation of the documentation are given below.

This documentation takes the form of an explanatory Volume $A$ and a separate Volume $B$ codebook for each wave of the BHPS. The organisation of these volumes is described below. There are several key aspects of the information in this User Manual, which it is important to make clear from the beginning.

## I.1. Important Features of the Documentation

## Wave Indicators

Individual waves of the BHPS are identified by an initial letter in all Record/File and Variable Names; thus, " A " is attached to all Wave One Records or Variables, " B " to Wave Two, " C " to Wave Three and so on. Throughout this documentation, wherever possible, this wave-specific letter has been replaced by a generic " $w$ ". When this appears, the implication is that the information being supplied applies to all waves unless otherwise stated.

## Refreshing the data

A new "edition" of BHPS data will occur every year, with the release of the latest wave. All existing users should obtain the latest release of the entire BHPS dataset, rather than merely requesting the latest wave. Data which are mounted for remote analysis will be automatically withdrawn and replaced with the latest version. It is therefore essential that up-dates to this User Manual are also obtained. As noted elsewhere, it is particularly important that the latest version of the three cross-wave records/files, XWLSTEN, XWAVEID and XWAVEDAT are used in all cross-wave analysis. These will always occur at the end of the database and codebook for the latest release.

## Dates

Dates are clearly critical in a large number of BHPS variables. Because of the nature of a panel survey, the relevant dates are often not totally obvious. Throughout the documentation, we have attempted to generalise the representation of these dates to make the relevant dates clearer. Throughout the wavespecific Volume B codebook entries, the actual dates are included. Within Volume A, we have used conventions to generalise our notes and descriptions. These conventions are described below. As background, it is important to remember that the fieldwork period runs from 1 September one year through the end of April of the following year; the bulk of the interviews have usually taken place by the end of December, although some of them do extend well into the following year. The end of April is the cut-off point.

Relevant conventions employed in treatment of dates within variable descriptions are:
w = initial letter of all Record and Variable Names, which replaces the wave-specific initial letter (e.g. A = Wave One, B = Wave Two, and so on)

Derived variables sometimes use data taken from earlier, and in some case, later waves. This is indicated by:
$w-1=$ indicates the year prior to the wave under investigation:
$w+1=$ indicates the year following the wave under investigation
LY = indicates the 12 months prior to the start of fieldwork (e.g. 1 September 1990-31 August 1991 for Wave One)
TY = indicates the present period, beginning at the 1 September on which fieldwork begins for a specific wave (e.g. 1 September 1991 for Wave One, 1 September 1992 for Wave Two, etc.)

## Variable Names

Variable names are preceded, as are Record or File names, by a wave-specific letter - A for Wave One, $B$ for Wave Two and so on. In many descriptions, this is replaced by a generic $w$, indicating the generality of the information being provided. Variable names are, in part, mnemonic. See Section III in this Volume for a table listing some of the conventions employed.

## I.2. Volume A

This initial introductory volume, essential for all users, will be supplemented in future through the issue of up-date sheets. Volume A contains vital information required for the analysis of the data, including details of fieldwork, sampling, weighting and imputation procedures employed within the Centre, and information to assist users in the linking and aggregating data across waves. Usage notes on specific variables or sections of the database are also included, plus sections presenting background information required for specific types of analysis. References to the contents of the sections are given below.

There are also a number of appendices:
Appendix One (Using BHPS Data) presents worked examples of analyses of BHPS data, using both SIR and SPSS, illustrating some of the basic manipulations which researchers may wish to perform during their own analysis.

Appendix Two (Notes on Derived Variables) presents generalised notes on the derived variables which form part of each wave of the data.

Appendix Three (Coding Frames) contains full coding frames for main categorical variable types which appear in all waves of the data.

Appendix Four (Help for Old Friends) is a summary of information on changes which have occurred in the data from previous waves since the last release. Since all users of the BHPS should receive the entire BHPS dataset at each new release, this information will be essential for all existing users. Information will relate to such things as re-coding of previous wave variables to conform to the latest release, additional variables, new imputations based on information from the later waves, correction of errors, and so on.

Appendix Five (Related Publications and Documentation) contains references to other volumes produced by the ESRC Research Centre on Micro-Social Change and of publications based on BHPS data.

Appendix Six (Indexes) contains two indexes to aid users in locating the information they require quickly. These are described in more detail below.

## I.3. Volume B

Each wave will be released in a separate wave-specific volume, Volume B1 containing a codebook for Wave One data and its related questionnaires and show cards, for example, Volume B2 containing Wave Two information and so on.

With each new release, those acquiring the latest wave will also receive up-date sheets for both Volume A and earlier Volume Bs, along with a new Volume containing the codebook for the latest wave. We hope that this will make life both easier, and less expensive, for our users.

Codebooks contain essential information for each variable for each wave included in the British Household Panel Study database. Tables are presented in the order in which they appear within the Record Types in the SIR database. Cross-Wave Identification Variables appear at the end of the volume containing the latest Wave.

Within each wave-specific volume, each Record Type is allotted a separate section, which begins with a short overview of the contents of that Record Type. These sections reflect the Record and Variable order and structure of the User Database. (For more information on the database structure, see the main text of this Volume and Appendix 1.)

Within each Record Type section, there is a Table for every variable within that Record Type. This Table contains relevant information needed for interpretation and use. A short description of elements of each Table is presented below.

## I.3.1. Reading The Variable Tables

Figure 1 presents a sample Variable Table with an indication of the contents of each element within the table. The elements in the Tables are:

1. Record Type at the top of every page. The header shows the Record Type in which the variables below can be found.
2. Variable Name as a heading for each Table, followed by Variable Label
3. Questionnaire Section followed by page number within Questionnaire (Questionnaires and Showcards appear at the end of Wave-specific Volume Bs)
4. Question Number and Text. The specific Wave identifier has been added to the question number as found in the questionnaire. Where there is no relevant question text, an indication to the source of the information is included, e.g. Interviewer Check, Office Code, and so on.
5. A Frequency Table is included wherever relevant or possible, giving value labels, values, frequencies, percentages, valid cases and missing values. For categorical variables, with more than 20 categories, only valid and missing cases are given; for continuous variables, a Mean, usually non-zero, Standard Deviation, Minimum and Maximum are indicated, and a frequency table distinguishing those who stated an amount and those who did not. (Relevant coding frames for the extended categorical variables are presented in Appendix 3.)
6. Question Route For Base Variables, this indicates the question routing which defined the respondent sample asked a particular question and includes a prose description; for Derived Variables, a listing of the variables used to construct the variables is given; for Key or Key Linking Variables, either ALL or ALL RESPONDENTS is entered here. Derived Variables information can also be found in Appendix 2 .

Volume B: Codebook - Record Type GINDRESP


| SPSS Frequency Table <br> (unweighted data) <br> Descriptives for <br> categorical variables |
| :--- |

Terms describing information content to allow identification of relevant and related data

Value Label

## Question Route

Index Terms


GF30C1 : (IF `Maintenance/alimony/child support') About how much in total do you give for (maintenance/alimony/child support)?

## Non Zero

Mean Std Dev Minimum Maximum
$196.08 \quad 437.86 \quad 1 \quad 5270$
Value Frequency $\% \quad$ Valid \%

Variable Occurrence $\quad$ W2 W3 W4 W5 W6 W7 W8

Cross-wave occurence

F (GFTEXHH=1 AND GFTEXA1=1) Asked if transfers money to any person not coresident for maintenance, alimony or child support

Financial Management: External Transfers

After Wave 1, the restructuring of Finance section allowed investigation into amount and periodicity of external transfers for maintenance/alimony/child support.

Indication of routing through questionnaire, allowing identification of relevant population surveved

Note field containing key information related to variable interpretation and analvsis
7. Index Terms One or more index terms have been attached to each variable. Terms are included on the Variable Table to allow users to easily identify other variables on the same subject or, in the case of Interview Characteristics, Sampling Factors or Key Linking Variables, variables of the same type.
8. Variable Occurrence An indication of the inclusion of the individual variable in individual waves and of planned inclusion in future waves. See below for more details.
9. Note Included here are notes of special importance for users of a particular variable or variable type. There may also be a pointer, where applicable, to variables which are similar but not sufficiently so to warrant being considered directly comparable (and therefore have an entry in the Variable Occurrence field). These may, nevertheless, be sufficiently closely related to serve as a proxy and satisfy the requirements of the researcher. In many cases, reference is made to other sections of this User Manual where fuller information is provided.

Tables contain marginals for each variable. For continuous variables, the marginals show the number of respondents/households for whom the included descriptives are valid. The missing cases and those who have zero amounts are excluded for the descriptive statistics. This enables the researcher to get a more accurate picture from the few descriptive statistics presented.

For variables with more than 20 value labels, coding frames are provided in Appendix 3.
Users should also note that the results displayed in the tables in Volume B are obtained from unweighted data. See Section $V$ for a discussion on weighting.

At the end of each wave-specific Volume $B$, the Questionnaires and Showcards for the relevant wave are reproduced. It is planned that all Questionnaires will be annotated with Variable Names attached to the question which gave rise to the Variable. There is also a Variable Location Index at the end of each wave-specific volume. An alphabetical list of variable names is linked to the page number within the volume on which the variable description appears.

## I.4. Indexes

## Indexes to the Variables are included at the end of this volume.

To assist you in planning your analysis, a number of indexes are presented in the final Appendix. Clearly, given the nature of such a panel dataset, many variables are repeated in each wave, while others are repeated intermittently and still others appear in only one wave. A Cross-Wave Continuity Index details this in schematic form. Another Index is based on the subjects covered by the data, allowing initial identification of variables on particular topics. This is augmented by a subject thesaurus, to guide you to the correct topics.

These indexes are intended to aid the user in navigating the wide range of information presented and to allow the tracing of the links between questions, variables, record types and subject coverage or variable type. The indexes included are:
o Subject Category Thesaurus, a full list of all subject category index terms together with more detailed subject references and cross-references. This index should be used to augment the information presented in the Cross-Wave Subject Category Index.
o Question Number to Variable Name Index, a sorted list of question numbers and the database variables based on them;

One or more index terms are attached to each variable, and included on the variable entry in the codebook in the wave-specific Volume B. These indicate the major subjects covered by the variable (or the type of variable) and allow linkage with other variables on the same or related topics. Reference to either the Cross-Wave Subject Category Index (or first to the Subject Category Thesaurus Index )
will lead to the identification of others. In some cases, these refer specifically to the content of the information - e.g. "Health: Medical Consultations" or "Incomes". In other cases, an additional index term indicates that the variable contains "Personal Opinions" or "Subjective Well-Being". "Key Linking Variables" are also identifiable through these indexes, as are "Interview Characteristics and Conditions".

## I.5. A Note about Question Numbers

Users may notice differences between the question numbers as they appear in the Questionnaire and as they appear in the variable tables and Question Number to Variable Name Index. Some of the less obvious of these differences are explained below.

1. All question numbers carry a numerical prefix to indicate the Wave to which they refer; that is, "A" for Wave One questionnaire, "B" to indicate Wave Two, and so on. The second letter indicates the Questionnaire Section in which the question appears (e.g. H for Household Questionnaire, P for Proxy Questionnaire, F for Finance, V for Values, M for Health, D for Demographics, J for Job History, S for Self-completion and so on).
2. Suffixes to question numbers have been added to specify the exact part of the question being answered, or to designate an "Office Coding" of a respondent-specified time period to a standardised time period.

## Key to the Suffixes

| OC | Office Code |
| :--- | :--- |
| NA | Not Applicable Question |

Y Year
M Month
D Day
CTY Country
and

DK Don't Know
BM Began Month
BY Began Year
EM Ended Month
EY Ended Year
P1,P2 Person One,Two
AL All
M1,M2 Mention One, Two
SC Status Code
SEQ Sequence
PN Person number

## Example

Question AH20C became AH20COC
AD10A became AD10A and AD10NA
Question BE81 has three variable components
BE81Y,
BE81M and
BE81D
AD5 with two possible, variable responses became AD5CTY, AD5DST

BE64 gave rise to BE64DK (negative response to BE64)
BE73D gives BE73BM, and BE73BY

BE73 gives BE73EM, and BE73EY

AM32P1, AM32P2 and AM32P3
BF3BAL from question BF3B
BH3 gives BH3M1 and BH3M2
AJ6A gave rise to AJ6ASC
AF3SEQ records the number of finance grids completed
AF3FPN records PNO of joint recipient

## I.6. Technical References

References made in the text of this User Manual to which you might like to refer are:
Cox, B et al, (1987) The Health and Lifestyle Survey. London: Health Promotion Trust.
Elias, P, K Halstead and K Prandy (1993) Computer Assisted Standard Occupational Coding (CASOC) (1993) London: HMSO

Goldthorpe, J H and K Hope (1974) The Social Grading of Occupations: A New Approach and Scale Oxford: Clarendon Press

International Labour Office (1990) International Standard Classification of Occupations: ISCO 88 Geneva: International Labour Office

Marsh, C \& A Teague (1992) `Samples of anonymised records from the 1991 Census', Population Trends, 69, 17-26,

Prandy K (1990) "The Revised Cambridge Scale of Occupations", Sociology 24, 629-655
Standard Occupational Classification, Volume 3: Social Classifications and Coding Methodology.(London OPCS/HMSO 1991).

## I.7. Getting More Information

Other information about the BHPS is available on the ISER web-site at https://www.iser.essex.ac.uk/bhps

The operations of BHPS have been incorporated within those of Understanding Society, the UK Household Longitudinal Study. User queries about the BHPS may be submitted to the Understanding Society Further Help and Support for using BHPS can be found in the Understanding Society Online Data User forum. After a short registration data users can read past issues, FAQ's and experiences or report any issues or queries of their own.
The URL is: https://www.understandingsociety.ac.uk/support/projects/support

## II. Introduction to the British Household Panel Survey

The British Household Panel Survey (BHPS) is being carried out by the ESRC UK Longitudinal Studies Centre with the Institute for Social and Economic Research at the University of Essex. The main objective of the survey is to further our understanding of social and economic change at the individual and household level in Britain, to identify, model and forecast such changes, their causes and consequences in relation to a range of socio-economic variables. The BHPS is designed as a research resource for a wide range of social science disciplines and to support interdisciplinary research in many areas.

The ULSC, established in 1999, is a continuation of the research resource component of the ESRC Research Centre on Micro-Social Change which was established with a grant from the ESRC in 1989. In addition to conducting the panel survey and disseminating it to the research community, the ISER undertakes a programme of research based on panel data, funded in part by a continuation of the ESRC Research Centre on Micro-Social Change, using the BHPS and other national panels to monitor and measure social change. The results of this research feed back into the later waves of the survey and increase its research potential for the wider user community.

The BHPS was designed as an annual survey of each adult (16+) member of a nationally representative sample of more than 5,000 households, making a total of approximately 10,000 individual interviews. The same individuals will be re-interviewed in successive waves and, if they split-off from original households, all adult members of their new households will also be interviewed. Children are interviewed once they reach the age of 16; there is also a special survey of 11-15 year old household members from Wave Four onwards. Thus the sample should remain broadly representative of the population of Britain as it changes through the 1990s. Additional sub-samples were added to the BHPS in 1997 and 1999 - see section II. 2 below.

Research priorities and research design for the BHPS were established after extensive consultation within the British academic and policy research community. Major topics in the first three waves of the panel survey are household organisation, the labour market, income and wealth, housing, health and socio-economic values. The panel survey thus permits research into a wide range of topics such as the relationship between health changes and unemployment, the effects of life events on changing socioeconomic values, life cycle variations in income, the returns in the labour market to training and education, the causes and consequences of residential mobility, and so on.

Panel data have many advantages:
they allow analysis of how individuals and households experience change in their socioeconomic environment and how they respond to such changes;
they allow an analysis of how conditions, life events, behaviour and values are linked with each other dynamically over time;
they allow analysts to control for unobserved heterogeneity in cross-sectional models through difference analysis;
because all household members are interviewed, the effects of the interaction of changes at the individual level can be analysed for the whole household or for other individuals;
because sample members are followed as they leave their original household, panel data will provide unique information on the processes of household formation and dissolution.

It is the aim of the design of the BHPS to maximise these advantages. For further discussion of the research and design rationales of the BHPS, users are referred to the publications listed in Appendix 5.

The BHPS data are deposited in the Data Archive within 12 months of the completion of field work. Between the end of fieldwork and the deposit date, the Centre carries out a very full programme of data cleaning, missing value imputation and weighting. But despite this, some remaining inconsistencies in the data will undoubtedly be revealed as the data and documentation are widely used. Users are requested to alert the Centre to any such inconsistencies they find, so that appropriate corrections can
be made in future releases. Comments on the presentation of both data and documentation would also be welcomed. This can, perhaps, best be done through the BHPS User Group which is described below. Participation in this Group is recommended for all users.

## II.1. The BHPS Sample and Following Rules

The initial sample for Wave One of the BHPS (described in detail in the Section on Sampling and Survey Methods) is not unlike that for any cross-sectional household study, for example OPCS's General Household Survey. The sample consisted of 8167 issued addresses drawn from the Postcode Address File. Interviews were attempted at all private households found at these addresses (subject to selection where multiple households were found). All individuals enumerated in respondent households became part of the longitudinal sample. All these sample members are known as Original Sample Members (OSMs).

The sample for the subsequent waves consists of all adults in all households containing at least one member who was resident in a household interviewed at Wave One, regardless of whether that individual had been interviewed in Wave One. Thus, with a few exceptions, an attempt was made to interview all those individuals in responding households who had refused to participate at Wave One, or for any reason had been unable to take part. In addition, a number of households where no contact had been made in Wave One were approached for interview in Wave Two after confirmation that no household moves between waves had taken place.

The following rules applied in subsequent waves differed from the sampling rules in Wave One in only one respect. In both sets of rules, eligibility depended on domestic residence in England, Wales, or Scotland south of the Caledonian Canal. In waves after Wave One, however, OSMs were followed into institutions (unless in prison or in circumstances where the respondent was not available for interview e.g. too frail, mentally impaired etc.) or into Scotland north of the Caledonian Canal.

New eligibility for sample inclusion could occur between waves in the following ways:

1. A baby born to an OSM.
2. An OSM move into a household with one or more new people.
3. One or more new people move in with an OSM.

Children born to OSMs after the start of the study automatically count as OSMs. New Entrants to the sample (categories two and three) become eligible for interview on the standard OPCS household definition, (i.e. as long as they were living with an OSM and `either share living accommodation OR share one meal a day and have the address as their only or main residence'). The main requirement for marginal cases of household membership was six months continuous residence during the year. This excluded students who might have been at a parental home during vacation (students were treated as members of their term-time household). The household non-contacts from Wave One referred to above count technically as OSMs but for all practical purposes (in particular the need to obtain `initial conditions' data) were treated as new entrants. The sample for each Wave thus consists of all OSMs plus their natural descendants plus any other adult members of their households, known as Temporary Sample Members (TSMs).

Once household membership is determined, interviews are sought with all resident household members aged 16 or over on 1 December of the sample year, thus including OSMs previously coded as children. Proxy interviews with another household member, or telephone interviews, are carried out for eligible members who are either too ill or too busy to be interviewed.

Where OSMs are not found at the expected address, interviewers attempt to trace them using a variety of methods. These are described in the Section on Sampling and Survey Methods. Interviewees who do not quality as OSMs are only re-interviewed in subsequent years if they are still co-resident in households with OSMs. However, a subset of TSMs become permanent sample members and are followed even if they no longer reside with an OSM. The criterion for this status is that the TSM is the parent, with an OSM, of a new OSM birth.

## II.2. Additional sub-samples

Since the start of BHPS in 1991, a number of additional sub-samples have been added to the survey.

## II.2.1 The ECHP sub-sample

From Wave Seven the BHPS began providing data for the United Kingdom European Community Household Panel (ECHP). As part of this, it incorporated a sub-sample of the original UKECHP, including all households still responding in Northern Ireland, and a 'low-income' sample of the Great Britain panel. The low-income sample was selected on the basis of characteristics associated with low income in the ECHP. At Wave Seven ECHP households in which all adult members responded at the previous wave and which fell into the following categories were issued:

Household reference person unemployed at interview or within the last year,
Household reference person in receipt of lone parent benefit,
Household reference person in receipt of means tested benefit,
Household in rented accommodation.
Respondent households who agreed to have their data passed to the University of Essex were incorporated in the BHPS.

From the point of view of the BHPS this constitutes a new sample whose first wave is wave seven. However, their sample membership status depends in part on their membership status within the ECHP. Thus, members of the original 1994 ECHP sample are defined for our purposes as OSMs, while joiners to ECHP households after the first wave of ECHP, including joiners at Wave Seven and Wave Eight of BHPS are defined as TSMs or PSMs according to standard BHPS rules. There are also a small number of ECHP original sample members who rejoin selected households after Wave Seven. These are also classified as OSMs.

The ECHP came to an end in 2001, equivalent to Wave 11 of BHPS. No alternative funding for the ECHP sub-sample was available, and it has therefore not been continued beyond Wave 11.

Further information on identifying the ECHP sub-sample is included in sections III.3.2 and III.18. Weights for incorporating this sample are discussed in section V.2.4.

## II.2.2 Scotland and Wales Extension Samples

A major development at Wave 9 was the recruitment of two additional samples to the BHPS in Scotland and Wales. There were two main aims of the extensions. First, to increase the relatively small Scottish and Welsh sample sizes (around 400-500 households in each country in the initial BHPS sample) in order to permit independent analysis of the two countries. Second, to facilitate analysis of the two countries compared to England in order to assess the impacts of the substantial public policy changes which may be expected to follow from devolution. The first wave of the extension samples were fully funded by the ESRC. A consultation period in the early part of 1999 established the requirements of the Scottish and Welsh user-communities. Provision of comparable data between the different parts of Great Britain required identical questionnaires and fieldwork arrangements for the additional samples to those used for the main BHPS sample. The target sample size in each country was 1500 households. The Scottish sample includes the population living north and west of the Caledonian Canal. Aspects of fieldwork for the extension samples are discussed section IV.17.

All members of households recruited at the first wave of the extension samples will be treated as OSMs, and standard BHPS following rules will apply. Members of these samples who move to England will be followed. At the second wave of the surveys for these samples non-contact and some refusal households will be approached again, for recruitment to the sample. Such second wave recruits will also be treated as OSMs.

Further information on identifying the Scottish and Welsh sub-samples is included in sections III.3.2 and III.19. Weights for incorporating this sample are discussed in section V.2.5.

## II.2.3. Northern Ireland Household Panel Survey

At wave 11 a substantial new sample in Northern Ireland, the Northern Ireland Household Panel Survey (NIHPS) was added. This sample is jointly funded by the ESRC and government departments
in Northern Ireland. Since the start of the BHPS it has been recognised that a sample was needed in Northern Ireland so that the coverage of the panel was UK wide rather than Great Britain only. Until now, funding has not been available to run a panel that was large enough to enable comparative analysis between Northern Ireland and the rest of the UK. More recently, having longitudinal data that is comparable with Great Britain has become something of a priority for the Northern Ireland policy makers as well as for the wider academic community. There are three years of funding in the first instance.

Provision of data for Northern Ireland which was comparable with data from other parts of the United Kingdom required largely identical questionnaires and fieldwork arrangements for the NIHPS to those used for the other BHPS samples. The target sample size in was 2000 households. Aspects of fieldwork for the extension samples are discussed in section IV.17.

Support for users of the NIHPS in Northern Ireland is provided by ARK, the Northern Ireland Social and Political Archive, a collaboration between Queen's University Belfast and University of Ulster. See http://www.ark.ac.uk/nihps/

All members of households recruited at the first wave of the NIHPS will be treated as OSMs, and standard BHPS following rules will apply. Members of these samples who move to other parts of the UK will remain in sample, and we attempt to interview them.

Further information on identifying the NIHPS members is included in sections III.3.2 and III.19. Weights for incorporating this sample are discussed in section V.2.5.

## II.3. Survey Instruments

The questionnaire package consists of:
a. A household coversheet, which contains an interviewer call record, observations on the type of accommodation and the final household outcomes. At Wave One, it contained a Kish selection grid for the selection of households at multi-household addresses. Cover sheets are produced containing the last known address of sample members. Moves discovered by interviewers during fieldwork are dealt with by interviewers, either by discovering a forwarding address or by creating a movers form for return to the Research Centre. Techniques for following movers are described in Section IV on Sampling and Survey Methods.
b. A household composition form which is administered, in most cases, at the interviewer's first contact with an adult member of the household. The interviewer gathers a complete listing of all household members together with some brief summary data of their sex, date of birth, marital and employment status and their relationship to the household reference person (HRP) defined as the person legally or financially responsible for the accommodation, or the elder of two people equally responsible. Additional checks are required on presence in the household of natural parents or spouse or partners, in order to unambiguously establish all relationships (for instance, secondary or `hidden' couples).
c. A short household questionnaire administered with the household reference person and taking on average 10 minutes to complete. This contains questions about the accommodation and tenure and some household level measures of consumption.
d. The individual schedule takes approximately 40 minutes to complete and is administered with every adult member of the household (aged 16 or over). The individual questionnaire covers the following topics:
neighbourhood
individual demographics
residential mobility
health and caring
current employment and earnings
employment changes over the past year
lifetime childbirth, marital and relationship history (Wave Two only)

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employment status history (Wave Two only)
values and opinions
household finances and organization
```

e. A self-completion questionnaire, which takes about five minutes to complete. Questions included are subjective or attitudinal questions particularly vulnerable to the influence of other people's presence during completion, or potentially sensitive questions requiring additional privacy. The self-completion questionnaire contains a reduced version of the General Health Questionnaire (GHQ) which was originally developed as a screening instrument for psychiatric illness, but is often used as an indicator of subjective well-being. It also contains attitudinal items and questions on social support.
f. A proxy schedule is used to collect information about household members absent throughout the field period or too old or infirm to complete the interview themselves. It is administered to another member of the household, with preference shown for the spouse or adult child. The questionnaire is a much shortened version of the individual questionnaire, collecting some demographic, health, and employment details, as well as a summary income measure.
g. A telephone questionnaire, developed from the proxy schedule, for use by an experienced interviewer employed by the Centre. This is used when all other efforts to achieve a face-toface interview have failed.

The questionnaires went through a series of major revisions from the initial pre-testing through the two pilots to produce the final versions used in Waves One and Two. A full set of questionnaires, together with the full text of the show cards employed, is included in the wave-specific Volume $B$.

In Wave Nine the conversion to Computer Assisted Personal Interviewing (CAPI) began. Details of the conversion are discussed in section IV.16. The structure of instruments outlined above remains the same. At Wave Nine only the household questionnaire and the individual questionnaire were converted to CAPI.

## II.4. Longitudinal Aspects of the Survey

Many of the questions asked in Wave One have been repeated in subsequent waves. Some are repeated in all waves; these are the "Core" questions. Some variables appear in alternating waves or on a cyclical basis; these are known as the "Rotating Core" questions. Some groups of questions will be asked only once in the life of the panel study; these are known as the "Variable Components". The subjects of these questions are outlined in Table 1.

As a further guide to users who wish to plan their present analyses of BHPS on the basis of potential longitudinal analysis, there is an indication of wave occurrence of each variable in each table in the wave-specific Volume B: this information is provided in schematic form in the Cross-Wave Continuity Index together with page references, at the end of this Volume.

There are some slight modifications in question wording and, in a few cases, in the level of specificity in the response categories between waves. These alterations are fully documented in the entries for each individual variable; between-wave modifications of data previously released are indicated in Appendix 4: Help for Old Friends in this volume. It is intended that the majority of derived variables will be repeated in all waves. Exact comparability between the waves will obviously always be dependant on the exact comparability of the data from which they are derived. More information on plans for repeated questions will be available through the BHPS User Group, which is described in Section VI in this volume of the Manual.

## II.5. Links to Other Surveys

The BHPS is intended to be a reference dataset. Links to other major surveys are therefore of great importance. For this reason, many of the questions in the BHPS are replications of those which have previously occurred in other studies, or are similar questions with variant wording. The Centre has therefore begun, as a first step in assisting users in making links between the BHPS and these studies,
to compile a listing of surveys in which questions which are related or identical to BHPS questions were asked. Substantive questions only are included, and not derived variables or standard demographic background variables. There are often minor differences, either in the body of the question itself, or in the response categories. This linking is intended as a first and rough guide only, as the documentation of these links is not yet complete.

For information on this listing, please contact the Scientific Documentation Officer at the Centre. In most cases, copies of the relevant questionnaires can be ordered from the Data Archive at the University of Essex. It is intended that this cross-referencing information will be extended and published in a separate document in the future. We ask therefore that all users inform the Institute for Social and Economic Research of any links of this type to other surveys of which they are, or become, aware.

The major studies to which BHPS questions are currently linked are the following:

```
British General Election Study
British Social Attitudes Surveys
Cohort Study of the Unemployed
European Values Survey
General Health Questionnaire
General Household Surveys
Family Economics Survey
Family Expenditure Surveys
The Health and Lifestyle Survey
International Project on Class Structure and Class
International Social Survey Project
International Social Justice Project
Life Events in Everyday Experiences (US)
Labour Force Surveys
National Child Development Study
Panel Study of Income Dynamics (US)
Social Change and Economic Life Initiative
Surveys of Income and Program Participation (US)
Survey of Life-style and Usage of Social Services (Ireland)
Socio-Economic Panel Study (Germany)
Study of Attitudes to Public and Private Welfare
Working Class in the Labour Market
Women and Employment
```

In addition, the Centre is involved in a number of cross-national comparative projects with researchers from a number of other national and regional household panel studies from Germany, the United States, France, Ireland, Spain, Belgium, Sweden, Luxembourg, Hungary, Poland, the Czech Republic, Italy and so on. Among these are the Panel Comparability (PACO) project, designed to create a set of comparable variables across a number of domains and countries to enable cross-national research and a research programme based on the European Community Household Panel Study. For more information on these and other comparative projects, contact the Centre.

Table 1

## Overview of Topics Covered in BHPS

Themes which are covered at every wave are known as Core Components; these are the heart of the survey and allow us to study the net change in which we are interested. This category includes topics which are asked, after the First Wave, simply to verify the status of the household and individual members, or are only asked of new entrants.

Topics covered periodically (i.e. every two or three years) are known as Rotating Core Components. These topics are addressed only in situations in which we don't expect large changes over time and there is therefore no need to ask questions on them every year. This also allows us to balance competing demands for limited space within the questionnaire.

Last, but very important, are the Non-Core or Variable Components. These are 'one-offs', usually asked only once. These include many questions that need to be asked only once such as the initial conditions. If we asked the same respondents every year 'What age did you leave school ?' and "Where were you born ?", for example, they would soon tire of it. The BHPS has taken the opportunity (over the first three waves) to get a very good picture of our respondents' lives asking for life-time retrospective work-histories, and marital and fertility histories, using the space set aside for the Variable Component to investigate these illuminating and vital areas of the lives of those who make up a representative sample of the households of Britain.

Below is a representation of the pattern that is emerging in the underlying structure of the BHPS dataset; this must not, of course, be taken as a fixed structure for the BHPS. We reserve the right to drop questions that may appear to be core and, in the event, prove to yield little data of interest. We may well consolidate, into the core, questions that have recently appeared in the questionnaire, or even include other new ones. The BHPS must also, of course, reserve the right to vary the period of rotation of those components which at present appear to be regularly included. The variable component has attracted the covetous eyes of many a researcher and is the source of much high level debate here in the Research Centre where we have not only competing research agendas but also external pressures with which to contend.

The Questionnaire is divided into 5 sections :
The Cover sheet, the Household Questionnaire, the Individual Questionnaire which is the main part of the interview and finally respondents are asked to complete a short Self Completion Questionnaire. For various reasons, some people have a Proxy Questionnaire (a reduced form of the Individual schedule) filled in for them by another member of the household. New from Wave Four, the Young Persons Questionnaire which 11 to 16 year olds have been asked to complete.

Table 1 (cont'd): HOUSEHOLD QUESTIONNAIRE

| CORE | Size and Condition of Dwelling Ownership Status, Length of Tenure, Previous Ownership Interview Characteristics | Household Finances <br> Rent and Mortgage, Loan and HP Details Local Authority Service Charges Allowances/ Rebates Difficulties with Rent/Mortgage Payments Household Composition Consumer Durables, Cars, Telephones, Food Heating/Fuel Types, Costs, Payment Methods Non-monetary poverty indicators Crime |
| :---: | :---: | :---: |

Table 1 (cont'd): INDIVIDUAL QUESTIONNAIRE

| CORE | Neighbourhood and individual <br> Demographics <br> Birthplace, Residence <br> Satisfaction with Home/Neighbourhood <br> Reasons for Moving <br> Ethnicity <br> Educational background and attainments <br> Recent Education/Training <br> Partisan support <br> Changes in marital status <br> Citizenship | Current Employment <br> Employment status <br> Not Working/Seeking Work <br> Self Employed <br> Sector Private/Public <br> SIC/SOC/ISCO <br> Nature of Business/Duties <br> Workplace/Size of Firm <br> Travelling time/ <br> Means of travel <br> Length of Tenure <br> Hours worked/Overtime <br> Union membership <br> Prospects/Training/Ambitions <br> Superannuation/Pension schemes <br> Attitudes to work/Incentives <br> Wages/Salary/ <br> Deductions <br> Childcare provisions <br> Job search activity <br> Career opportunities <br> Bonuses <br> Performance related pay | Finances <br> Incomes from <br> Benefits/Allowances/ <br> Pensions <br> Rents/Savings/Interest/ <br> Dividends <br> Pension Plans <br> Savings and Investments <br> Material well-being <br> Consumer Confidence <br> Internal Transfers <br> External Transfers <br> Personal Spending <br> Roles of Partners/Spouses <br> Domestic work <br> Childcare <br> Bills/Everyday spending <br> Car Ownership/Use <br> Value of Car <br> Interview Characteristics <br> Windfalls |
| :---: | :---: | :---: | :---: |



Table 1 (cont'd)

| COVER SHEET | SELF-COMPLETION QUESTIONNAIRE |  | YOUNG PERSONS QUESTIONNAIRE <br> (corresponding questions also asked of parents (Wave 4)) |
| :---: | :---: | :---: | :---: |
| Core <br> Socio-demographic characteristics of individual household members <br> Relationship between household members <br> Marital Status <br> Household Changes during past year <br> Geographic Location <br> Interview Outcomes | Core | Subjective Well-being Stress/Worry/Strain Capability/Strength/Confidence Happiness/Unhappiness | Use of Spare time <br> TV watching <br> Going Out <br> Relationships with family and friends <br> Attitudes to issues facing young people <br> Smoking, Drugs and Alcohol, Crime <br> Attitudes to Health and Family Life <br> Diet <br> Sport <br> Subjective well-being <br> Self Image <br> Reading and Comprehension <br> Pastimes <br> Pocket money, earnings <br> Social and Political Awareness <br> Employment aspirations and life after school |
|  | Rotating Core | Attitudes  <br>  To Family <br>  To Mens/Womens Roles <br>  Morality <br>  Religion <br> Social Support Networks  <br> Life Satisfaction  |  |

## II.6. File linkages: matching, aggregating and distributing data

The BHPS is "complex" -- in the special sense that it consists of a number of different data structures or "files", with differing focuses (some referring to the particular households studied at particular waves, some referring to individuals, some referring to particular incidents or events that the surveyed individuals have experienced) and often repeated files, with the same structures but applying to different points in historical time (that is, files describing respondents' circumstances in successive years). This does not mean that the BHPS is particularly difficult to use; on the contrary, the same core of data management skills used in the analysis of simple "symmetrical" cross-sectional datasets is also used in panel analysis. It does, however, imply that analysts must apply some additional concepts to those involved in the analysis of more straightforward survey datasets.

The real value from this sort of dataset comes from the analyst`s ability to link the various files together, so as to connect information in a number of straightforward ways; attaching household-level information to the individual respondents, for example, or connecting individual respondents' information over time. The crucial concept is that of a "key variable" which serves to identify particular records within files as belonging to particular households or individuals. It is these key variables that tell us which parts of which files can validly be joined together.

There are, in principle, just three different sorts of linking or joining operations that can be made between data files. Evidence organised at a particular level may be matched with other evidence organised at a similar level; for example information about someone in 1992 could be matched with information about the same person in 1993. Evidence organised at a particular level may be aggregated to a higher level of organisation; for example, a file organised to provide information about every separate employment spell experienced by each respondent during the last year, might be reorganised to provide information at the level of the respondent, perhaps about the number of changes of employment status during the year. And evidence from records organised at a higher level, may be distributed across records in files organised at a lower level -- as where household-level information (for example, concerning type of housing) is attached to all of the individual-level records of the members of each household. All the data operations necessary to draw the full scientific value from the BHPS can be defined in terms of these three operations.

There are many different sorts of computer software that will carry out these three sorts of linking (or "database") operations. In addition to special-purpose "database management software", this set of operations can also be carried out in some integrated statistical packages. BHPS data files are maintained both in one of the standard database structures (SIR), and as system files for a standard statistical package (SPSS), or as data sets in the statistical package SAS. Appendix 1 includes examples of programs which carry out these sorts of operations for various purposes (both in SIR and in SPSS code).

The following chapters provide more detail on the use of these linkage techniques in the analysis of the BHPS, followed by basic information on the methodologies employed in the collection of the BHPS data, and the information essential for its analysis.

## III. The BHPS Data

## III.1. Using Complex Data

The BHPS is a household survey in which all adult members of each household are available to be interviewed. It is also a panel study, so data may be expected from each individual each year. It is also quite likely that individuals may move out of one household, and join with new people. Data are therefore collected at different levels (individual and household), and over time these levels will not fall into neat hierarchies. All these factors mean that the data from the BHPS will have a relatively complex structure.

Moreover, individual researchers may want to restructure the data into different types of unit of analysis. Even with one wave of data, it is possible to identify at least the following: households, enumerated household members, respondents, job spells, receipts from a particular income source, pairs of individuals linked by various relationships. With multiple waves of data, the possible range of units of analysis becomes very much wider, and the potential complexities of organising the data into these units becomes correspondingly greater. The data must be structured in a way which facilitates this variety of types of analysis, while recognizing that the same data may be used in different ways. For example, some users may want to use the data from the finance grids in order to identify the months in which a particular income source, e.g. unemployment benefit, was received, while others may be concerned with total income from all sources in a particular month or year.

## A note on linking data files.

The Centre uses SIR in its extensive preparatory work on the survey materials prior to their release to users. The data is distributed (via the Data Archive) as a SIR database, or alternatively as a set of SPSS system files or a set of SAS datasets or a set of STATA data files with a one-to-one correspondence of SIR Record Types to SPSS, SAS or STATA files. In the rest of the documentation therefore, "Record Type" and "File" will be used interchangeably. (As Appendix 1 discusses, the SIR database has a `caseless' structure. Enquiries about the BHPS itself, and about the availability of other formats for release of BHPS data, should be addressed to the Data Archive)

Irrespective of the particular software used for data storage and management, however, the principles of the three basic database operations are perfectly straightforward. Figure 2 illustrates the first and simplest of these procedures: "matching" parallel files. Suppose that we have different pieces of information on the same group of individuals, contained in two different data files, variables "VAR1" and "VAR2" on one file, "VAR3" and "VAR4" on another. We wish to carry out some analysis that explores the relationship between VAR1 and VAR2 on one hand, and VAR3 and VAR4 on the other (it might be the case that the two files relate to similar questions in two successive waves of the panel, and we wish to estimate the change over the period.) The individuals are identified by the variable "KEYVAR". In Figure 2, the boxes represent data files, and each line within the boxes represent a particular record, each of which refers to a single individual. We simply give an instruction (in the case of SPSS, a single line of code) that says "match the records of the first file to the records of the second using keyvar as the matching variable". The result is a file in which individuals maintain their identification variables, and the content of the original input files are merged.

There can be more than one key variable used in the matching procedure. Often (to choose the most frequently occurring case of multiple keys in the BHPS) the records are uniquely identified by a


Figure 2 Matching Data Files


Figure 3 Aggregating Data Files
combination of a household number with a within-household person-number. The matching principle still holds: we simply specify a hierarchical match, first by the household, then by the person identifier.

Figure 3 illustrates the second class of operation: "aggregating" information from one level to a higher or more inclusive level. For example some characteristics of a household can only be calculated from the characteristics of some or all of its current members (e.g. its size, its total income or its age range). The essence of aggregation is computing a set of new records or cases at the "higher" level with unique key variables replacing the multiple repeated keys which indicate the "lower" level groups which are to
be aggregated, and with higher level derived variables which are functionally derived from other variables in the lower level records. In the Figure 3 example, the lower-level input file is aggregated by values of KEYVAR2; AGV1 is simply the sum of all the values of VAR1 across each group which shares a particular value of KEYVAR2. Alternative sorts of aggregate variables include maxima and minima (e.g. oldest and youngest members of households) and counts of cases, or of cases with particular characteristics, within groups (e.g. numbers of persons, or of adults, within households). KEYVAR1, which served to identify the lower-level cases (e.g. individual household members) is of course inappropriate in the new higher-level aggregated result file.

The third general class of database operation is of "distributing" information from a higher to a lower or less-inclusive level. In the example illustrated in Figure 4, the household-level information derived in Figure 3 is simply redistributed to the respective household members. The household information is now repeated for each household member; this allows the analyst to relate the individual's characteristics to her/his own household characteristics (e.g. "respondent's proportional contribution to total household income"); it also facilitates individual-level tabulations of household characteristics (e.g. "proportions of young people living in households of particular sizes").


Figure 4 Distribution of Data

## III.2. Record Types or Files

The User Database consists of two types of record or files: the majority, which contain the data collected at each wave for different subsets of questions and respondents (e.g. AINDRESP, BHHRESP) and a small number which contain no substantive data, but whose purpose is to facilitate linkage of data relating to the same individual at separate waves.

Record Types (we use this term from here onwards, but remind users that it should be treated as equivalent to data files etc in other statistical software) are normally defined to separate different levels of unit of analysis (e.g. individuals and households) or major subsets at a single level (e.g. respondents and non-respondents to the questionnaire instruments). Thus, Record Types generally correspond to the different questionnaire instruments, or to major distinguishable elements within those instruments.

There is, therefore, one Record ( $\mathrm{wHHSAMP}^{1}$ ) which corresponds to the household level cover sheet for all issued households. Another, (wINDSAMP) corresponds to the individual level information on the cover sheet. For responding households, there will be a household level Record corresponding to the household questionnaire (wHHRESP), and an individual level Record for all members of the household, corresponding to the household grid (wINDALL). Responding individuals (whether to the full interview, by proxy, or from Wave Three onwards by telephone) will have a Record containing the most of the data collected in that interview (wINDRESP). Two distinct sets of information from the full individual questionnaire, which are structured as sets of information repeated an indefinite number of times, are included as separate Record Types: employment status spells over the previous year (wJOBHIST), and income receipt Records (wINCOME). Generally, data from wave-specific questions (the variable component) will be carried on the main Records as described above, but where, as in Wave Two and Wave Three, these data have a natural repeating Record structure, it is carried on separate Record Types - these are described in Sections III.10, III. 11 and III. 12 below. In addition to the above, there is one derived Record (wEGOALT) containing cells from a household relationship matrix.

Table 2 outlines the longitudinal Record structure as described above. In principle, the same eight cross-sectional Records available at Wave Two (i.e. excluding Records which relate to the Wave Two variable component) are replicated for each future wave. More detail, including the units of analysis and content is given in Table 3 for this standard set of single wave Record Types and in Table 8 for wavespecific Record Types introduced in Wave Two and after. The relationship among the basic Record Types is illustrated in Figure 5. The content of these records is discussed in more detail in the sections at the end of this chapter containing wave-specific information. Table 9, later in this chapter, shows the number of Records of each type at each wave. The cross-wave Record Types, XWAVEID and XWLSTEN, are discussed in more detail in Section III. 3 - Matching Individuals Across Waves.

There are four types of variable on each Record (or its equivalent SPSS file):

- Key variables variables which uniquely identify each Record, and can be used for matching and linking purposes. ${ }^{2}$
- Base variables variables which relate directly back to some question in the BHPS questionnaire.
- Copied variables variables originating on another Record, and copied to reduce the need for linkage.
- Derived variables variables computed from base variables ${ }^{3}$.

The different variable types are generally held in the order listed above on each Record.

[^1]2. The primary key variable for all cross-sectional Record Types in the database will always be wHID ("Household database Identifier"), where w is some wave-specific prefix, "A", "B", "C", etc ... (see Section xx on Naming Conventions). wHID values are assigned after receipt of the questionnaires. AHID values in Wave One match one-to-one with the values of wFID ("Fieldwork household Identifier"), comprised in Wave One of the concatenation of the wave identifer ("1"), the area code (PSU identifier), the address number, the household number, and a modula 11-based checksum calculated over these four components. The structure of the Fieldwork Identifier after Wave One consists of a wave identifier, the issued household number, a one-digit split-off household indicator and a checksum digit.
3. SIR users may examine the set of procedures used to generate the derived variables contained in the Procedure Families M1DV, M2DV, MIDV and MXDV. There is, in general, one Procedure for each variable, named M1DV.varname (M2DV.varname, MXDV.varname, and so on, where varname is the name of the derived variable. A printout of the SIR code can be made available to users on request.

Table 2 BHPS User Database: Longitudinal Structure

| Wave | Cross sectional records available each wave | Cross sectional records only at specific waves | Linkage and panel profile records: cross wave |
| :---: | :---: | :---: | :---: |
| 1 | AHHSAMP <br> AHHRESP <br> AINDALL <br> AINDRESP <br> AINCOME <br> AJOBHIST <br> AEGOALT | None in Wave One | Two records: <br> XWAVEID <br> 1) Response status and identifiers for all known sample members at each wave <br> XWLSTEN |
| 2 | BHHSAMP <br> BINDSAMP <br> BHHRESP <br> BINDALL <br> BINDRESP <br> BINCOME <br> BJOBHIST <br> BEGOALT | BMARRIAG <br> BCOHABIT <br> BCHILDAD <br> BCHILDNT <br> BLIFEMST |  |
| 3 | CHHSAMP <br> CINDSAMP <br> CHHRESP <br> CINDALL <br> CINDRESP <br> CINCOME <br> CJOBHIST <br> CEGOALT | CLIFEJOB | 2) Last known positive response status for all known sample members. |

Table 3

BHPS USER DATABASE STRUCTURE: STANDARD SINGLE WAVE RECORDS

| RECORD <br> NAME | UNIT OF ANALYSIS | KEY <br> VARIABLES | CONTENT |
| :--- | :--- | :--- | :--- |
| wHHSAMP | All sampled addresses | wHID | Sampling information, response status, non-respondent household <br> characteristics |
| wINDSAMP | All potential sample members issued to field <br> or enumerated | wHID <br> wPNO | Response and sample status, information on movers into and out of <br> households. (This record is not included at Wave One.) |
| wINDALL | All enumerated persons at respondent <br> households | wHID <br> wPNO | Demographic enumeration grid information. |
| wHHRESP | Respondent households | wHID | All information from the household questionnaire (mainly housing and <br> consumption variables). Household level derived variables. |
| wINDRESP | All individual respondents to full or proxy <br> interview. | sHID <br> wPNO | All information from the individual questionnaires (including the self- <br> completion), except that contained in AJOBHIST and AINCOME: <br> Demographic, education, health, labour market, values and opinions, finance <br> and internal household organisation information. Individual level derived <br> variables, including those related to income and the employment history. |
| wJOBHIST | Employment history spells for individual <br> respondents who started their current spell <br> since 1 September of the previous year. | wHID <br> wPNO <br> wJSNOP | Spell employment status, dates of start and finish, and job characteristics if <br> spell was a job. |
| wINCOME | Income receipt from a single payment type, <br> for individual respondents who claimed receipt <br> of that payment type. | wHID <br> wPNO <br> wFICODE <br> wFISEQ | Details of amount of payment, and months in which received. |

Figure 5 BHPS User Database Structure


Table 4

| BHPS USER DATABASE STRUCTURE : CROSS-WAVE RECORD TYPES |  |  |  |
| :--- | :--- | :--- | :--- |
| RECORD <br> NAME | UNIT OF ANALYSIS | KEY <br> VARIABLES | CONTENT |
| XWAVEID | Each individual who has ever been a member of a <br> respondent household. | PID | Information for matching individuals between waves. The household identifier and <br> person number within household and individual and household response status of <br> each individual at each wave. |
| XWLSTEN | Each individual who has ever been a member of a <br> respondent household. | PID | Latest known sample status of individuals and information to locate most recent <br> contact with each sample member, and if applicable reasons why there has been <br> no contact since that wave. |
| XWAVEDAT | Each individual who has ever been a member of a <br> respondent household. | PID | Substantive data about individuals which is generally fixed and measured only <br> once in the life of the panel, e.g. ethnicity, school leaving age. |

## III.3. Matching Individuals Across Waves

A number of features facilitate the matching of data about individuals between the separate waves, but a number of factors also need to be borne in mind. Matching individuals is likely to make use of the two cross-wave records, XWAVEID and XWLSTEN, and they are described at the end of this section.

## III.3.1. Identifiers: Key Variables in the BHPS

In the BHPS, there are two sorts of primary key variables: first, wave specific key variables which uniquely identify:

1) the household which is surveyed at the particular wave; wHID (throughout the survey, we use the convention that the first letter in the variable name refers to the wave of data collection, while the subsequent letters of each variable name remain unchanged in so far as they describe the same item of information through successive waves). So AHID, BHID and CHID are respectively the household identity key variables for the 1991, 1992/3 and 1993/4 waves.
2) the individual's number within the household at a given wave, wPNO; so APNO, BPNO and CPNO are the individual within-household numbers for successive waves. The "reference person" in the household, usually the oldest person within it, normally has wPNO =1, and her/his spouse often has wPNO=2. Information about relationships between people within households (e.g. parental, filial, spousal) is given in terms of these wPNO variables.

These wave-specific identifiers are used to link together information from different levels within one wave. They cannot be used to connect information across waves. The reason for this is quite simple as goes to the heart of the BHPS methodology. A household consists of a group of people living together within one postal address; this group either may or may not persist over time. About one in six British households change their composition each year. So each year we issue a new number for each household which has no connection with the previous year's household number. Furthermore, since people may enter or leave the household during the course of the year between successive interviews, we also issue new within-household person numbers each year.

To make the connection between information for the same person in successive waves, we use:
3) the cross-wave personal identity number PID.

These wHID, wPNO and PID variables are included in most of the files that could have valid "primary" matches (that is, matches of a record of an individual to his/her own household within a wave, or to records of events that are associated with that respondent, or records for the same individual in successive waves). In other cases it is necessary to match wHID and wPNO to those in a special crosswave identity file (XWAVEID, which contains a PID for each individual present in any household containing a BHPS member at any wave, together with that individual's wHID and wPNO for each year that these are available). However, in addition to these primary matches, there are sometimes cases in which it is necessary to make matches using other variables as "secondary" keys. For example: to check that an individual is still married to the same spouse in successive years, it is necessary to use the spouse's PID keys for each year. But the spouse's identity for each year is stored as a person number within the household. To solve this problem, we must again use the XWAVEID file as a source for a "secondary" match (using the respondent's spouse's identity variable wHGSPN as a key to match with the relevant wPNO in the XWAVEID file, from which the spouse's PID could be identified from successive years).

## III.3.2. Sample Membership Status

Because the BHPS is a household panel study which tracks household formation and dissolution, individuals may join and leave the sample. The BHPS has a number of following rules determining who is eligible to be interviewed at each wave. There are three categories:

Original Sample Members These consist of members of Wave One households, and their natural children born after the start of the study. This group is always eligible to be interviewed.

Temporary Sample Members

Permanent Sample Members

These consist of individuals who form households with OSMs after the start of the study. TSMs are eligible to be interviewed for as long as they are resident with an OSM, but cease to be eligible if they leave.

TSMs may become Permanent Sample Members if they are deemed to have a sufficiently strong continuing bond to an OSM to justify following them even if they cease to live with that person. At present, the Centre defines this criteria as being that the TSM is the natural parent of an OSM child born since the start of the study.

Thus, from Wave Three onwards, some individuals in the issued sample will not be eligible for interview because the are no longer living with an OSM. In addition a number of OSMs have died. These cases may be identified from the individual level response status. All new entrants at Wave Two will have a PID greater than 20000000; correspondingly, new entrants at Wave Three have a PID greater than 30000000, and so on. However, the different sample statuses of these new entrants may be identified from the variables MSTAT, YOSM and YPSM on Record XWLSTEN, as well as wSAMPST on Records wINDSAMP and wINDALL.

Original sample members are issued for re-interview at each wave, regardless of their previous wave response status, unless the household in which they are expected to be found is deemed to have refused beyond possibility of subsequent reconversion. In practice, this judgement is based on both the number of refusals and the form of the refusal. The reissue of all but the most adamant refusals means that some individuals will have an intermittent pattern of response. These patterns can be identified from the Record XWAVEID.

There are five special cases which may cause difficulties:
a) there were a small number of households at Wave One where interviews were carried out, but no usable data reached the Centre. Members of these households have Wave One PIDs, but there will be no Wave One individual level data. These cases may be identified from their household interview outcome of 19 at Wave One (AIVFHO), on Record XWAVEID. Their individual interview outcome (AIVFIO) is set to 8.
b) At Wave Two, households which were not contacted at Wave One were reissued. Those where interviews were achieved are included in the database. Members are classified as OSMs, but have Wave Two PIDs. They may be identified from the variable YOSM on XWLSTEN, and from the household interview outcome at Wave One on XWAVEID. In addition, these households have a value of -3 in the variable BHHMOVE on BHHSAMP.
c) A small number of individuals were enumerated at Wave Two, and reported as having been present at the time of the Wave One enumeration, but were not recorded there. These are classified as OSMs, have a Wave Two PID, and may be identified from the variable YOSM.
d) There are a small number of individuals at each wave who had left a previous wave household, mostly to educational institutions, who were proxied at the previous wave households. These are treated as separate households with a household interview outcome of 15.
e) From Wave Three onwards, a small number of individuals who were out of scope or ineligible or not issued because of adamant refusal at a previous wave return to an in-scope household.

From Wave Seven the BHPS began providing data for the United Kingdom European Community Household Panel (ECHP). As part of this, it incorporated a sub-sample of the original UKECHP, including all households still responding in Northern Ireland, and a low-income sample of the Great Britain panel. For the purposes of BHPS data and following rules, UKECHP original sample members are treated as BHPS OSMs, while UKECHP new entrants are treated as BHPS TSMs.

From Wave Nine the BHPS includes substantial new samples in Scotland and Wales. For the purposes of BHPS data and following rules, members of respondents households in these new samples are treated as BHPS OSMs.

Members of these various new sub-samples can be identified from the variable MEMORIG on XWAVEID, and wMEMORIG on wINDSAMP, wINDALL, and wINDRESP. Their status is also defined by the variables, MSTAT, YOSM and YPSM on XWLSTEN, and by wSAMPST on wINDSAMP,
wINDALL, and wINDRESP. A number of previous members of the selected ECHP households rejoin after Wave Seven. These are also defined as OSMs. Members of the new sub-samples clearly have no BHPS root wave one household.

## III.3.3. Cross-Wave Records

The latest version of these cross-wave records should always be used in analysis.

## Record Type XWAVEID

Record Type XWAVEID contains information for matching individuals between waves. It contains one record for each individual who has ever been a member of a respondent household. It is keyed on PID, the Cross-wave person identifier, and contains the household identifier and person number within household, as well as the response status, for that individual at each wave. Members of the ECHP sample can be identified from the variable MEMORIG. See Table 4.

For each wave, the indexed household reference is to the last (expected) household of enumeration at last wave. See the document relating to BINDSAMP below for a discussion of multiple enumerations. This Record Type provides the simplest method of matching data pertaining to an individual at more than one wave.

If the individual had not entered the sample by the time of a particular wave, they will have "not applicable" (-8) values for the wave-specific information; the same is the case if they had finally left the sample, e.g. through death or as an ineligible TSM, by the time of a wave.

## Record Type XWLSTEN

XWLSTEN contains information on the latest known sample status of individuals. It contains one record for each individual who has ever been a member of a respondent household. It is keyed on the crosswave person identifier, PID, and contains information on the most recent contact with each member of the sample, and, if applicable, reasons why there has been no contact since that wave. See Table 4.

It also indicates the wave of entry to the sample, the reasons why sample membership may have changed, and whether the sample member has ever been interviewed. Members of the ECHP sample can be identified from the variable MEMORIG.

## Record Type XWAVEDAT

Record Type XWAVEDAT contains substantive data about individuals which is fixed and only measured once in the panel. This includes information asked at the initial wave of entry and information collected later for new entrants. Where a significant life event occurred after the respondent entered the panel, e.g. first birth, this is updated from the panel data. These data tend to be located in different files depending on the individual wave of entry. The aim of this record type is to provide users with a single place to find such information.

The record type contains infomation on the following main topics: race, place of birth, school leaving age, type of school attended, father's and mother's job characteristics when aged 14, year of first marriage and first cohabitation, year in which first child born, first job characteristics, birth weight for children in the panel.

There is one record for each individual who has ever been a member of a respondent household. It is keyed on PID, the Cross-wave person identifier.

Variables relating to questions never asked of a respondent are coded (-8). If they were missing when asked, they are coded (-9).

## Record Type XIVDATA

Record Type XIVDATA contains basic information about interviewers who have worked on the BHPS over the 18 waves of the survey. These data are intended to contribute to research on interviewer effects, The data are somewhat limited in scope and there and there is missing data. The variables included are:

IVSEX Interviewer sex
IVYEND Year finished with NOP
IVNO Interviewer number
IVYSTRT Year started with NOP
IVID Interviewer id
IVYOB Interviewer year of birth
Most of these are self evident but two important ones are IVID and IVNO. IVNO is IVID with the first two characters removed and then converted to a number, this is the real interview number. IVID is the variable needed to enable merging.

The file is a cross-wave file and can be merged with any wave. To use it the data must first be matched/merged with a wHHSAMP file which are the only files to contain wIVID 'Interviewer ID number' which now becomes a Key Linking Variable. IVID and wIVID are alphanumeric variables, but both SPSS and Stata allow one to merge data using an alphanumeric key variable, if the files are correctly sorted.

Once this step has been achieved the resultant file can be merged with any other file. The merged file can be sorted by Interviewer Number to see all the interviews done by each particular interviewer.

There are certain values of wIVID in the main dataset that are not matced in XIVDATA These values include PHONEI, PHONEO, PHOENI, PHONE1 etc., these are phone interviews and there is no interviewer data available. Another frequently found code is 000000, which signifies no interview took place.

A certain amount of cleaning of the data in wIVID has taken place to enable these merges but we have not attempted to impute missing interviewer numbers, as might for example be done on the basis that most instances a single interview worked in each interviewer area, identified by wIVIA.

## III.4. Naming Conventions

Record Types/Files All Record Type names begin with a single character wave identifier; A = Wave 1 , $\mathrm{B}=$ Wave 2, and so on. (Throughout this Manual, this wave-specific character has been replaced by a generic "w".) The rest of the name attempts to provide a meaningful mnemonic given the data content (e.g. $\mathrm{HH}=$ household, IND = individual, RESP = respondent). Two records (XWAVEID and XWLSTEN) contain cross-wave matching information.

Variables All variable names begin with a single character wave identifier, replaced by a generic " w ". The rest of the name is mnemonic which attempts to give some information as to the content of the variable. In general, the second and third characters give some indication of the general subject area of the variable. The conventions used are described in Table 5.

Table 5 Some Variable Naming Conventions

| ADLT | Adults | JU | Unemployed |
| :---: | :---: | :---: | :---: |
| BU | Benefit Unit | LOC | Location |
| CD | Consumer Durables | MG | Mortgage |
| CH | Child/ren | MOI | Month of interview |
| CK | Check-ups | MN | Month |
| COH | Cohabitation | ML | Marital/Marriage |
| CSSM | Cambridge Scale | MOV/E | Moves/Moving |
|  | Classification (Male) | NC | Number of Calls (by Interviewer) |
| CSSF | Cambridge Scale | NEW | Bought in Last Year |
|  | Classification (Female) | NO/N | Number |
| DC | Document Check | OP | Values and Opinions |
| DOI | Day of interview | ORG | Organisations |
| DOB | Date of Birth | OSM | Original Sample Member |
| ED | Education | OWN | Owned by Respondent |
| FAM | Family | PAY/PY | Wages, salaries |
| FED | Further Education | PY | Parental |
| FI | Financial | PEN | Pension/s |
| FID | Fieldwork Identifier | PID | Person Identification Number |
| FIO | Final Interview Outcome | PL | Place |
| FR | Final Receipts | PNO | Person number |
| FT | Financial Transfers | PSM | Permanent Sample Member |
| GHQ | General Health Questionnaire | QF | Qualifications |
| GOLD | Goldthorpe Social Scale | R/RSP | Respondent(s) |
| HG | Household Enumeration Grid | RENT | Rent |
| HGS | Hope-Goldthorpe Scale | RGSC | Registrar General's Social |
| HH | Household |  | Classification |
| HID | Household Identification Number | SEG | Socio-Economic Group |
| HL | Health | SIC | Standard Industrial Classification |
| HOH | Conventional Head of Household | SOC | Standard Occupational |
| HS | Housing |  | Classification |
| HU | Who | SP | Spouse/Partner |
| IMPS | Imputation Variable | STAT | Status |
| IPS | Inter-penetrating Sample | TSM | Temporary Sample Member |
| ISCO | International Standard Classification of Occupations | USE | Has the use of named item in household |
| IV | Interview/interviewer | WGHT | Weight |
| IVA | Interviewer Area | XP | Expenditure |
| JB | Job | XW | Cross-Wave |
| JH | Job History | YP | Young Person |
| JL | Last Job | YR | Year |
| JS | Self-employed |  |  |

## III.5. Missing Value Conventions

As far as possible, identical conventions have been used to represent the variety of situations where respondents did not provide data in response to questions, or where a variable could not be computed.

0 represents 'Not Mentioned' or 'None' (unless it has some other meaning in the coding frame). Thus, where respondents are asked which of a list of items apply to them (for example, educational qualifications), those not selected will be coded 0 .
-1 represents a respondent response of `Don't Know'. In the questionnaire, these are defined as `8', `98', `998' etc. (questions without such codes may have this response as a result of interviewer write-in)
-2 represents a respondent refusal. In the questionnaire, these are defined as `9', `99', `999' etc. (questions without such codes may have this response as a result of interviewer write-in)
$-3 /-4$ are reserved for situations arising for particular questions where invalid data are given for other reasons, or data that do not fit into the frame of the main variable (e.g. selfemployed person made a loss, last payment was a refund). The Value Label will indicate the particular situation.
-7 is used on individual respondent records AINDRESP, BINDRESP etc; it indicates that the respondent was interviewed by proxy (or from Wave Three, by telephone) and therefore the relevant question was not asked, or the derived variable could not be computed. From Wave Three this code is also used on the wHHRESP record to indicate that the only household contact was a telephone interview, so that the household schedule was not completed.
-8 represents data missing because not applicable to that respondent, or because of routing from some previous question.
-9 represents data missing in error, with no other explanation, or derived variables which could not be computed.

None of these 'missing values' are pre-defined as such in the SIR database, or in derived SPSS files (i.e. by assigning MISSING VALUES to the variables). There are no valid non-missing negative values within the dataset. (Note, however, that "-3" and "-4" codes may under some circumstances be treatable as non-missing.) The complete set of numerical variables may, therefore, have missing value codes set by a single "missing value" statement in SPSS. (Note, however, that string variables' missing values are coded as "-9", "-8" and so on.)

## III.6. Other Variable Transformations

The following general procedures were adopted in creating the User Database, which will affect the apparent relationship between individual questions and variables:
a) As noted above, `Don't Know' and `Refuse' values were re-coded to a consistent basis, with -1 representing `Don't Know' and -2 representing `Refused'
b) Separate `Don't Know' and `Refuse' variables associated with amount variables were combined with this variable.
c) Separate pre-coded and office-coded variables for period of receipt or payment of amounts were combined into a single variable, measuring weeks of receipt. By convention, a month was treated as containing 4.33 weeks.
d) Where identical information was collected for different subsets of respondents at different points in the questionnaire, this is merged into a single variable. Particular attention is drawn to the treatment of proxy data in this respect. This is described below in the discussion of Record
wINDRESP.
e) Record Type wINDRESP combines both full respondent and proxy data. The code -7 is used to indicate a value missing because the response was by proxy and the question was therefore not asked.
f) Multiple response and equivalent lists of questions are generally re-coded so that a positive response is coded 1 and a 'Not mentioned' or an equivalent negative response is coded to 0.
g) In a number of instances, minor questionnaire modifications led to inconsistencies in response categories between waves. Rather than leaving these, the Wave One data have been re-coded so that the categories are consistent with the Wave Two questionnaire and data, rather than the Wave One questionnaire. The following variables are affected: AMASTAT, AQFEDA -AQFEDJ, and ANQFEDA - ANQFEDJ, ACJSBLY, AF131 and AF133, AJBED1 - AJBED5, AEDNEW1 AEDNEW4. Other such re-coding exercises in subsequent waves will be described in up-date sheets provided with later releases.
h) From Wave Two onwards, an open ended question was placed as the final question on the individual questionnaire asking people to state in their own words what "has happened to you (or your family) which has stood out as important". Answers were recorded verbatim. Verbatim responses can not be made available for public release, because of confidentiality concerns. However, a numeric code was developed to capture the full range of events mentioned. Up to four events are coded for each response. For this question, coding was done at the Essex Centre, using specially trained coders.

## III.7. Missing and Potentially Erroneous Data

Survey processes generate errors. These can emerge at many stages and for many reasons: the respondents' understanding of the original question, whether they in fact know the answer, their preparedness to answer, the interviewer's understanding of the response, her/his accuracy in transcribing the response, the accuracy of any processing by editors and coders, and of data entry operations, and then the soundness of any subsequent checking and editing processes. We have sought to minimise all these sources of error through efforts in questionnaire design, in interviewer training and monitoring, in motivation of respondents, in the monitoring of initial stages of data processing, and in our own data processing procedures, as explained elsewhere in this documentation. However, there are certainly missing data, and no data set is error free.

Our approach to potentially erroneous data has been, on the one hand, to ensure that data processing stages are as foolproof as possible, but, on the other hand, to respect the responses given in the field, unless there was a very clear basis for making any change. The rationale employed was that the final researcher should be able to make the judgement of how to deal with cases at the margins of plausibility. Because different researchers may want to take different approaches to these situations, we have sought to retain on the data set as much information from the interview as possible. As an example, a number of respondents reporting category `e' at question D20 ("O" levels obtained before 1975) were not themselves born, or were implausibly young in 1975. Some researchers may be content to re-code these cases to category f , while others may regard this information as so suspect that they would prefer to exclude it. Interviewer checks, on the other hand, are enforced so as to be consistent with other data. We have also checked extreme values on continuous variables (e.g. money amounts), and amended these when there is some clear evidence of error.

On the other hand, in situations in which we believe that some error may have arisen in a more systematic fashion as a result of respondent misunderstanding of questions, we have not sought to change the data. For example, E15b (AJBRISE) appears to have been understood by some respondents to be including (rather than excluding) annual pay rises taking account of inflation.

We have not sought to reconcile potentially conflicting data collected at the separate waves. As noted below, in a number of specific cases, apparent inconsistencies exist, (for example, in current job status as reported in Wave One and retrospective reports of job status in the Autumn of 1991, as collected at Wave Two, or other subsequent pairs of waves). Neither have we sought to reconcile information collected in the various life history components in Waves Two and Three with data collected in the main panel or with each other. It is for the individual researcher to determine how to resolve such inconsistencies as they may affect their own work. We have, however, sought to ensure that sex is
consistently reported, and major inconsistencies in age and date of birth are resolved.

## III.8. Mobility and Implications of the Fieldwork Process for Data Organisation

As described elsewhere, some movement, either of individuals or of whole households is identified before the fieldwork process. Coversheets for individuals are issued at the beginning of fieldwork to households where they are expected to be found. These expected households are assigned to the same interviewer area as at Wave One, except where a move is anticipated; in which case they are assigned to area ' 0 '. At Wave Two, this assignment is contained in the variable BIVIA. In later waves, the area ' 0 ' issues were reallocated before fieldwork, and CIVIA and so on contain the anticipated fieldwork area. Further moves are uncovered in the course of fieldwork. Where these are non-local moves - i.e. beyond the range of the current interviewer - they are reassigned, and have a code 0 in the variable wIVIAM (but see the discussion of the interpenetrating sample Section IV, for other uses of this variable).

However, for most analytical purposes, the derived variables wHHMOVE on wHHSAMP and wHHRESP, and wMOVEST on the individual level Records are to be preferred, since these indicate whether the household or individual has moved in comparison with their location at the last wave, which the fieldwork-based variables may not. Given that sample members may return to previous addresses and rejoin other sample members, it does not follow that all members of a non-mover household (wHHMOVE=1) are themselves non-movers. The household status is defined in terms of the household reference person where this is a PSM, and the oldest PSM where the HRP is not a permanent sample member. Where there is sufficient information, new addresses are coded to the Region and Local Authority coding frames used at Wave One.

One further implication of the tracking of movers is that individuals may be expected to be found in more than one household. Thus, on the Record wINDSAMP, there will be one record for each expected occurrence of an individual, and, for example, one record may contain information about departure date and reasons for leaving one household, and another record may contain information about arrival in the new household. The variable wFINLOC identifies the final location of each sample member (although, in some cases, the final individual outcome may be `Mover', where no further information about the destination was available). Caution should be exercised in using matching procedures with data from this Record, for example by selecting cases where wFINLOC equals 1, to avoid spurious duplicate matches.

## III.9. Usage Notes

There are three types of usage notes. This section contains, first, information that is general to all waves, and secondly, information which is general to all waves after the first, since substantial modifications were made to the questionnaire at Wave Two; some basic information did not need to be collected afresh from all respondents, but did have to be collected from new entrants. Notes which are entirely wave-specific are contained in Sections III.11, III.12, III. 13 on the individual waves.

## III.9.1. For All Waves

## Employment Status

There are three measures of current employment status: that on the Household Composition Form; that arising from the direct status question J2 (wJBSTAT); and that arising from the sequence of questions about whether the respondent did any paid work in the last week, whether away from a job and whether seeking work. The first of these is likely to be reported by someone else, and therefore one of the others is to be preferred if available. In a minority of cases, there may be inconsistencies (e.g. where full-time students have a part-time job, but define themselves as students). Where the interest is in self-defined status, wJBSTAT should be used, but the routing of the questionnaire, and hence the availability of data at various points, depends on the paid work questions. Thus, in order to select out all those in employment, the combination of wJBHAS and wJBOFF should be used.

## The Employment History: Record Types wJOBHIST and variables wCJSBLY, wNJBS

Related to the previous point, the employment history is routed in terms of current status as defined by the job-holding questions. In a limited number of cases, respondent or interviewer confusion led to erroneous ordering or overlapping periods. The majority of these have been cleaned, but a few unresolvable inconsistencies remain. Where the last employment spell given started after 1st September 199LY, or the current spell started after this date, and no information about previous spells was given, a single wJOBHIST record with missing data was created.

## Occupational Coding

Occupational coding was carried out using the Computer Assisted Standard Occupational Classification (CASOC) system developed by Peter Elias. As a result of the six-figure codes attached via CASOC, matching of the 1990 SOC coding with previous occupational classifications is now possible; in addition, special algorithms within CASOC allow the re-coding of SOC codes into SEG, RGSC, Goldthorpe, Hope-Goldthorpe, Cambridge Scale and ILOISCO 88.

Attention should be paid to the fact that there is a degree of change found in the coding of occupations and industry between waves for respondents who have not apparently changed jobs. These cases could be the result of respondent recall error or misunderstanding, or of coding or keying errors. A blind re-coding exercise indicated a low level of absolute error, however, and if this is randomly distributed throughout the sample, this should not be problematic for analysis. Researchers will have to make their own decisions in these cases, as to whether they consider a job has changed, perhaps by looking at changes in other variables such as pay and hours.

In relation to industry coding, users should note that the information available for coding industries at Wave Two and Three was reduced if the respondent had not changed their job in the past year. The type of organisation (for example, private firm/local government and so on) was not asked in these cases. In addition, names of employers were not obtained at Waves Two and Three, as they were at Wave One.

## Money receipts and payments

The base variables associated with these payments or receipts include two for each, the amount of the receipt or payment, and the period in weeks which it covered. These variables should not be used without first converting to a common time metric - e.g. dividing by the number of weeks. However, users should be aware that, for a small number of cases, the period of receipt is less than one week. They may wish to take special action in these cases.

## Income payments: wINCOME Record Types and variables wF101-wF159, wNF1

As explained above, these records contain detailed information about each payment received. It is possible that more than one payment stream may be received from a single type, identified in variables wF101-wF159 (for example a pension may be received from more than one previous employer). Hence more than one wINCOME record may exist for each payment type. The variable wNF1 (on wINDRESP) is the count of the number of payment types, and not of the number of payment receipts.

Where a payment type is identified, but with no further details, then a wINCOME record is generated with missing data.

In the treatment of reported joint receipt, the Wave One practice is different to that of the subsequent waves. Question F3f (whether payment was received jointly) has been heavily edited, and also, we believe, has been treated rather inconsistently by interviewers. At Wave One, we have endeavoured to ensure that reports of joint receipt are consistent by payment type, though not necessarily by amount. The variable AFRJT is to be used to ensure that total household income is correctly calculated, and should not be regarded as an analysis variable for investigating the incidence of joint receipt. At Wave Two and subsequently, we have left the data as collected, but computed a new variable, wFRJTVF, an edited version of wFRJT,
depending on whether matching records exist, and this is used in the computation of derived variables.

Over the course of the panel, the range of payment types has changed, particularly with the introduction of new state welfare benefits. For example Job seekers allowance replaced unemployment benefit. In this case a new variable (wF142) on wINDRESP was introduced, and the variable wF130 was removed. Correspondingly a new code value of 42 on wFICODE on wINCOME was introduced. For health and disability related benefits rather more substantial changes have been made to the system. However, the same benefit will retain the same variable name and coded value across time, and where a benefit is clearly a descendant of an earlier benefit phased out, it will retain the same name. This will mean that code values in the data set may not correspond to those shown on the questionnaire documents.

## Income and Imputation

It should be noted that income information for all waves includes imputed data. Imputation methods and the system of imputation flags are discussed in Section $V$ below. It is important to note that imputation flags do not distinguish at the individual level how substantial the imputation was, and variables which are computed from other variables with imputations may contain widely varying proportions imputed. For example, for some individuals the only imputation may relate to a small amount of Community Charge Benefit, while for another the whole of current pay may be imputed.

In general, annual and latest-month income derived variables are computed in the same way, though it should be noted that they have a non-overlapping reference period, so that it is theoretically possible for monthly income to be greater than annual income. The only difference in computation methods is that, while monthly income includes pay from any second or occasional job held by the respondent, this is not included in annual income since we have no information on the period for which the job has been held.

At each wave after Wave One, the calculation of the variables for pay at September of the previous year, and hence all annual labour income measures, makes use of the pay variables from the previous wave where the respondent claims still to be in the same job. This means that some elements of these data may contain imputations, though this is not separately flagged. The variables will be independently imputed where the report of employment status given at the previous wave is inconsistent. Non-labour income variables rely solely on data collected at the current wave.

## III.9.2. For Wave Two and Beyond

The notes below relate to questionnaire modifications introduced at Wave Two.

## III.9.2.1. Housing Data

There are substantial changes in the design of the section of the household questionnaire dealing with owner-occupation from Wave Two onwards, as compared with Wave One; the aim was to deal with large number of possible changes in ownership conditions, and to avoid unnecessary repetition of questions where conditions had not changed since the previous wave. The structure has been somewhat simplified in the database, but the main effect is that certain apparently comparable questions are only asked of very small subsets of respondents. For example, the respondent's assessment of the current selling price of the house (wHSVAL) which was asked of all owner-occupiers at Wave One, is only asked of outright owners at a new address at Wave Two - although, from Wave Three, it is again asked of all owners. The questions on additional mortgages now apply only to the period since September 1st of the previous year, except where the interview took place at a new address, where the reference period is the period since the respondent first started paying a mortgage on the property, identified by wMGYRO. This value, and the value of wHSYRO may be below 91 where the house-owner is a new entrant.

By contrast the renter section is unmodified, except that those on $100 \%$ rent rebate/housing benefit are now routed through the housing payment difficulties questions, and routed out if they were on $100 \%$ rent rebate throughout the previous year.

## III.9.2.2. The Employment Section

Users should be particularly aware of the structure of the employment section, and note that the routing on the questionnaire from Wave Two onwards means that respondents interviewed at the previous wave do not answer all questions; whether they do depends on whether they have changed their job since September 1 of the previous year. Differences in questions asked of respondents interviewed in earlier waves and those asked of new entrants should be particularly noted; although the variable names are the same as at Wave One, the population totals may differ.

This applies particularly to the following variables:

| wJBSECT | wJBTIME | wJBONUS | wJRISE | wTUJBPL | wTUIN1 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| WTUIN2 | wJBOPPS | wJBPEN | wJBPENM | wPAYLY | wPAYLYG |
| wPAYLY | wPAYLYW |  |  |  |  |

As questions on union membership are not asked of employees in the same job as at Wave One, for example, users will need to carry over the Wave One value for employees at later waves who have not changed their job in the previous year, in order to use the variable on union membership for all respondents.

As currently structured, the employment section uses the date the respondent started their current job/position (either with the same or a different employer) to route respondents in the same job past several questions regarding the type of workplace, union membership and employer's pensions. (The key variables on Start Date of Current job are wJBBGD, wJBBGM and wJBBGY.) This date is, additionally, the critical arbiter of whether people are in the same job as last year or not. This applies to both the employment section and to the annual job history, as this date is transferred forward to the Job History for routing at the beginning of the section. There is some indication that some respondents may not be interpreting this question correctly and are failing to give the date they were promoted or changed their job within employer. It is also possible that they are assuming that the date needed is the date the respondent started working for their current employer. Where respondents have given a different job title and description allied with a change in managerial status and a change in hours or earnings, it is possible they are, in fact, describing a different job.

## III.9.2.3. Educational Qualifications

All waves produce all qualifications obtained and, in addition, numbers of school qualifications. The relevant variables here are:

| wQFHAS | wQFA-N | wQFED | wQFEDA-S | wNQFEDA-S |
| :--- | :--- | :--- | :--- | :--- |
| wQFEDHI | wQFX | wQFEDX | wQFXA-N | wQFEDXA-K |
| wNQFEXA-K |  |  |  |  |

Wave One respondents in Wave Two were only asked for qualifications obtained since Wave One, taken to be since 1.9.91. The routing variables BQFX and BQFEDX should be used to elicit these additional qualifications. However, as some people would have obtained qualifications reported in Wave One after 1.9.91, there could be some double-counting in Wave Two. This may be accentuated through a tendency to report qualifications more than once. It is quite possible to obtain the same level of qualifications two years running, and therefore no attempt has been made to eliminate this. However, care should be taken when combining qualifications from both waves.

If only highest qualification is required, then the derived variable wQFEDHI has been calculated to update the Wave One variable with newly received higher qualifications. wQFVOC and wQFACHI have been treated in the same way.

The variables for all new respondents, which contain all qualifications obtained and are therefore the same as the Wave One variables, are respectively wQFA-N, wQFEDA-S, and wNQFEDA-S. There may not always be a match between reported qualifications and reported numbers (for example, where a respondent failed to provide a number).

## III.9.2.4. Interview outcome codes

At Wave Two and beyond, the distinction between whole household non-response, and nonresponse within an enumerated household becomes more important. A new computed individual interview outcome variable (wIVFIO) contains additional codes for individuals in nonresponse households giving further information on their status. These have a standard set of values for all waves after Wave One, and thus do not directly reflect the values contained on each cover sheet. It should be noted that, in some cases, household enumeration was completed for households which otherwise refused. Individuals in these households have outcome codes in the range 30 to 40 . It should also be noted that, in a small number of cases at Wave Two only, individuals in respondent households have a final individual outcome code of 12 (moved). These were cases where there was insufficient information to reissue them to a new household. At later waves this value is only used where the final location code (wFINLOC) is equal to 0 .

## III.9.2.5. Major life events

From Wave Two onwards, an open ended question was placed as the final question on the individual questionnaire asking people to state in their own words what "has happened to you (or your family) which has stood out as important". Answers were recorded verbatim. Verbatim responses can not be made available for public release, because of confidentiality concerns. However, a numeric code was developed to capture the full range of events mentioned. Up to four events are coded for each response. Along with the events mentioned, code 97 has been retained for "nothing happened". This is sometimes a substantive response as people indicate that little of consequence occurred, although in the vast majority of cases the answer is probably the equivalent of "don't know" (code -1). Missing data is assigned -9. The full detailed coding frame appears in Appendix 3.

As would be expected, people's answers include not only events that happened to them personally but also events that happened to other family members or friends. Each event is therefore assigned a "subject code," with 20 being used if no subject is specified. The pertinent "subject code" where ambiguous is indicated by the event frame (e.g. code 40 pregnancy / birth indicates the subject is the parent). The subject code frame includes mentions of pets (code 18). For further details see Chapter 11 in Changing Households: The British Household Panel Survey 1990-1992 (Buck et al (eds.) 1994).

For this question, coding was done at the Essex Centre, using specially trained coders. An inter-coder reliability check was carried out on $10 \%$ of the sample. For Wave Two, inter-coder reliability was $97 \%$ for subject mentions, over $90 \%$ for the specific category of events $90 \%$ and $95 \%$ for the 12 major categories (health, caring, education, employment, leisure/political, non-familial, family, financial, consumption, residential move, crime and religion).

## III.10. Definitions

## Age of respondents

The eligible age for a full individual interview in Wave One was 16 on 1st December 1991. Given that the field period ran from the beginning of September to early December, it is possible that some respondents were in fact under 16 at the time of interview. This may lead to some minor apparent inconsistencies between household composition information and individual questionnaire information. Two age variables are provided, one measuring age at the date of household interview and the other measuring age at 1st December 1991. The day of birth variable has been suppressed from the public use version. For Wave Two and subsequent waves, similar eligibility rules were applied in relation to age; all those who were 16 or above on 1 December of the fieldwork year were eligible for interview.

## Days since 1st September 199LY

Questions asking how many days since September 199LY the respondent has carried out some activity (e.g. training, in hospital) do not have a standard one year basis, since they depend on the date of interview. Thus values above 365 are possible, however implausible.

## Dates of Events

There are a large number of questions in the BHPS asking for the exact date of events, particularly employment events. Inevitably, there are many missing components to these dates, which would inhibit normal date functions from producing durations, for example. In constructing derived variables which depended on dates we have assumed that the missing day of month is the first, and, for two or more years before the year of interview only, we have assumed July for missing months.

## Season Codes

In cases where respondents could not remember exact dates, a convention was applied, by which January was used when Winter was reported, April for Spring, July for Summer and October for Autumn. However, where these season codes are used in a spell which starts and finishes in the same calendar year, the length is set to -3, indicating less than 12 months but exact length indeterminate.

## The Self-Completion Questionnaire

The data from the Self-Completion Questionnaire are included on Record wINDRESP. This document was refused or is missing for other reasons for a number of respondents. They may be identified from the variable wIODC.

## Dependent Children

Unlike the standard definition of a child for fieldwork purposes (i.e. under 16), a dependent child has been defined for use in derived variable construction as one aged under 16, or aged 16-18 and in school or non-advanced further education, not married and living with parent.

## Benefit Units

Benefits Units are defined, following the definition used by the Department of Social Security, as a subset of households, consisting of single individuals or couples and their dependent children, if any.

## General Health Questionnaire

A question battery originally developed as a screening instrument for psychiatric illness, but often used as an indicator of subjective well-being. See Cox, B. et al, The Health and Lifestyle Survey. (London: Health Promotion Research Trust, 1987). See Variables wHLGHQ1-2 on wINDRESP.

## Personality Measures for the British Household Panel Study

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Personality traits are individual differences in relatively consistent patterns of thoughts, feelings, and behaviors. Traits have been labeled "essential psychological constructs" because they exert a substantial influence on important life outcomes such as work experiences (e.g., Barrick \& Mount, 1991; Judge et al., 1999), academic success (e.g., Digman, 1989), romantic relationships (e.g., Donnellan, et al., 2004; Robins, et al., 2002), parent-child relationships (Kochanska et al., 2004), health-related behaviors (e.g., Bogg \& Roberts, 2004; Friedman, et al., 1993), and the risk for psychopathology (e.g., Krueger et al., 2000; Krueger et al., 1996) and criminality (e.g., Miller \& Lynam, 2001). Indeed, it is rare to find a single domain that is of interest to social scientists where evidence for the importance of personality traits has not been found.

There is general agreement among personality psychologists that five broad dimensions can adequately organize the vast range of possible personality descriptors (e.g., assertive, friendly, nervous). These five "super traits" are known as the "Big Five," and they include the traits of

Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to Experience (John \& Srivastava, 1999). Extraversion refers to individual differences in sociability, gregariousness, level of activity, and the experience of positive affect. Agreeableness refers to individual differences in altruistic behavior, trust, warmth, and kindness. Conscientiousness refers to individual differences in self-control, task-orientation, and rule-abiding. Neuroticism refers to individual differences in the susceptibility to distress and the experience of negative emotions such as anxiety, anger, and depression. Finally, Openness to Experience refers to individual differences in the propensity for originality, creativity, and the acceptance of new ideas. The general agreement on the Big Five provides a standardized language for describing personality differences at the broadest levels and has facilitated the accumulation of knowledge concerning how personality traits are related to a broad range of life outcomes.

Personality traits tend to be assessed using long questionnaires. However, recent scale-development studies have indicated that the Big Five traits can be reliably assessed with a small number of items (e.g., Gosling et al., 2003). For instance, pilot work from the German Socio-Economic Panel (GSOEP) Study led to a 15 -item version of the well-validated Big Five Inventory (Benet-Martinez \& John, 1998) that can be used in large-scale surveys like the BHPS. Accordingly, we propose adding these measures to the BHPS.

## Benefit to the Research Community

Including measures of Extraversion, Neuroticism, and Conscientiousness in the BHPS will provide a great benefit to personality, social, clinical, industrial/organizational, and health psychologists. Traditionally, these kinds of researchers do not analyze data from large-scale panel studies like the BHPS because these studies rarely include variables of prime interest to these psychologists. This is unfortunate because theory in these disciplines posits that personality traits should have real-world consequences such as influencing individuals' specific life choices linked to economic well-being and physical health (e.g., career choice, engaging in health-promoting practices) as well as influencing how individuals react to major life events (e.g., unemployment, death of a spouse). Indeed, largescale nationally represented data are crucial for establishing that personality traits are in fact essential psychological constructs. Including personality in the BHPS will make it one of the best datasets in the world for study how personality traits are linked with real-world choices and reactions over time. We are confident that this would ensure that psychologists from a variety of sub-disciplines would begin to use the BHPS.

Furthermore, the inclusion of personality variables would inform research into the causes and effects of existing variables in the study. For instance, social scientists are often interested in the effects of life events (e.g., layoffs, income changes, health shocks, changes in marital status, etc.) on important social and economic variables. Yet these events are rarely completely exogenous. For instance, recent behavioral genetic work shows that the likelihood of getting married or divorced is partly due to personality characteristics that can ultimately be tied to genetic differences between individuals (Johnson, et al., 2004). It is likely that other important life events like unemployment, job promotions, or even the onset of health problems result from similar processes. Thus, by including personality measures, researchers can better understand (and control for) the factors that predispose individuals to experience social, economic, and health-related changes over time.

Finally, the GSOEP, another large-scale panel study, recently began including personality measures in their survey. Including the same personality measures in the BHPS and the GSOEP will permit cross-national replications of personality-related research projects. This promises to increase the status of both projects for conducting psychological research. We should also note that the GSOEP has already administered a pre-test of the measures, and the first full wave of data using these measures will be available in May of 2005. Thus, the data from their study can be used to examine the psychometric properties of the scales in a similar panel study.

Including personality trait measures in the BHPS will allow researchers using future waves of the BHPS to study prospective links between personality and these outcomes. This promises to make the inclusion of trait measures invaluable for years to come. Moreover, including personality measures at just one wave will help resolve a persistent debate regarding age differences in personality traits (e.g., McCrae \& Costa, 2003). The debate centers around whether or not there are age-differences in personality after age 30. To date, psychologists have not been able to resolve this controversy given the paucity of nationally-representative datasets with personality information. Thus, the BHPS is in a unique position to help resolve this important psychological issue regarding personality differences across the life span.

## Big Five Personality Trait Measures

From: Benet-Martinez, V. \& John, O. P. (1998). Los Cinco Grandes across cultures and ethnic groups: Multitrait multimethod analyses of the Big Five in Spanish and English. Journal of Personality and Social Psychology, 75, 729-750.

Agreeableness items are labeled with an "A", Conscientiousness items are labeled with a "C", Extraversion items are labeled with an "E", Neuroticism items are labeled with an "N", and Openness items are labeled with an "O".

Please answer each of the following questions using a 1 to 7 scale, where 1 means "does not apply to me at all" and 7 means "applies to me perfectly".

I see myself as someone who .

1. (A) Is sometimes rude to others (reverse-scored).
2. (C) Does a thorough job.
3. (E) Is talkative.
4. (N) Worries a lot.
5. (O) Is original, comes up with new ideas.
6. (A) Has a forgiving nature.
7. (C) Tends to be lazy (reverse-scored).
8. (E) Is outgoing, sociable.
9. (N) Gets nervous easily.
10. (O) Values artistic, aesthetic experiences.
11. (A) Is considerate and kind to almost everyone.
12. (C) Does things efficiently.
13. (E) Is reserved (reverse-scored).
14. (N) Is relaxed, handles stress well (reverse-scored).
15. (O) Has an active imagination.

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## III.11. WAVE ONE: Record Types and Wave Specific Information

## III.11.1. Record Types: Wave One

## Record Type AHHSAMP

AHHSAMP contains sampling, interview outcome and weighting information. There is one record for each sampled Address, and records for additional selected households at addresses containing multiple households.

Respondent households, for which records AHHRESP etc will exist may be identified from the variable AIVFHO.

Derived and additional variables are those from AHHWGHT onwards.

## Record Type AINDALL

This record contains individual level variables derived from the Household Composition Form. There is one record for each individual enumerated in a respondent household. This record is the only one containing individual level data on children and other non-respondents.

Full and Proxy respondents for whom a corresponding AINDRESP record exists may be identified from the variable AIVFIO (individual interview outcome).

Derived and additional variables are those from AAGE onwards.

## Record Type AHHRESP

This record contains data from the Household Questionnaire and household level information from the Household Composition Form for respondent households. There is one record for each household.

For 15 households there was no household questionnaire completed. For these cases only data from the household composition is available on this record. The cases may be identified from the variable AHHDC.

Derived and additional variables are those from AHHDC onwards. Of these, AHHWGHT AHSTYPE AHSFLOOR AREGION and ALADISTC are direct copies of variables on record AHHSAMP.

The following variables have data for all missing cases imputed:

| AMGNEW | AXPMG | AHSVAL | ARENT | ARENTG | AXPHSN |
| :--- | :--- | :--- | :--- | :--- | :--- |
| AXPHSG | AFIHHMN | AFIHHML | AFIHHMNL | AFIHHMP | AFIHHMB |
| AFIHHMT | AFIHHMI | AFIHHYR | AFIHHYL | AFIHHYNL | AFIHHYP |
| AFIHHYB | AFIHHYT | AFIHHYI |  |  |  |

The following imputation flag variables were added:

| AMGNEWI | AXPMGI | AHSVALI | ARENTI | ARENTGI | AXPHSNI |
| :--- | :--- | :--- | :--- | :--- | :--- |
| AXPHSGI | AFIHHMNI | AFIHHMLI | AFIHMNLI | AFIHHMPI | AFIHHMBI |
| AFIHHMTI | AFIHHMII | AFIHHYRI | AFIHHYLI | AFIHHYNI | AFIHHYPI |
| AFIHHYBI | AFIHHYTI | AFIHHYII |  |  |  |

See Section $V$ for a full discussion of imputation.

## Record Type AINDRESP

This record contains individual data from full and proxy questionnaires. Data from the Household Composition Form are also copied to this record. Proxy respondents may be distinguished from main questionnaire respondents on the basis of the variable AIVFIO. Note that adult non-respondents, which may include the Household Reference Person will not have an AINDRESP record, but only an AINDALL record.

Proxy data are copied to equivalent full questionnaire variables. Where there is no equivalent variable, proxy values are set to -7 (inapplicable). The variables APRRS2I APRIPN APRWHY APRFEHQ APRSEHQ APRFITB APRJBFT correspond to questions in the proxy questionnaire which have no direct equivalent in the full questionnaire. They are inapplicable for full respondents.

Data from the job history are contained on record AJOBHIST, except for a number of derived variables. Similarly detailed data on payment receipts from questions F3a - F3f are contained on record AINCOME.

Derived and additional copied variables are those from AIVFIO to AREGION and from AHGR2R onwards. The variables AREGION AHHSIZE AHHTYPE ATENURE and AFIHHMN are copied from record AHHRESP. The variables AIVFIO AIODC and AHGR2R to AHOH are copied from record AINDALL.

The following variables have data for all missing cases imputed (note that proxy cases do not have imputed values except in the case of APRFITB):

| AJ2PAY | AFIYRDI | APRFITB | APAYGU | APAYNU | APAYGTY |
| :--- | :--- | :--- | :--- | :--- | :--- |
| APAYGLY | APAYNTY | APAYNLY | AJSPROF | AJSPAYG | AFIMNP |
| AFIMNB | AFIMNI | AFIMNT | AFIMNNL | AFIMNL | AFIMN |
| AFIYRL | AFIYRNL | AFIRP | AFIYRB | AFIYRT | AFIYRI |
| AFIYR | ASPPAYG | AFIHHMN |  |  |  |

The following imputation flag variables were added:

| AJ2PAYI | AFIYRDII | APRFITBI | APAYGUI | APAYNUI | APAYGT |
| :--- | :--- | :--- | :--- | :--- | :--- |
| APAYGLI | APAYNTI | APAYNLI | AJSPROFI | AJSPAYGI | AFIMNP |
| AFIMNBI | AFIMNII | AFIMNTI | AFIMNNLI | AFIMNLI | AFIMNTH |
| AFIYRLI | AFIYRNLI | AFIYRPI | AFIYRBI | AFIYRTI | AFIYRI |
| AFIYEARI | ASPPAYGI | AFIHHMNI |  |  |  |

See Section $V$ for a full discussion of imputation.

## Record Type AJOBHIST

This record contains information from the employment history over the period from 1st September 1990 to the date of interview. There is one record for each spell identified at question J5, with job characteristic information from questions J 6 to J 89 appended where relevant. These records will only exist for respondents whose current labour force spell began after 1.9.1990. The additional key AJSPNO, identifies the sequence of job spell, with the most recent first. (See Table 6)

Derived variables are those from AJHENDD onwards. Where a job is with the same employer as previously mentioned and/or at the same workplace (AJHSTAT=1), then the values for AJHSIC AJHSECT and AJHSIZE are copied from the relevant record.

The following variables have all missing data imputed:
AJHGPAY AJHNPAY
The following imputation flag variables were added:
AJHGPAYI AJHNPAYI
See Section $V$ for a full discussion of imputation.
Note that for 62 employment history spells, employment status was undefined. These are mainly spells generated because the subsequent spell did not begin before 1.9.90. A status and pay level is imputed for these spells, but is not included on this record, but rather contributes to the computation of AFIYRL and APAYGLY, and is flagged there.

Table 6 Variable Name to Question Number Index on Job History Record (AJOBHIST)

| AJSPNO <br> (spell no.) | AJHSTAT | AJHBGD <br> AJHBGM <br> AJHBGY | AJHSOC | AJHPLDF | AJHSIC | AJHSIZE | AJHMNGR | AJHSEMP |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1st <br> (most recent) | AJ5A/ <br> AJ6ASC | AJ5B(-D-M-Y) <br> AJ6A(-M-Y) | AJ6B | AJ8 | AJ9A/11A | AJ9B/14 | AJ10/12 | AJ11B |
| 2nd | AJ21A | AJ21A | AJ21B | AJ23 | AJ24A/26A | AJ24B/29 | AJ25/27 | AJ26B |
| Ard | AJ35A | AJ35A | AJ35B | AJ37 | AJ38A/40A | AJ38B/43 | AJ39/41 | AJ40B |
| 4th | AJ49A | AJ49A | AJ49B | AJ51 | AJ52A/54A | AJ52B/57 | AJ53/55 | AJ54B |
| 5th | AJ63A | AJ63A | AJ63B | AJ65 | AJ66A/68A | AJ66B/71 | AJ67/69 | AJ68BB |
| 6th | AJ77A | AJ77A | AJ77B | AJ79 | AJ80A/82A | AJ80B/85 | AJ81/82 | AJ82B |


| AJSPNO <br> (spell no.) | AJHSECT | AJHA990 | AJHPAY0 | AJHPYOW | AJHPY0G | AJHPAYS | AJHPYSW | AJHPYSG | AJHSTPY |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1st <br> (most recent) | AJ13 | AJJBLK | AJ16A | AJ16B | AJ16C | AJ17A | AJ17B | AJ17C | AJ18 |
| 2nd | AJ28 | AJ30 | AJ31A | AJ31B | AJ31C | AJ32A | AJ32B | AJ32C | AJ33 |
| 3rd | AJ42 | AJ44 | AJ45A | AJ45B | AJ45C | AJ46A | AJ46B | AJ46C | AJ47 |
| 4th | AJ56 | AJ58 | AJ59A | AJ59B | AJ59C | AJ60A | AJ60B | AJ60C | AJ61 |
| 5th | AJ70 | AJ72 | AJ73A | AJ73B | AJ73C | AJ74A | AJ74B | AJ74C | AJ75 |
| 6th | AJ84 | AJ86 | AJ87A | AJ87B | AJ87C | AJ88A | AJ88B | AJ88C | AJ89 |

## Record Type AINCOME

This Record contains income and payment data. There is one record for each payment recorded at question F3. This record will only exist for respondents with one or more payments recorded at question F1, (i.e. where ANF1 is greater than 0). For each payment identified at question F1 (i.e. in variables AF101 - AF159) then there will exist at least one AINCOME Record with a corresponding value of AFICODE.

In those cases where payments from multiple sources were combined in a single payments and individual receipts could not be distinguished, AINCOME Records will exist for each source, but the variables ANFR or AFRVAL may indicate that multiple amounts are referred to, or that the amount is given on another Record.

AFIM09L - AFIM12T are derived variables indicating the estimated amount received in each month, taking into account joint receipt and changes in welfare benefit levels. The code constructing all these variables is in the procedure M1DV.AFIM.

The following variables have all missing data imputed:

## AFRVAL AFIM09L to AFIM12T

Note that a value is not imputed where the missing value code is -3 'amount included elsewhere'.
See Section $V$ for a full discussion of imputation.

## Record Type AEGOALT

This Record provides a mechanism for identifying the relationship of each individual in a household to all others. There are two records for each relationship pair to separately identify the relationship in either direction (e.g. one record identifies that person 1 is the parent of person 3, while another record identifies that person 3 is the child of person 1). The relationship codes are not gendered, so the sex of each person is also given.

The relationship given is that of the second person to the first (e.g. if APNO = 1 and AOPNO $=3$ and AREL $=4$ (natural child)) then person 3 is the natural child of person 1.
This Record provides a means of identifying the relationship of each individual in a household to all others. There are two records for each relationship pair to identify separately the relationship in either direction (e.g. one record identifies that person 1 is the parent of person 3, while another record identifies that person 3 is the child of person 1). The relationship codes are not gendered, so the sex of each person is also given.

The relationship given is that of the second person to the first (e.g. if APNO $=1$ and $A O P N O=3$ and AREL $=4$ (natural child)) then person 3 is the natural child of person 1 ).

## III.12. WAVE TWO: Record Types and Wave Specific Information

## III.12.1. Record Types : Wave Two

## Record Type BHHSAMP

BHHSAMP contains fieldwork control, interview outcome and weighting information. There is one record for each issued household, and records for additional households which split off from an issued household. (See Section IV for a detailed description of the fieldwork process.)

Respondent households, for which records BHHRESP etc. will exist, may be identified from the variable BIVFHO. Note that the coding frame for this variable is substantially different from that used at Wave One.

Derived and additional variables are those from BXHWGHT onwards.
This Record also contains variables which allow households which were part of the inter-penetrating
sample experiment to be identified (See Section $M$ ) sample experiment to be identified (See Section IV).

## Record Type BINDSAMP

This Record contains individual level variables derived from the Household Cover sheet. The Record is keyed on BHID and BPNO. There will be one BINDSAMP record for each issued individual at each household where they were expected to be found, either at first issue, or as a result of a move uncovered during the fieldwork process, and additionally a record for each new entrant identified at a contacted household. Thus any individual may be represented by more than one BINDSAMP Record, if they were understood to have moved. The variable BFINLOC enables the last household where the sample member was expected to be found to be identified.

This Record will contain information about dates of departure and reasons for departure for sample members who left respondent households. It will also contain last enumeration information about sample members who have died.

## Record Type BINDALL

This Record contains individual level variables derived from the Household Composition Form. There is one record for each individual enumerated in a respondent household. This Record is the only one containing individual level data on children and other non-respondents.

Full and Proxy respondents for whom a corresponding BINDRESP Record exists may be identified from the variable BIVFIO (individual interview outcome).

Derived and additional variables are those from BAGE onwards.
See Section $V$ for a full discussion of the use of the weights contained on this Record Type.

## Record Type BHHRESP

This Record contains data from the Household Questionnaire and household level information from the Household Composition Form for respondent households. There is one record for each household.

For the 6 households with response code 41 - 'proxy taken at Wave One address' the BHHRESP record will exist, and will consist entirely of missing values. In addition a small number of households were missing household questionnaires - these may be identified from the variable BHHDC.

Derived and additional variables are those from BHHDC onwards. Of these, BXHWGHT BREGION and BLADISTC are direct copies of variables on Record BHHSAMP.

The following variables have data imputed for all missing cases:

| BMGNEW | BXPMG | BRENT | BRENTG | BXPHSN | BXPHSG |
| :--- | :--- | :--- | :--- | :--- | :--- |
| BFIHHMN | BFIHHML | BFIHHMNL | BFIHHMP | BFIHHMB | BFIHHMT |
| BFIHHMI | BFIHHYR | BFIHHYL | BFIHHYNL | BFIHHYP | BFIHHYB |
| BFIHHYT | BFIHHYI |  |  |  |  |

The following imputation flag variables have been added:

| BMGNEWI | BXPMGI | BRENTI | BRENTGI | BXPHSNI | BXPHSG |
| :--- | :--- | :--- | :--- | :--- | :--- |
| BFIHHMNI | BFIHHMLI | BFIHMNLI | BFIHHMPI | BFIHHMBI | BFIHHMT |
| BFIHHMII | BFIHHYRI | BFIHHYLI | BFIHHYNI | BFIHHYPI | BFIHHYB |
| BFIHHYTI | BFIHHYII |  |  |  |  |

## Record Type BINDRESP

This Record contains individual data from full and proxy questionnaires. Data from the Household Composition Form are also copied to this Record. Proxy respondents may be distinguished from main questionnaire respondents on the basis of the variable BIVFIO.

Proxy data are copied to equivalent full questionnaire variables. Where there is no equivalent variable, proxy values are set to -7 (inapplicable). The variables BPRRS2l BPRIPN BPRWHY BPRFEHQ

BPRSEHQ BPRFITB BPRJBFT etc correspond to questions in the proxy questionnaire which have no direct equivalent in the full questionnaire. They are inapplicable for full respondents.

Data from the job history are contained on Record BJOBHIST, except for a number of derived variables. Similarly detailed data on payment receipts from questions F3a - F3f are contained on Record BINCOME.

Derived and additional copied variables are those from BIVFIO to BREGION and from BHGR2R onwards. The variables BREGION BHHSIZE BHHTYPE BTENURE and BFIHHMN are copied from Record BHHRESP. The variables BIVFIO BIODC and BHGR2R to BHOH are copied from Record BINDALL.

The following variables have data imputed for all missing cases (note that proxy cases do not have imputed values except in the case of BPRFITB):

| BJ2PAY | BFIYRDI | BPRFITB | BPAYGU | BPAYNU | BPAYGTY |
| :--- | :--- | :--- | :--- | :--- | :--- |
| BPAYGLY | BPAYNTY | BPAYNLY | BJSPROF | BJSPAYG | BFIMNP |
| BFIMNB | BFIMNI | BFIMNT | BFIMNNL | BFIMNL | BFIMN |
| BFIYRL | BFIYRNL | BFIYRP | BFIYRB | BFIYRT | BFIYRI |
| BFIYR | BSPPAYG | BFIHHMN |  |  |  |

The following imputation flag variables have been added:

| BJ2PAYI | BFIYRDII | BPRFITBI | BPAYGUI | BPAYNUI | BPAYGT |
| :--- | :--- | :--- | :--- | :--- | :--- |
| BPAYGLI | BPAYNTI | BPAYNLI | BJSPROFI | BJSPAYGI | BFIMNP |
| BFIMNBI | BFIMNII | BFIMNTI | BFIMNNLI | BFIMNLI | FIMNTH |
| BFIYRLI | BFIYRNLI | BFIYRPI | BFIYRBI | BFIYRTI | BFIYRI |
| BFIYEARI | BSPPAYGI | BFIHHMNI |  |  |  |

## Record BJOBHIST

This record contains information from the employment history over the period from 1st September 1991 to the date of interview. There is one record for each spell identified at question J12-J14, with job characteristic information from questions J16 to J31 appended where relevant.

These records will only exist for respondents whose current labour force spell began after 1.9.1991. The additional key BJSPNO, identifies the sequence of job spell, with the most recent first.

Derived variables are those from BJHENDD onwards. Where a job is with the same employer as previously mentioned and/or at the same workplace (BJHSTAT=1), then the values for BJHSIC BJHSECT and BJHSIZE are copied from the relevant record.

There is no special table detailing question source and Record structure for this Record (as there was for AJOBHIST) as the record structure mirrors the Questionnaire structure.

The following variables have all missing data imputed:

```
BJHGPAY BJHNPAY
```

Imputation flag variables are listed below.

```
BJHGPAYI BJHNPAYI
```


## Record Type BINCOME

This record contains income and payment data. There is one record for each payment recorded at question F3.

This record will only exist for respondents with one or more payments recorded at question F1, (i.e. where BNF1 is greater than 0). For each payment identified at question F1 (i.e. in variables BF101 BF159) then there will exist at least one BINCOME record with a corresponding value of BFICODE.

In those cases where payments from multiple sources were combined in a single payments and individual receipts could not be distinguished, BINCOME records will exist for each source, but the variables BNFR or BFRVAL may indicate that multiple amounts are referred to, or that the amount is given on another record.

BFIML01 - BFIMN01 are derived variables indicating the estimated amount received in each month, taking into account joint receipt and changes in welfare benefit levels. These calculations depend on the variable BFRJTVF, which is a flag variable identifying whether a reported jointly received payment can be matched to any other persons payment. The code constructing these variables is in the procedure M2DV.BFIM.

The following variables have all missing data imputed:

```
BFRVAL BFIM09L to BFIM01N
```

Imputation flag variables are listed below. Note that a value is not imputed where the missing value code is -3 'amount included elsewhere'.

BFRVALI (This also implies imputation on BFIM09L to BFIM12T)

## Record Type BEGOALT

This record provides a mechanism for identifying the relationship of each individual in a household to all others. There are two records for each relationship pair to separately identify the relationship in either direction (e.g. one record identifies that person 1 is the parent of person 3, while another record identifies that person 3 is the child of person 1). The relationship codes are not gendered, so the sex of each person is also given.

The relationship given is that of the second person to the first (e.g. if BPNO $=1$ and BOPNO $=3$ and BREL $=4$ (natural child)) then person 3 is the natural child of person 1.

The variable BLWSTAT allows the computation of household composition change measures since Wave One, and BNWSTAT composition change between Wave Two and Wave Three

## Record Type BMARRIAG

This record contains one record for each reported legal marriage. It is keyed on BHID, BPNO and BMARNO. The sequence of BMARNO reflects the questionnaire structure. The current or most recent marriage is always keyed as $\mathrm{BMARNO}=4$. Records with $\mathrm{BMARNO}=1,2$ or 3 will exist if there were one or more previous marriages. Thus the record with the key value BMARNO $=1$ corresponds to questions L4 to L10, the record with key value 2 corresponds to L12 to L18, the record with key value 3 corresponds to L20 to L26, and the record with key value 4 corresponds to L27 to L34. The variable BMRMSEQ contains the sequence number of the most recent marriage (e.g. if BMRMSEQ on record where BMARNO eq 4 is equal to 1 , then the most recent marriage is the first marriage).

This record also contains information on cohabitation spells with the same partner which may have preceded marriage.

Note that there has been no attempt to enforce consistency between the data contained in this record, and the information about household composition and relationships at Wave One or Wave Two, contained in Record Types AINDALL, BINDALL, AEGOALT and BEGOALT.

See entry for BLIFEMST (below) for a discussion of season codes.
Table 7 indicates the question sources for variables on this Record Type and details the Record Structure.

## Record Type BCOHABIT

This record contains information about each cohabitation spell outside legal marriage which the respondent has ever had, excepting those which preceded marriages, for which the information is contained on record BMARRIAG. There is a separate record for each spell reported at questions L38 and L39.

Note that there has been no attempt to enforce consistency between the data contained in this record, and the information about household composition and relationships at Wave One or Wave Two, contained in Record Types AINDALL, BINDALL, AEGOALT and BEGOALT.

See entry for BLIFEMST (below) for a discussion of season codes.

## Record Type BCHILDAD

This record contains information about the children respondent has either adopted, or for whom they have acted as step-parent, and the periods when they resided with the respondent. There is one record for each child reported in answer to question L41.

Note that there has been no attempt to enforce consistency between the data contained in this record, and the information about household composition and relationships at Wave One or Wave Two, contained in Record Types AINDALL, BINDALL, AEGOALT and BEGOALT.

See entry for BLIFEMST (below) for a discussion of season codes.

## Record Type BCHILDNT

This record contains information about natural children respondent has ever had or fathered, and the periods when they resided with the respondent. There is one record for each child reported in answer to question L44

Note that there has been no attempt to enforce consistency between the data contained in this record, and the information about household composition and relationships at Wave One or Wave Two, contained in Record Types AINDALL, BINDALL, AEGOALT and BEGOALT.

See entry for BLIFEMST (below) for a discussion of season codes.

## Record Type BLIFEMST

This record contains information about employment status spells in the period since the respondent first left full time education. There is one record for each spell reported in answer to questions L50, L51 and L52. The record contains end date for each spell except the final spell which should be recorded as not ended. The start date for each spell and the spell length in months are included as derived variables.

While data collected here may have been compared with the single year job history information to resolve internal ambiguities, there has been no attempt to enforce consistency between data collected here and that contained in the records AJOBHIST, BJOBHIST etc.

Season codes were used when the respondent could not remember exact month. In the calculation of spell length it was assumed, by convention, that winter would be coded as January, spring as April, summer as July and Autumn as October. However where these season codes are used in a spell which starts and finishes in the same calendar year, the length is set to -3, indicating less than 12 months but exact length indeterminate.

## III.12.2. Wave Two Specific Usage Notes

## Voting

There are two types of question on voting:

1. party identification in Waves One and Two:

AVOTE1 AVOTE2 AVOTE3 BVOTE1 BVOTE2
2. actual vote in the April 1992 General Election in Wave Two:

BVOTE8
AVOTE is a derived variable combining responses to AVOTE4 (triggered by AVOTE1-2), and AVOTE3. Users should be aware that it does not, therefore, reproduce the difference in strength of party support
measured by responses to these separately. AVOTE3 ("which party would you vote for ?") cannot be compared to BVOTE8 ("which party did you vote for?"), as it is only asked of those not responding to AVOTE1-2.

## Marriage History

As explained in the discussion of Record Type BMARRIAG above, data from the marriage history (questions L4 to L34 at Wave two) have been re-structured as a set of separate records. The records are keyed on BHID, BPNO and BMARNO. It is important to note that BMARNO is not the sequence number of the marriage within the respondent's life, but rather reflects the questionnaire structure, so that the most recent marriage always has a BMARNO value of 4 . The variable BMRMSEQ indicates the sequence number of this marriage within the respondent's life. See Table 7 for an indication of question sources for variables and an outline of the record structure.

## Table 7

Variable Name to Question Number Index on Lifetime Marital History Record (BMARRIAG)

| BMARNO | BLMARM | BLMARY | BMPNO | BLMCOH | BLMCBM | BLMCBY | BLMEND | BLMWWM | BLMWWY | BLMDVM | BLMDVY | BLMSPM | BLMSPY |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1st (if more than one) | BL4M | BL4Y |  | BL5 | BL6M | BL6Y | BL7 | BL8M | BL8Y | BL9M | BL9Y | BL10M | BL10Y |
| 2nd (if more than two) | BL12M | BL12Y |  | BL13 | BL14M | BL14Y | BL15 | BL16M | BL16Y | BL17M | BL17Y | BL18M | BL18Y |
| 3rd <br> (if more than three) | BL20M | BL20Y |  | BL21 | BL22M | BL22Y | BL23 | BL24M | BL24Y | BL25M | BL25Y | BL26M | BL26Y |
| 4th or Current or most recent | BL27M | BL27Y | BL28 | BL29 | BL30M | BL30Y | BL31 | BL32M | BL32Y | BL33M | BL33Y | BL34M | BL34Y |

## III.13. WAVE THREE: Record Types and Wave Specific Information

## III.13.1. Record Types: Wave Three

## Record Type CHHSAMP

Record Type CHHSAMP contains fieldwork control, interview outcome and weighting information. There is one record for each issued household, and records for additional households which split off from an issued household. (See Section IV for a detailed description of the fieldwork process.)

Respondent households, for which records CHHRESP etc will exist may be identified from the variable CIVFHO. Note that the coding frame for this variable is substantially different from that used at Wave One and at Wave Two.

Derived and additional variables are those from CXHWGHT onwards.

## Record Type CINDSAMP

This record contains individual level variables derived from the Household Cover sheet. The record is keyed on CHID and CPNO. There will be one CINDSAMP record for each issued individual at each household where they were expected to be found, either at first issue, or as a result of a move uncovered during the fieldwork process, and additionally a record for each new entrant identified at a contacted household. Thus any individual may be represented by more than one CINDSAMP record, if they were understood to have moved. The variable CFINLOC enables the last household where the sample member was expected to be found to be identified.

This record will contain information about dates of departure and reasons for departure for sample members who left respondent households. It will also contain last enumeration information about sample members who have died.

## Record Type CINDALL

This record contains individual level variables derived from the Household Composition Form. There is one record for each individual enumerated in a respondent household. This Record is the only one containing individual level data on children and other non-respondents.

Full and Proxy respondents for whom a corresponding CINDRESP record exists may be identified from the variable CIVFIO (individual interview outcome).

Derived and additional variables are those from CAGE onwards.
See the Section $V$ for a full discussion of the use of the weights contained on this Record Type.

## Record Type CHHRESP

This record contains data from the Household Questionnaire and household level information from the Household Composition Form for respondent households. There is one record for each household.

Households with response code 14 'telephone interview only' will have CHHRESP records, but with most variables taking the missing value code -7 .

For the households with response code 43 - 'proxy taken at Wave One address' the CHHRESP record will exist, entirely consist of missing values. In addition a small number of households were missing household questionnaires - these may be identified from the variable CHHDC.
Derived and additional variables are those from CHHDC onwards. Of these, CXHWGHT CREGION and CLADISTC are direct copies of variables on record CHHSAMP.

The following variables have data imputed for all missing cases:

| CMGNEW <br> CXPHSG <br> CFIHHMT | CXPMG <br> CFIHHMN | CHSVAL <br> CFIHHMI | CFIHHML <br> CFIHHYR | CRENT <br> CFIHHMNL <br> CFIHHYL | CRENTG <br> CFIHHMP <br> CFIHHYNL |
| :--- | :--- | :--- | :--- | :--- | :--- | | CXPHSN |
| :--- |
| CFIHHMB |
| CFIHHYP |

CFIHHYB CFIHHYT CFIHHYI
See Section $V$ for a full discussion of imputation. Imputation flag variables are listed below:

| CMGNEWI | CXPMGI | CHSVALI | CRENTI | CRENTGI | CXPHSNI |
| :--- | :--- | :--- | :--- | :--- | :--- |
| CXPHSGI | CFIHHMNI | CFIHHMLI | CFIHMNLI | CFIHHMPI | CFIHHMBI |
| CFIHHMTI | CFIHHMII | CFIHHYRI | CFIHHYLI | CFIHHYNI | CFIHHYPI |
| CFIHHYBI | CFIHHYTI | CFIHHYII |  |  |  |

## Record Type CINDRESP

This record contains individual data from full and proxy questionnaires. Data from the Household Composition Form are also copied to this record. Proxy and telephone respondents may be distinguished from main questionnaire respondents on the basis of the variable CIVFIO.

Proxy and telephone data are copied to equivalent full questionnaire variables. Where there is no equivalent variable, values are set to -7 (inapplicable). The proxy variables CPRRS2I CPRIPN CPRWHY CPRFEHQ CPRSEHQ CPRFITB CPRJBFT CTELWHY CPRESBFM CPRESBGY CPRESBLY CPRFI01 CPRFI02 CPRFI16 CPRFI31 CPRFI34 CPRFI35 CPRFI37 CPRFI39 CPRFI41 CPRFIRN CPREARN CPRJBBGM CPRJBBFY CPRJBLY correspond to questions which have no direct equivalent in the full questionnaire. They are inapplicable for full respondents.

Data from the job history are contained on record CJOBHIST, except for a number of derived variables. Similarly detailed data on payment receipts from questions F3a - F3f are contained on record CINCOME.

Derived and additional copied variables are those from CIVFIO to CREGION and from CHGR2R onwards. The variables CREGION CHHSIZE CHHTYPE CTENURE and CFIHHMN are copied from record CHHRESP. The variables CIVFIO CIODC and CHGR2R to CHOH are copied from record CINDALL.

The following variables have data imputed for all missing cases (note that proxy cases do not have imputed values except in the case of CPRFITB):

| CJ2PAY | CFIYRDI | CPRFITB | CPAYGU | CPAYNU | CPAYGTY |
| :--- | :--- | :--- | :--- | :--- | :--- |
| CPAYGLY | CPAYNTY | CPAYNLY | CJSPROF | CJSPAYG | CFIMNP |
| CFIMNB | CFIMNI | CFIMNT | CFIMNNL | CFIMNL | CFIMN |
| CFIYRL | CFIYRNL | CFIYRP | CFIYRB | CFIYRT | CFIYRI |
| CFIYR | CSPPAYG | CFIHHMN |  |  |  |

See the Section $V$ for a full discussion of imputation. Imputation flag variables are listed below.

| CJ2PAYI | CFIYRDII | CPRFITBI | CPAYGUI | CPAYNUI | CPAYGTI |
| :--- | :--- | :--- | :--- | :--- | :--- |
| CPAYGLI | CPAYNTI | CPAYNLI | CJSPROFI | CJSPAYGI | CFIMNPI |
| CFIMNBI | CFIMNII | CFIMNTI | CFIMNNLI | CFIMNLI | CFIMNTHI |
| CFIYRLI | CFIYRNLI | CFIYRPI | CFIYRBI | CFIYRTI | CFIYRII |
| CFIYEARI | CSPPAYGI | CFIHHMNI |  |  |  |

## Record Type CJOBHIST

This record contains information from the employment history over the period from 1st September 1992 to the date of interview. There is one record for each spell identified at questions J12-J14, with job characteristic information from questions J16 to J31 appended where relevant.

These records will only exist for respondents whose current labour force spell began after 1.9.1992. The additional key CJSPNO, identifies the sequence of job spell, with the most recent first.

Derived variables are those from CJHENDD onwards. Where a job is with the same employer as previously mentioned and/or at the same workplace (CJHSTAT=1), then the values for CJHSIC CJHSECT and CJHSIZE are copied from the relevant record.

The following variables have all missing data imputed:

CJHGPAY CJHNPAY
See Section $V$ for a full discussion of imputation. Imputation flag variables are listed below.
CJHGPAYI CJHNPAYI

## Record Type CINCOME

This record contains income and payment data. There is one record for each payment recorded at question F3.

This record will only exist for respondents with one or more payments recorded at question F1, (i.e. where CNF1 is greater than 0). For each payment identified at question F1 (i.e. in variables CF101 CF159) then there will exist at least one CINCOME record with a corresponding value of CFICODE.

In those cases where payments from multiple sources were combined in a single payments and individual receipts could not be distinguished, CINCOME records will exist for each source, but the variables CNFR or CFRVAL may indicate that multiple amounts are referred to, or that the amount is given on another record.

CFIM01L - CFIM01N are derived variables indicating the estimated amount received in each month, taking into account joint receipt and changes in welfare benefit levels. These calculations depend on the variable CFRJTVF, which is a flag variable identifying whether a reported jointly received payment can be matched to any other persons payment. The code constructing these variables is in the procedure M2DV.CFIM.

The following variables have all missing data imputed:
CFRVAL CFIM09L to CFIM01N
See Section $V$ for a full discussion of imputation. Imputation flag variables are listed below. Note that a value is not imputed where the missing value code is -3 'amount included elsewhere'.

CFRVALI (This also implies imputation on CFIM09L to CFIM12T)

## Record Type CEGOALT

This record provides a mechanism for identifying the relationship of each individual in a household to all others. There are two records for each relationship pair to separately identify the relationship in either direction (e.g. one record identifies that person 1 is the parent of person 3, while another record identifies that person 3 is the child of person 1). The relationship codes are not gendered, so the sex of each person is also given.

The relationship given is that of the second person to the first (e.g. if CPNO $=1$ and COPNO $=3$ and CREL $=4$ (natural child)) then person 3 is the natural child of person 1.

The variable CLWSTAT allows the computation of household composition change measures since Wave Two.

## Record Type CLIFEJOB

This record contains information about jobs held in employment spells in the period since the respondent first left full time education up to the beginning of data collection in the main panel - i.e. 1st September 1990. There is one record for each spell reported in answer to questions L5 to L13. The definition of a job spell in this record type is different from that used in wINDRESP and wJOBHIST: here a job spell corresponds to a continuous spell with a single employer, while in the main panel data spells may also be defined by changes in occupation or promotions while working with the same employer. An additional spell from the responses to questions L14 to L17 is generated, if the respondent started work with their current employer before 1.9.90. Note that, for this spell the date and occupational information may be different from that collected in the employment section about the current job, since the information there relates to start of the current job, and respondents may have done more than one job in a single spell with the same employer.

The final record of this type for each individual may be one of three different kinds: a) a generated present employer record as indicated above; b) a completed record where this was the last job the respondent has had to date, and this began before 1.9.90 and has finished; c) a record containing only status and start date, where the job began after 1.9.90. In this last case further information about this job and any subsequent jobs held by the respondent will be contained in the main panel record types (e.g. AINDRESP or AJOBHIST). The type of last record is indicated by the variable CLJENST. This information is also contained in the variable CLJRST on record type CINDRESP.

The CLIFEJOB records have been checked to ensure that the spell sequence (indicated by CLJSEQ) is in ascending order of start dates. However there is some multiple job holding reported, so job spells may overlap, and end dates may not be consistently in order.

No attempt has been made to enforce consistency with the lifetime employment status history collected at wave two, and contained in record type BLIFEMST. However this history was available to the respondent, and the variable CLJESFV on record type CINDRESP indicates whether the respondent believed this to be correct. In this case, the variable CLJESFN will indicate the number of the employment status spell which should correspond to this record (=BLESHNO on record type BLIFEMST). Respondents may have held more than one job in a single employment status spell, and hence there may be more than one CLIFEJOB record corresponding to the period covered by a single BLIFEMST record. In the employment status history, full-time and part-time spells were distinguished. It is therefore possible in a limited number of cases that a single CLIFEJOB record may correspond to the period of more than one BLIFEMST record.

## III.14. WAVE FOUR: Record Types and Wave Specific Information

## III.14.1. Record Types: Wave Four

## Record Type DHHSAMP

Record Type DHHSAMP contains fieldwork control, interview outcome and weighting information. There is one record for each issued household, and records for additional households which split off from an issued household. (See the User Documentation for a detailed description of the fieldwork process.)

Respondent households, for which records DHHRESP etc will exist may be identified from the variable DIVFHO. Note that the coding frame for this variable is substantially different from that used at Wave One and at Wave Two.

Derived and additional variables are those from DXHWGHT onwards.

## Record Type DINDSAMP

This record contains individual level variables derived from the Household Cover sheet. The record is keyed on DHID and DPNO. There will be one DINDSAMP record for each issued individidual at each household where they were expected to be found, either at first issue, or as a result of a move uncovered during the fieldwork process, and additionally a record for each new entrant identified at a contacted household. Thus any individual may be represented by more than one DINDSAMP record, if they were understood to have moved. The variable DFINLOC enables the last household where the sample member was expected to be found to be identified.

This record will contain information about dates of departure and reasons for departure for sample members who left respondent households. It will also contain last enumeration information about sample members who have died.

## Record Type DINDALL

This record contains individual level variables derived from the Household Composition Form. There is one record for each individual enumerated in a respondent household. This record is the only one containing individual level data on children and other non-respondents.

Full and Proxy respondents for whom a corresponding DINDRESP record exists may be identified from the variable DIVFIO (individual interview outcome).

Derived and additional variables are those from DAGE onwards.
See the User Documentation for a full discussion of the use of the weights contained on this record type.

## Record Type DHHRESP

This record contains data from the Household Questionnaire and household level information from the Household Composition Form for respondent households. There is one record for each household.

Households with response code 14 'telephone interview only' will have DHHRESP records, but with most variables taking the missing value code -7 .

For the households with response code 43 - 'proxy taken at Wave One address' the DHHRESP record will exist, entirely consist of missing values. In addition a small number of households were missing household questionnaires - these may be identified from the variable DHHDC.
Derived and additional variables are those from DHHDC onwards. Of these, DXHWGHT DREGION and DLADISTC are direct copies of variables on record DHHSAMP.

The following variables have data for all missing cases imputed:

| DMGNEW | DXPMG | DHSVAL | DRENT | DRENTG | DXPHSN |
| :--- | :--- | :--- | :--- | :--- | :--- |
| DXPHSG | DFIHHMN | DFIHHML | DFIHHMNL | DFIHHMP | DFIHHMB |
| DFIHHMT | DFIHHMI | DFIHHYR | DFIHHYL | DFIHHYNL | DFIHHYP |
| DFIHHYB | DFIHHYT | DFIHHYI |  |  |  |

See the User Documentation for a full discussion of imputation. Imputation flag variables are listed below:

| DMGNEWI | DXPMGI | DHSVALI | DRENTI | DRENTGI | DXPHSNI |
| :--- | :--- | :--- | :--- | :--- | :--- |
| DXPHSGI | DFIHHMNI | DFIHHMLI | DFIHMNLI | DFIHHMPI | DFIHHMBI |
| DFIHHMTI | DFIHHMII | DFIHHYRI | DFIHHYLI | DFIHHYNI | DFIHHYPI |
| DFIHHYBI | DFIHHYTI | DFIHHYII |  |  |  |

## Record Type DINDRESP

This record contains individual data from full and proxy questionnaires. Data from the Household Composition Form is also copied to this record. Proxy and telephone respondents may be distinguished from main questionnaire respondents on the basis of the variable DIVFIO.

Proxy and telephone data is copied to equivalent full questionnaire variables. Where there is no equivalent variable, values are set to -7 (inapplicable). The variables DPRRS2I DPRIPN DPRWHY DPRFEHQ DPRSEHQ DPRFITB DPRJBFT DTELWHY etc correspond to questions which have no direct equivalent in the full questionnaire. They are inapplicable for full respondents.

A new set of variables this wave, DYPPAR to DPYHLF3, arise from questions for parents of children aged 11-15. They are primarily intended for use in conjunction with the data collected from the young person's questionnaire contained in record type DYOUTH. The variables DPYWHR1 to DPYHLF3 contain responses concerning specific children. They may be matched to the relevant child through the variables DPYPNO1, DPYPNO2 and DPYPNO3.

Data from the job history are contained on record DJOBHIST, except for a number of derived variables. Similarly detailed data on payment receipts from questions F3a - F3f are contained on record DINCOME.

Derived and additional copied variables are those from DIVFIO to DREGION and from DHGR2R onwards. The variables DREGION DHHSIZE DHHTYPE DTENURE and DFIHHMN are copied from record DHHRESP. The variables DIVFIO DIODC and DHGR2R to DHOH are copied from record DINDALL.

The following variables have data for all missing cases imputed (note that proxy cases do not have imputed values except in the case of DPRFITB):

DJ2PAY DFIYRDI DPRFITB DPAYGU DPAYNU DPAYGTY

| DPAYGLY | DPAYNTY | DPAYNLY | DJSPROF | DJSPAYG | DFIMNP |
| :--- | :--- | :--- | :--- | :--- | :--- |
| DFIMNB | DFIMNI | DFIMNT | DFIMNNL | DFIMNL | DFIMN |
| DFIYRL | DFIYRNL | DFIYRP | DFIYRB | DFIYRT | DFIYRI |
| DFIYR | DSPPAYG | DFIHHMN |  |  |  |

See the User Documentation for a full discussion of imputation. Imputation flag variables are listed below.

| DJ2PAYI | DFIYRDII | DPRFITBI | DPAYGUI | DPAYNUI | DPAYGTI |
| :--- | :--- | :--- | :--- | :--- | :--- |
| DPAYGLI | DPAYNTI | DPAYNLI | DJSPROFI | DJSPAYGI | DFIMNPI |
| DFIMNBI | DFIMNII | DFIMNTI | DFIMNNLI | DFIMNLI | FIMNTHI |
| DFIYRLI | DFIYRNLI | DFIYRPI | DFIYRBI | DFIYRTI | DFIYRII |
| DFIYEARI | DSPPAYGI | DFIHHMNI |  |  |  |

## Record Type DJOBHIST

This record contains information from the employment history over the period from 1st September 1993 to the date of interview. There is one record for each spell identified at questions J12-J14, with job characteristic information from questions J 16 to J 31 appended where relevant.

These records will only exist for respondents whose current labour force spell began after 1.9.1992. The additional key DJSPNO, identifies the sequence of job spell, with the most recent first.

Derived variables are those from DJHENDD onwards. Where a job is with the same employer as previously mentioned and/or at the same workplace (DJHSTAT=1), then the values for DJHSIC DJHSECT and DJHSIZE are copied from the relevant record.

The following variables have all missing data imputed:

## DJHGPAY DJHNPAY

See the User Documentation for a full discussion of imputation. Imputation flag variables are listed below.

## DJHGPAYI DJHNPAYI

## Record Type DINCOME

This record contains income and payment data. There is one record for each payment recorded at question F 3 .

This record will only exist for respondents with one or more payments recorded at question F1, (i.e. where DNF1 is greater than 0). For each payment identified at question F1 (i.e. in variables DF101 DF159) then there will exist at least one DINCOME record with a corresponding value of DFICODE.

In those cases where payments from multiple sources were combined in a single payments and individual receipts could not be distinguished, DINCOME records will exist for each source, but the variables DNFR or DFRVAL may indicate that multiple amounts are referred to, or that the amount is given on another record.

DFIM01L - DFIM01N are derived variables indicating the estimated amount received in each month, taking into account joint receipt and changes in welfare benefit levels. These calculations depend on the variable DFRJTVF, which is a flag variable identifying whether a reported jointly received payment can be matched to any other persons payment. The code constructing these variables is in the procedure M4DV.DFIM.

The following variables have all missing data imputed:
DFRVAL DFIM09L to DFIM01N
See the User Documentation for a full discussion of imputation. Imputation flag variables are listed below. Note that a value is not imputed where the missing value code is -3 'amount included elsewhere'.

DFRVALI (This also implies imputation on DFIM09L to DFIM12T)

## Record Type DEGOALT

This record provides a mechanism for identifying the relationship of each individual in a household to all others. There are two records for each relationship pair to separately identify the relationship in either direction (e.g. one record identifies that person 1 is the parent of person 3, while another record identifies that person 3 is the child of person 1). The relationship codes are not gendered, so the sex of each person is also given.

The relationship given is that of the second person to the first (e.g. if DPNO $=1$ and DOPNO $=3$ and DREL $=4$ (natural child)) then person 3 is the natural child of person 1.

The variable DLWSTAT allows the computation of household composition change measures since Wave Three. DNWSTAT allows computation of household change measures between Wave Four and Wave Five.

## Record Type DYOUTH

This record type contains the responses to the Young persons questionnaire, asked of children aged 11 to 15 on 1st December 1994. There will be one record for each respondent young person. Such respondents have the value 21 for the final interview outcome variable DIVFIO. The variable DYPWGHT contains an individual cross-sectional weight to be used specifically with the youth responses. The contains the normal key variables DHID and DPNO, and children may be matched to information about their parents through the record DEGOALT. See the note to record type DINDRESP above for a discussion of corresponding parental questions. Note that these questions are asked of both natural parents and step parents.

Cooperating young person respondents will have a value of 21 on the interview outcome variable DIVFIO, on record type DINDALL.

## III.15. WAVE FIVE: Record Types and Wave Specific Information

## Record Type EHHSAMP

Record Type EHHSAMP contains fieldwork control, interview outcome and weighting information. There is one record for each issued household, and records for additional households which split off from an issued household. (See the User Documentation for a detailed description of the fieldwork process.) Respondent households, for which records EHHRESP etc will exist may be identified from the variable EIVFHO. Note that the coding frame for this variable is substantially different from that used at Wave One and at Wave Two.

Derived and additional variables are those from EXHWGHT onwards.

## Record Type EINDSAMP

This record contains individual level variables derived from the Household Cover sheet. The record is keyed on EHID and EPNO. There will be one EINDSAMP record for each issued individidual at each household where they were expected to be found, either at first issue, or as a result of a move uncovered during the fieldwork process, and additionally a record for each new entrant identified at a contacted household. Thus any individual may be represented by more than one EINDSAMP record, if they were understood to have moved. The variable EFINLOC enables the last household where the sample member was expected to be found to be identified.

This record will contain information about dates of departure and reasons for departure for sample members who left respondent households. It will also contain last enumeration information about sample members who have died.

## Record Type EINDALL

This record contains individual level variables derived from the Household Composition Form. There is one record for each individual enumerated in a respondent household. This record is the only one containing individual level data on children and other non-respondents.

Full and Proxy respondents for whom a corresponding EINDRESP record exists may be identified from the variable EIVFIO (individual interview outcome).

Derived and additional variables are those from EAGE onwards.

## Record Type EHHRESP

This record contains data from the Household Questionnaire and household level information from the Household Composition Form for respondent households. There is one record for each household.

Households with response code 16 `telephone interview only' will have EHHRESP records, but with most variables taking the missing value code -7 .

For the households with response code 15 - `proxy taken at Wave One address' the EHHRESP record will exist, entirely consist of missing values. In addition a small number of households were missing household questionnaires - these may be identified from the variable EHHDC.

Derived and additional variables are those from EHHDC onwards. Of these, EXHWGHT EREGION and ELADISTC are direct copies of variables on record EHHSAMP.

The following variables have data for all missing cases imputed:

| EMGNEW | EXPMG | EHSVAL | ERENT | ERENTG | EXPHSN |
| :--- | :--- | :--- | :--- | :--- | :--- |
| EXPHSG | EFIHHMN | EFIHHML | EFIHHMNL | EFIHHMP | EFIHHMB |
| EFIHHMT | EFIHHMI | EFIHHYR | EFIHHYL | EFIHHYNL | EFIHHYP |

See the User Documentation for a full discussion of imputation. Imputation flag variables are listed below:

| EMGNEWI | EXPMGI | EHSVALI | ERENTI | ERENTGI | EXPHSNI |
| :--- | :--- | :--- | :--- | :--- | :--- |
| EXPHSGI | EFIHHMNI | EFIHHMLI | EFIHMNLI | EFIHHMPI | EFIHHMBI |
| EFIHHMTI | EFIHHMII | EFIHHYRI | EFIHHYLI | EFIHHYNI | EFIHHYPI |
| EFIHHYBI | EFIHHYTI | EFIHHYII |  |  |  |

## Record Type EINDRESP

This record contains individual data from full and proxy questionnaires. Data from the Household Composition Form is also copied to this record. Proxy and telephone respondents may be distinguished from main questionnaire respondents on the basis of the variable EIVFIO.

Proxy and telephone data is copied to equivalent full questionnaire variables. Where there is no equivalent variable, values are set to -7 (inapplicable). The variables EPRRS2I EPRIPN EPRWHY EPRFEHQ EPRSEHQ EPRFITB EPRJBFT ETELWHY etc correspond to questions which have no direct equivalent in the full questionnaire. They are inapplicable for full respondents.

The variables EYPPAR to EPYSTS3 arise from questions for parents of children aged 11-15. They are primarily intended for use in conjnuction with the data collected from the young person's questionnaire contained in record type EYOUTH. The variables with final digit 1, 2 or 3 contain responses concerning specific children. They may be matched to the relevant child through the variables EPYPNO1, EPYPNO2 and EPYPNO3 which contain the EPNO of the relevant child.

Data from the job history are contained on record EJOBHIST, except for a number of derived variables. Similarly detailed data on payment receipts from questions F3a - F3f are contained on record EINCOME.

Derived and additional copied variables are those from EIVFIO to EREGION and from EHGR2R
onwards. The variables EREGION EHHSIZE EHHTYPE ETENURE and EFIHHMN are copied from record EHHRESP. The variables EIVFIO EIODC and EHGR2R to EHOH are copied from record EINDALL.

The following variables have data for all missing cases imputed (note that proxy cases do not have imputed values except in the case of EPRFITB):

| EJ2PAY | EFIYRDI | EPRFITB | EPAYGU | EPAYNU | EPAYGTY |
| :--- | :--- | :--- | :--- | :--- | :--- |
| EPAYGLY | EPAYNTY | EPAYNLY | EJSPROF | EJSPAYG | EFIMNP |
| EFIMNB | EFIMNI | EFIMNT | EFIMNNL | EFIMNL | EFIMN |
| EFIYRL | EFIYRNL | EFIYRP | EFIYRB | EFIYRT | EFIYRI |
| EFIYR | ESPPAYG | EFIHHMN |  |  |  |

See the User Documentation for a full discussion of imputation. Imputation flag variables are listed below.

| EJ2PAYI | EFIYRDII | EPRFITBI | EPAYGUI | EPAYNUI | EPAYGTI |
| :--- | :--- | :--- | :--- | :--- | :--- |
| EPAYGLI | EPAYNTI | EPAYNLI | EJSPROFI | EJSPAYGI | EFIMNPI |
| EFIMNBI | EFIMNII | EFIMNTI | EFIMNNLI | EFIMNLI | FIMNTHI |
| EFIYRLI | EFIYRNLI | EFIYRPI | EFIYRBI | EFIYRTI | EFIYRII |
| EFIYEARI | ESPPAYGI | EFIHHMNI |  |  |  |

## Record Type EJOBHIST

This record contains information from the employment history over the period from 1st September 1993 to the date of interview. There is one record for each spell identified at questions J12-J14, with job characteristic information from questions J16 to J31 appended where relevant.

These records will only exist for respondents whose current labour force spell began after 1.9.1994. The additional key EJSPNO, identifies the sequence of job spell, with the most recent first.

Derived variables are those from EJHENDD onwards. Where a job is with the same employer as previously mentioned and/or at the same workplace (EJHSTAT=1), then the values for EJHSIC EJHSECT and EJHSIZE are copied from the relevant record.

The following variables have all missing data imputed:

> EJHGPAY EJHNPAY

See the User Documentation for a full discussion of imputation. Imputation flag variables are listed below.

EJHGPAYI, EJHNPAYI

## Record Type EINCOME

This record contains income and payment data. There is one record for each payment recorded at question F3.

This record will only exist for respondents with one or more payments recorded at question F1, (i.e. where ENF1 is greater than 0). For each payment identified at question F1 (i.e. in variables EF101 EF159) then there will exist at least one EINCOME record with a corresponding value of EFICODE.

In those cases where payments from multiple sources were combined in a single payments and individual receipts could not be distinguished, EINCOME records will exist for each source, but the variables ENFR or EFRVAL may indicate that multiple amounts are referred to, or that the amount is given on another record.

EFIM01L - EFIM01N are derived variables indicating the estimated amount received in each month, taking into account joint receipt and changes in welfare benefit levels. These calculations depend on the variable EFRJTVF, which is a flag variable identifying whether a reported jointly received payment can be matched to any other persons payment. The code constructing these variables is in the procedure M5DV.EFIM.

The following variables have all missing data imputed:
EFRVAL EFIM09L to EFIM01N
See the User Documentation for a full discussion of imputation. Imputation flag variables are listed below. Note that a value is not imputed where the missing value code is -3 `amount included elsewhere'.

EFRVALI (This also implies imputation on EFIM09L to EFIM12T)

## Record Type EEGOALT

This record provides a mechanism for identifying the relationship of each individual in a household to all others. There are two records for each relationship pair to separately identify the relationship in either direction (e.g. one record identifies that person 1 is the parent of person 3, while another record identifies that person 3 is the child of person 1). The relationship codes are not gendered, so the sex of each person is also given.

The relationship given is that of the second person to the first (e.g. if EPNO $=1$ and EOPNO $=3$ and EREL $=4$ (natural child)) then person 3 is the natural child of person 1.

The variable ELWSTAT allows the computation of household composition change measures since Wave Two.

## Record Type EYOUTH

This record type contains the responses to the Young persons questionnaire, asked of children aged 11 to 15 on 1st December 1995. There will be one record for each respondent young person. Such respondents have the value 21 for the final interview outcome variable EIVFIO. The variable EYPWGHT contains an individual cross-sectional weight to be used specifically with the youth responses. The record contains the normal key variables EHID and EPNO, and children may be matched to information about their parents through the record EEGOALT. See the note to record type EINDRESP above for a discussion of corresponding parental questions. Note that these questions are asked of both natural parents and step parents.

Cooperating young person respondents will have a value of 21 on the interview outcome variable EIVFIO, on record type EINDALL.

## III.16. WAVE SIX: Record Types and Wave Specific Information

## Record Type FHHSAMP

Record Type FHHSAMP contains fieldwork control, interview outcome and weighting information. There is one record for each issued household, and records for additional households which split off from an issued household. (See the User Documentation for a detailed description of the fieldwork process.)

Respondent households, for which records FHHRESP etc will exist may be identified from the variable FIVFHO. Note that the coding frame for this variable is substantially different from that used at Wave One.

Derived and additional variables are those from FXHWGHT onwards.

## Record Type FINDSAMP

This record contains individual level variables derived from the Household Cover sheet. The record is keyed on FHID and FPNO. There will be one FINDSAMP record for each issued individidual at each household where they were expected to be found, either at first issue, or as a result of a move uncovered during the fieldwork process, and additionally a record for each new entrant identified at a contacted household. Thus any individual may be represented by more than one FINDSAMP record, if they were understood to have moved. The variable FFINLOC enables the last household where the sample member was expected to be found to be identified.

This record will contain information about dates of departure and reasons for departure for sample members who left respondent households. It will also contain last enumeration information about sample members who have died.

## Record Type FINDALL

This record contains individual level variables derived from the Household Composition Form. There is one record for each individual enumerated in a respondent household. This record is the only one containing individual level data on children and other non-respondents.

Full and Proxy respondents for whom a corresponding FINDRESP record exists may be identified from the variable FIVFIO (individual interview outcome).

Derived and additional variables are those from FAGE onwards.

See the User Documentation for a full discussion of the use of the weights contained on this record type.

## Record Type FHHRESP

This record contains data from the Household Questionnaire and household level information from the Household Composition Form for respondent households. There is one record for each household.

Households with response code 14 `telephone interview only' will have FHHRESP records, but with most variables taking the missing value code -7 .

For the households with response code 15 - 'proxy taken at Wave One address' the FHHRESP record will exist, entirely consist of missing values. In addition a small number of households were missing household questionnaires - these may be identified from the variable FHHDC.

Derived and additional variables are those from FHHDC onwards. Of these, FXHWGHT FREGION and FLADISTC are direct copies of variables on record FHHSAMP.

The following variables have data for all missing cases imputed:

| FMGNEW | FXPMG | FHSVAL | FRENT | FRENTG | FXPHSN |
| :--- | :--- | :--- | :--- | :--- | :--- |
| FXPHSG | FFIHHMN | FFIHHML | FFIHHMNL | FFIHHMP | FFIHHMB |
| FFIHHMT | FFIHHMI | FFIHHYR | FFIHHYL | FFIHHYNL | FFIHHYP |
| FFIHHYB | FFIHHYT | FFIHHYI |  |  |  |

See the User Documentation for a full discussion of imputation. Imputation flag variables are listed below:

| FMGNEWI | FXPMGI | FHSVALI | FRENTI | FRENTGI | FXPHSNI |
| :--- | :--- | :--- | :--- | :--- | :--- |
| FXPHSGI | FFIHHMNI | FFIHHMLI | FFIHMNLI | FFIHHMPI | FFIHHMBI |
| FFIHHMTI | FFIHHMII | FFIHHYRI | FFIHHYLI | FFIHHYNI | FFIHHYPI |
| FFIHHYBI | FFIHHYTI | FFIHHYII |  |  |  |

## Record Type FINDRESP

This record contains individual data from full and proxy questionnaires. Data from the Household Composition Form is also copied to this record. Proxy and telephone respondents may be distinguished from main questionnaire respondents on the basis of the variable FIVFIO.

Proxy and telephone data is copied to equivalent full questionnaire variables. Where there is no equivalent variable, values are set to -7 (inapplicable). The variables FPRRS2l FPRIPN FPRWHY FPRFEHQ FPRSEHQ FPRFITB FPRJBFT FTELWHY etc correspond to questions which have no direct equivalent in the full questionnaire. They are inapplicable for full respondents.

The variables FYPPAR to FPYSTS3 arise from questions for parents of children aged 11-15. They are primarily intended for use in conjunction with the data collected from the young person's questionnaire contained in record type FYOUTH. The variables with final digit 1, 2 or 3 contain responses concerning specific children. They may be matched to the relevant child through the variables FPYPNO1,

FPYPNO2 and FPYPNO3 which contain the FPNO of the relevant child.
Data from the job history are contained on record FJOBHIST, except for a number of derived variables. Similarly detailed data on payment receipts from questions F3a - F3f are contained on record FINCOME.

Derived and additional copied variables are those from FIVFIO to FREGION and from FHGR2R onwards. The variables FREGION FHHSIZE FHHTYPE FTENURE and FFIHHMN are copied from record FHHRESP. The variables FIVFIO FIODC and FHGR2R to FHOH are copied from record FINDALL.

The following variables have data for all missing cases imputed (note that proxy cases do not have imputed values except in the case of FPRFITB):

| FJ2PAY | FFIYRDI | FPRFITB | FPAYGU | FPAYNU | FPAYGTY |
| :--- | :--- | :--- | :--- | :--- | :--- |
| FPAYGLY | FPAYNTY | FPAYNLY | FJSPROF | FJSPAYG | FFIMNP |
| FFIMNB | FFIMNI | FFIMNT | FFIMNNL | FFIMNL | FFIMN |
| FFIYRL | FFIYRNL | FFIYRP | FFIYRB | FFIYRT | FFIYRI |
| FFIYR | FSPPAYG | FFIHHMN |  |  |  |

See the User Documentation for a full discussion of imputation. Imputation flag variables are listed below.

| FJ2PAYI | FFIYRDII | FPRFITBI | FPAYGUI | FPAYNUI | FPAYGTI |
| :--- | :--- | :--- | :--- | :--- | :--- |
| FPAYGLI | FPAYNTI | FPAYNLI | FJSPROFI | FJSPAYGI | FFIMNPI |
| FFIMNBI | FFIMNII | FFIMNTI | FFIMNNLI | FFIMNLI | FIMNTHI |
| FFIYRLI | FFIYRNLI | FFIYRPI | FFIYRBI | FFIYRTI | FFIYRII |
| FFIYEARI | FSPPAYGI | FFIHHMNI |  |  |  |

## Record Type FJOBHIST

This record contains information from the employment history over the period from 1st September 1993 to the date of interview. There is one record for each spell identified at questions J12-J14, with job characteristic information from questions J16 to J31 appended where relevant.

These records will only exist for respondents whose current labour force spell began after 1.9.1993. The additional key FJSPNO, identifies the sequence of job spell, with the most recent first.

Derived variables are those from FJHENDD onwards. Where a job is with the same employer as previously mentioned and/or at the same workplace (FJHSTAT=1), then the values for FJHSIC FJHSECT and FJHSIZE are copied from the relevant record.

The following variables have all missing data imputed:
FJHGPAY FJHNPAY
See the User Documentation for a full discussion of imputation. Imputation flag variables are listed below.

FJHGPAYI FJHNPAYI

## Record Type FINCOME

This record contains income and payment data. There is one record for each payment recorded at question F3.

This record will only exist for respondents with one or more payments recorded at question F1, (i.e. where FNF1 is greater than 0). For each payment identified at question F1 (i.e. in variables FF101 FF159) then there will exist at least one FINCOME record with a corresponding value of FFICODE.

In those cases where payments from multiple sources were combined in a single payments and individual receipts could not be distinguished, FINCOME records will exist for each source, but the variables FNFR or FFRVAL may indicate that multiple amounts are referred to, or that the amount is
given on another record.
FFIM01L - FFIM01N are derived variables indicating the estimated amount received in each month, taking into account joint receipt and changes in welfare benefit levels. These calculations depend on the variable FFRJTVF, which is a flag variable identifying whether a reported jointly received payment can be matched to any other persons payment. The code constructing these variables is in the procedure M2DV.CFIM.

The following variables have all missing data imputed:
FFRVAL FFIM09L to FFIM01N
See the User Documentation for a full discussion of imputation. Imputation flag variables are listed below. Note that a value is not imputed where the missing value code is -3 'amount included elsewhere'.

FFRVALI (This also implies imputation on FFIM09L to FFIM12T)

## Record Type FEGOALT

This record provides a mechanism for identifying the relationship of each individual in a household to all others. There are two records for each relationship pair to separately identify the relationship in either direction (e.g. one record identifies that person 1 is the parent of person 3, while another record identifies that person 3 is the child of person 1). The relationship codes are not gendered, so the sex of each person is also given.

The relationship given is that of the second person to the first (e.g. if FPNO $=1$ and FOPNO $=3$ and FREL $=4$ (natural child)) then person 3 is the natural child of person 1.

The variable FLWSTAT allows the computation of household composition change measures since Wave Five.

## Record type FYOUTH

This record type contains responses to the Young persons questionnaire, asked of children aged 11 to 15 on 1st December 1996. There will be one record for each respondent young person. Such respondents have the value 21 for the final interview outcome variable FIVFIO. The variable FYPWGHT contains an individual cross-sectional weight to be used specifically with the young person responses. The record contains the normal key variables FHID and FPNO, and children may be matched to their parents through the record FEGOALT. See the note to the record type FINDRESP above for a discussion of corresponding parental questions. Note that these questions are asked of both natural parents and step parents.

## III.17. WAVE SEVEN: Record Types and Wave Specific Information

## Record Type GHHSAMP

Record Type GHHSAMP contains fieldwork control, interview outcome and weighting information. There is one record for each issued household, and records for additional households which split off from an issued household. (See the User Documentation for a detailed description of the fieldwork process.)

Respondent households, for which records GHHRESP etc will exist may be identified from the variable GIVFHO. Note that the coding frame for this variable is substantially different from that used at Wave One. Cases from the former ECHP sample can be identified from the variable GHHORIG.

Derived and additional variables are those from GXHWGHT onwards.

## Record Type GINDSAMP

This record contains individual level variables derived from the Household Cover sheet. The record is keyed on GHID and GPNO. There will be one GINDSAMP record for each issued individidual at each household where they were expected to be found, either at first issue, or as a result of a move
uncovered during the fieldwork process, and additionally a record for each new entrant identified at a contacted household. Thus any individual may be represented by more than one GINDSAMP record, if they were understood to have moved. The variable GFINLOC enables the last household where the sample member was expected to be found to be identified. Cases from the former ECHP sample can be identified from the variable GMEMORIG.

This record will contain information about dates of departure and reasons for departure for sample members who left respondent households. It will also contain last enumeration information about sample members who have died.

## Record Type GINDALL

This record contains individual level variables derived from the Household Composition Form. There is one record for each individual enumerated in a respondent household. This record is the only one containing individual level data on children and other non-respondents.

Full and Proxy respondents for whom a corresponding GINDRESP record exists may be identified from the variable GIVFIO (individual interview outcome). Cases, new at this wave, from the former ECHP sample can be identified from the variable GMEMORIG.

Derived and additional variables are those from GAGE onwards.
See the User Documentation for a full discussion of the use of the weights contained on this record type.

## Record Type GHHRESP

This record contains data from the Household Questionnaire and household level information from the Household Composition Form for respondent households. There is one record for each household.

Households with response code 14 'telephone interview only' will have GHHRESP records, but with most variables taking the missing value code -7 .

For the households with response code 43 - `proxy taken at Wave One address' the GHHRESP record will exist, entirely consist of missing values. In addition a small number of households were missing household questionnaires - these may be identified from the variable GHHDC. Cases, new at this wave, from the former ECHP sample can be identified from the variable GHHORIG.

Derived and additional variables are those from GHHDC onwards. Of these, GXHWGHT GREGION and GLADISTC are direct copies of variables on record GHHSAMP.

The following variables have data for all missing cases imputed:

| GMGNEW | GXPMG | GHSVAL | GRENT | GRENTG | GXPHSN |
| :--- | :--- | :--- | :--- | :--- | :--- |
| GXPHSG | GFIHHMN | GFIHHML | GFIHHMNL | GFIHHMP | GFIHHMB |
| GFIHHMT | GFIHHMI | GFIIHYY | GFIHHYL | GFIHHYNL | GFIHHYP |
| GFIHHYB | GFIHHYT | GFIHHYI |  |  |  |

See the User Documentation for a full discussion of imputation. Imputation flag variables are listed below:

| GMGNEWI | GXPMGI | GHSVALI | GRENTI | GRENTGI | GXPHSNI |
| :--- | :--- | :--- | :--- | :--- | :--- |
| GXPHSGI | GFIHHMNI | GFIHHMLI | GFIHMNLI | GFIHHMPI | GFIHHMBI |
| GFIHHMTI | GFIHHMII | GFIIHYYRI | GFIHHYLI | GFIHHYNI | GFIHHYPI |
| GFIHHYBI | GFIHHYI | GFIHHYII |  |  |  |

## Record Type GINDRESP

This record contains individual data from full and proxy questionnaires. Data from the Household Composition Form is also copied to this record. Proxy and telephone respondents may be distinguished from main questionnaire respondents on the basis of the variable GIVFIO.

Proxy and telephone data is copied to equivalent full questionnaire variables. Where there is no equivalent variable, values are set to -7 (inapplicable). The variables GPRRS2I GPRIPN GPRWHY GPRFEHQ GPRSEHQ GPRFITB GPRJBFT GTELWHY etc correspond to questions which have no direct equivalent in the full questionnaire. They are inapplicable for full respondents.

Data from the job history are contained on record GJOBHIST, except for a number of derived variables. Similarly detailed data on payment receipts from questions F3a - F3f are contained on record GINCOME.

Cases, new at this wave, from the former ECHP sample can be identified from the variable GMEMORIG. These cases are all treated as new entrants. The extension of the sample to Northern Ireland implies an extension of the coding frames for newspaper readership and political support questions. In order to provide a bridge to previous ECHP data, the start of the reference period for income and job history data for the sub-sample was 1 January 1996, rather than 1 September 1996 as for the main sample. As a result five new variables were introduced in parallel with main BHPS data, GJBBGLYE (instead of GJBBGLY), GPAYLYE, GPAYLWE, GPAYLGE (for GPAYLY, GPAYLW, GPAYLG), and GCJSBLYE (for GCJSBLY). Values for GJBBGLY and GCJSBLY were also computed for ECHP cases. See also the note to record types GJOBHIST and GINCOME.

Derived and additional copied variables are those from GIVFIO to GREGION and from GHGR2R onwards. The variables GREGION GHHSIZE GHHTYPE GTENURE and GFIHHMN are copied from record GHHRESP. The variables GIVFIO GIODC and GHGR2R to GHOH are copied from record GINDALL.

The following variables have data for all missing cases imputed (note that proxy cases do not have imputed values except in the case of GPRFITB):

| GJ2PAY | GFIYRDI | GPRFITB | GPAYGU | GPAYNU | GPAYGTY |
| :--- | :--- | :--- | :--- | :--- | :--- |
| GPAYGLY | GPAYNTY | GPAYNLY | GJSPROF | GJSPAYG | GFIMNP |
| GFIMNB | GFIMNI | GFIMNT | GFIMNNL | GFIMNL | GFIMN |
| GFIYRL | GFIYRNL | GFIYRP | GFIYRB | GFIYRT | GFIYRI |
| GFIYR | GSPPAYG | GFIHHMN |  |  |  |

See the User Documentation for a full discussion of imputation. Imputation flag variables are listed below.

| GJ2PAYI | GFIYRDII | GPRFITBI | GPAYGUI | GPAYNUI | GPAYGTI |
| :--- | :--- | :--- | :--- | :--- | :--- |
| GPAYGLI | GPAYNTI | GPAYNLI | GJSPROFI | GJSPAYGI | GFIMNPI |
| GFIMNBI | GFIMNII | GFIMNTI | GFIMNNLI | GFIMNLI | FIMNTHI |
| GFIYRLI | GFIYRNLI | GFIYRPI | GFIYRBI | GFIYRTI | GFIYRII |
| GFIYEARI | GSPPAYGI | GFIHHMNI |  |  |  |

## Record Type GJOBHIST

This record contains information from the employment history over the period from 1st September 1996 to the date of interview. There is one record for each spell identified at questions J12-J14, with job characteristic information from questions J16 to J31 appended where relevant.

For the main sample, these records will only exist for respondents whose current labour force spell began after 1.9.1996. Some records relate to members of the ECHP sub-sample, introduced at this wave. These can be identified from the variable GMEMORIG on record type GINDRESP. Some of the records for these cases cover spells which ended before 1.9.96. This is because the ECHP reference period began at 1.1.96, as indicated on the note to record type GINDRESP. These records can be identified from the flag variable GJHEPFLG. The additional key GJSPNO, identifies the sequence of job spell, with the most recent first.

Derived variables are those from GJHENDD onwards. Where a job is with the same employer as previously mentioned and/or at the same workplace (GJHSTAT=1), then the values for GJHSIC GJHSECT and GJHSIZE are copied from the relevant record.

The following variables have all missing data imputed:

## GJHGPAY GJHNPAY

See the User Documentation for a full discussion of imputation. Imputation flag variables are listed below.

```
GJHGPAYI, GJHNPAYI
```


## Record Type GINCOME

This record contains income and payment data. There is one record for each payment recorded at question F3.

This record will only exist for respondents with one or more payments recorded at question F1, (i.e. where GNF1 is greater than 0). For each payment identified at question F1 (i.e. in variables GF101 GF159) then there will exist at least one GINCOME record with a corresponding value of GFICODE.

In those cases where payments from multiple sources were combined in a single payments and individual receipts could not be distinguished, GINCOME records will exist for each source, but the variables GNFR or GFRVAL may indicate that multiple amounts are referred to, or that the amount is given on another record.

GFIM01L - GFIM01N are derived variables indicating the estimated amount received in each month, taking into account joint receipt and changes in welfare benefit levels. These calculations depend on the variable GFRJTVF, which is a flag variable identifying whether a reported jointly received payment can be matched to any other persons payment. The code constructing these variables is in the procedure M7DV.CFIM.

Some records will relate to cases from the ECHP sub-sample. These can be identified from the variable GMEMORIG on record type GINDRESP. These cases use a longer reference period, back to January 1996, as indicated on the note to record type GINDRESP. These cases should have valid values for the variables GFREC01 to GFREC08, and also GFIM01L to GFIM08L.

The following variables have all missing data imputed:
GFRVAL GFIM09L to GFIM01N
See the User Documentation for a full discussion of imputation. Imputation flag variables are listed below. Note that a value is not imputed where the missing value code is -3 `amount included elsewhere'.

GFRVALI (This also implies imputation on GFIM09L to GFIM12T)

## Record Type GEGOALT

This record provides a mechanism for identifying the relationship of each individual in a household to all others. There are two records for each relationship pair to separately identify the relationship in either direction (e.g. one record identifies that person 1 is the parent of person 3, while another record identifies that person 3 is the child of person 1). The relationship codes are not gendered, so the sex of each person is also given.

The relationship given is that of the second person to the first (e.g. if GPNO $=1$ and GOPNO $=3$ and GREL $=4$ (natural child)) then person 3 is the natural child of person 1.

The variable GLWSTAT allows the computation of household composition change measures since Wave Two.

## Record Type GYOUTH

This record type contains responses to the Young persons questionnaire, asked of children aged 11 to 15 on 1st December 1997. There will be one record for each respondent young person. Such respondents have the value 21 for the final interview outcome variable GIVFIO. The variable GYPWGHT contains an individual cross-sectional weight to be used specifically with the young person responses. The record contains the normal key variables GHID and GPNO, and children may be
matched to their parents through the record GEGOALT. See the note to the record type GINDRESP above for a discussion of corresponding parental questions. Note that these questions are asked of both natural parents and step parents. Children aged 11 to 15 in the ECHP sub-sample were not eligible for the young persons questionnaire at this wave.

## III.18. WAVE EIGHT: Record Types and Wave Specific Information

## Record Type HHHSAMP

Record Type HHHSAMP contains fieldwork control, interview outcome and weighting information. There is one record for each issued household, and records for additional households which split off from an issued household. (See the User Documentation for a detailed description of the fieldwork process.)

Respondent households, for which records HHHRESP etc will exist may be identified from the variable HIVFHO. Note that the coding frame for this variable is substantially different from that used at Wave One. Cases from the former ECHP sample can be identified from the variable HHHORIG.

Derived and additional variables are those from HXHWGHT onwards.

## Record Type HINDSAMP

This record contains individual level variables derived from the Household Cover sheet. The record is keyed on HHID and HPNO. There will be one HINDSAMP record for each issued individidual at each household where they were expected to be found, either at first issue, or as a result of a move uncovered during the fieldwork process, and additionally a record for each new entrant identified at a contacted household. Thus any individual may be represented by more than one HINDSAMP record, if they were understood to have moved. The variable HFINLOC enables the last household where the sample member was expected to be found to be identified. Cases from the former ECHP sample can be identified from the variable HMEMORIG.

This record will contain information about dates of departure and reasons for departure for sample members who left respondent households. It will also contain last enumeration information about sample members who have died.

## Record Type HINDALL

This record contains individual level variables derived from the Household Composition Form. There is one record for each individual enumerated in a respondent household. This record is the only one containing individual level data on children and other non-respondents.

Full and Proxy respondents for whom a corresponding HINDRESP record exists may be identified from the variable HIVFIO (individual interview outcome). Cases, introduced at wave seven, from the former ECHP sample can be identified from the variable HMEMORIG.

Derived and additional variables are those from HAGE onwards.
See the User Documentation for a full discussion of the use of the weights contained on this record type.

## Record Type HHHRESP

This record contains data from the Household Questionnaire and household level information from the Household Composition Form for respondent households. There is one record for each household.

Households with response code 14 'telephone interview only' will have HHHRESP records, but with most variables taking the missing value code -7 .

For the households with response code 43 - `proxy taken at Wave One address' the HHHRESP record will exist, entirely consist of missing values. In addition a small number of households were missing household questionnaires - these may be identified from the variable HHHDC. Cases, new at wave seven, from the former ECHP sample can be identified from the variable HHHORIG.

Derived and additional variables are those from HHHDC onwards. Of these, HXHWGHT HREGION and HLADISTC are direct copies of variables on record HHHSAMP.

The following variables have data for all missing cases imputed:

| HMGNEW | HXPMG | HHSVAL | HRENT | HRENTG | HXPHSN |
| :--- | :--- | :--- | :--- | :--- | :--- |
| HXPHSG | HFIHHMN | HFIHHML | HFIHHMNL | HFIHHMP | HFIHHMB |
| HFIHHMT | HFIHHMI | HFIHHYR | HFIHHYL | HFIHHYNL | HFIHHYP |
| HFIHHYB | HFIHHYT | HFIHHYI |  |  |  |

See the User Documentation for a full discussion of imputation. Imputation flag variables are listed below:

| HMGNEWI | HXPMGI | HHSVALI | HRENTI | HRENTGI | HXPHSNI |
| :--- | :--- | :--- | :--- | :--- | :--- |
| HXPHSGI | HFIHHMNI | HFIHHMLI | HFIHMNLI | HFIHHMPI | HFIHHMBI |
| HFIHHMTI | HFIHHMII | HFIHHYRI | HFIHHYLI | HFIHHYNI | HFIHHYPI |
| HFIHHYBI | HFIHHYTI | HFIHHYII |  |  |  |

## Record Type HINDRESP

This record contains individual data from full and proxy questionnaires. Data from the Household Composition Form is also copied to this record. Proxy and telephone respondents may be distinguished from main questionnaire respondents on the basis of the variable HIVFIO.

From Wave Eight, the means of collection of data on education, training and qualifications has been restructured, based around full-time education spells and other periods of education and training, and the qualifications associated with these spells. Data from these spells, based on questions D19-D27 and D70-D78, have been 'flattened' with up to two full-time spells, and up to three other spells. Previous wave variables for qualifications attained in the last year wQFX to wQFXN and wQFEDX to wNQFEXK, are retained as derived variables, based on the new data structure. Some specific variables however are dropped since they cannot be computed.

Proxy and telephone data is copied to equivalent full questionnaire variables. Where there is no equivalent variable, values are set to -7 (inapplicable). The variables HPRRS21 HPRIPN HPRWHY HPRFEHQ HPRSEHQ HPRFITB HPRJBFT HTELWHY etc correspond to questions which have no direct equivalent in the full questionnaire. They are inapplicable for full respondents.

Data from the job history are contained on record HJOBHIST, except for a number of derived variables. Similarly detailed data on payment receipts from questions F3a - F3f are contained on record HINCOME.

Cases, new at wave seven, from the former ECHP sample can be identified from the variable HMEMORIG.

Derived and additional copied variables are those from HIVFIO to HREGION and from HHGR2R onwards. The variables HREGION HHHSIZE HHHTYPE HTENURE and HFIHHMN are copied from record HHHRESP. The variables HIVFIO HIODC and HHGR2R to HHOH are copied from record HINDALL.

The following variables have data for all missing cases imputed (note that proxy cases do not have imputed values except in the case of HPRFITB):

| HJ2PAY | HFIYRDI | HPRFITB | HPAYGU | HPAYNU | HPAYGTY |
| :--- | :--- | :--- | :--- | :--- | :--- |
| HPAYGLY | HPAYNTY | HPAYNLY | HJSPROF | HJSPAYG | HFIMNP |
| HFIMNB | HFIMNI | HFIMNT | HFIMNNL | HFIMNL | HFIMN |
| HFIYRL | HFIYRNL | HFIVRP | HFIYRB | HFIYRT | HFIYRI |
| HFIYR | HSPPAYG | HFIHHMN |  |  |  |

See the User Documentation for a full discussion of imputation. Imputation flag variables are listed below.

| HJ2PAYI | HFIYRDII | HPRFITBI | HPAYGUI | HPAYNUI | HPAYGTI |
| :--- | :--- | :--- | :--- | :--- | :--- |
| HPAYGLI | HPAYNTI | HPAYNLI | HJSPROFI | HJSPAYGI | HFIMNPI |
| HFIMNBI | HFIMNII | HFIMNTI | HFIMNNLI | HFIMNLI | HIMNTHI |
| HFIYRLI | HFIYRNLI | HFIYRPI | HFIYRBI | HFIYRTI | HFIYRII |
| HFIYEARI | HSPPAYGI | HFIHHMNI |  |  |  |

## Record Type HJOBHIST

This record contains information from the employment history over the period from 1st September 1997 to the date of interview. There is one record for each spell identified at questions J12-J14, with job characteristic information from questions J16 to J31 appended where relevant.

These records will only exist for respondents whose current labour force spell began after 1.9.1997. Some records relate to members of the ECHP sub-sample, introduced at wave seven. These can be identified from the variable HMEMORIG on record type HINDRESP. The additional key HJSPNO, identifies the sequence of job spell, with the most recent first.

Derived variables are those from HJHENDD onwards. Where a job is with the same employer as previously mentioned and/or at the same workplace (HJHSTAT=1), then the values for HJHSIC HJHSECT and HJHSIZE are copied from the relevant record.

The following variables have all missing data imputed:
HJHGPAY HJHNPAY
See the User Documentation for a full discussion of imputation. Imputation flag variables are listed below.

HJHGPAYI, HJHNPAYI

## Record Type HINCOME

This record contains income and payment data. There is one record for each payment recorded at question F3.

This record will only exist for respondents with one or more payments recorded at question F1, (i.e. where HNF1 is greater than 0). For each payment identified at question F1 (i.e. in variables HF101 HF159) then there will exist at least one HINCOME record with a corresponding value of HFICODE.

In those cases where payments from multiple sources were combined in a single payments and individual receipts could not be distinguished, HINCOME records will exist for each source, but the variables HNFR or HFRVAL may indicate that multiple amounts are referred to, or that the amount is given on another record.

HFIM01L - HFIM01N are derived variables indicating the estimated amount received in each month, taking into account joint receipt and changes in welfare benefit levels. These calculations depend on the variable HFRJTVF, which is a flag variable identifying whether a reported jointly received payment can be matched to any other persons payment. The code constructing these variables is in the procedure M8DV.HFIM.

Some records will relate to cases from the ECHP sub-sample, introduced at wave seven. These can be identified from the variable HMEMORIG on record type HINDRESP.

The following variables have all missing data imputed:
HFRVAL HFIM09L to HFIM01N
See the User Documentation for a full discussion of imputation. Imputation flag variables are listed below. Note that a value is not imputed where the missing value code is -3 `amount included elsewhere'.
hFRVALI (This also implies imputation on HFIM09L to HFIM12T)

## Record Type HEGOALT

This record provides a mechanism for identifying the relationship of each individual in a household to all others. There are two records for each relationship pair to separately identify the relationship in either direction (e.g. one record identifies that person 1 is the parent of person 3, while another record identifies that person 3 is the child of person 1). The relationship codes are not gendered, so the sex of each person is also given.

The relationship given is that of the second person to the first (e.g. if HPNO $=1$ and HOPNO $=3$ and HREL $=4$ (natural child)) then person 3 is the natural child of person 1.

The variable HLWSTAT and HNWSTAT allows the computation of household composition change measures since Wave Two.

## Record Type HYOUTH

This record type contains responses to the Young persons questionnaire, asked of children aged 11 to 15 on 1st December 1998. There will be one record for each respondent young person. Such respondents have the value 21 for the final interview outcome variable HIVFIO. The variable HYPWGHT contains an individual cross-sectional weight to be used specifically with the young person responses. Note that this weight assumes the inclusion of cases from the ECHP sub-sample. The record contains the normal key variables HHID and HPNO, and children may be matched to their parents through the record HEGOALT. See the note to the record type HINDRESP above for a discussion of corresponding parental questions. Note that these questions are asked of both natural parents and step parents. Children aged 11 to 15 in the ECHP sub-sample were eligible for the young persons questionnaire for the first time at this wave.

## III.19. WAVE NINE: Record Types and Wave Specific Information

## Record Type IHHSAMP

Record Type IHHSAMP contains fieldwork control, interview outcome and weighting information. There is one record for each issued household, and records for additional households which split off from an issued household. (See the User Documentation for a detailed description of the fieldwork process.)

Respondent households, for which records IHHRESP etc will exist may be identified from the variable IIVFHO. Note that the coding frame for this variable is substantially different from that used at Wave One. Cases from the ECHP and the Scotland and Wales sub-samples can be identified from the variable IHHORIG.

Derived and additional variables are those from IXHWGHT onwards.

## Record Type IINDSAMP

This record contains individual level variables derived from the Household Cover sheet. The record is keyed on IHID and IPNO. There will be one IINDSAMP record for each issued individual at each household where they were expected to be found, either at first issue, or as a result of a move uncovered during the fieldwork process, and additionally a record for each new entrant identified at a contacted household. Thus any individual may be represented by more than one IINDSAMP record, if they were understood to have moved. The variable IFINLOC enables the last household where the sample member was expected to be found to be identified. Cases from the ECHP and the Scotland and Wales sub-samples can be identified from the variable IMEMORIG.

This record will contain information about dates of departure and reasons for departure for sample members who left respondent households. It will also contain last enumeration information about sample members who have died.

## Record Type IINDALL

This record contains individual level variables derived from the Household Composition Form. There is one record for each individual enumerated in a respondent household. This record is the only one containing individual level data on children and other non-respondents.

Full and Proxy respondents for whom a corresponding IINDRESP record exists may be identified from the variable IIVFIO (individual interview outcome). Cases from the ECHP and the Scotland and Wales sub-samples can be identified from the variable HMEMORIG.

Derived and additional variables are those from IAGE onwards.
See the User Documentation for a full discussion of the use of the weights contained on this record type.

## Record Type IHHRESP

This record contains data from the Household Questionnaire and household level information from the Household Composition Form for respondent households. There is one record for each household.

Households with response code 14 'telephone interview only' will have IHHRESP records, but with most variables taking the missing value code -7 .

For the households with response code 43 - `proxy taken at Wave One address' the IHHRESP record will exist, entirely consist of missing values. In addition a small number of households were missing household questionnaires - these may be identified from the variable IHHDC. Cases, from the ECHP and the Scotland and Wales sub-samples can be identified from the variable IHHORIG.

Derived and additional variables are those from IHHDC onwards. Of these, IXHWGHT IREGION and ILADISTC are direct copies of variables on record IHHSAMP.

The following variables have data for all missing cases imputed:

| IMGNEW | IXPMG | IHSVAL | IHRENT | IRENTGI | IXPHSN |
| :--- | :--- | :--- | :--- | :--- | :--- |
| IXPHSG | IFIHHMN | IFIHHML | IFIHHMNL | IFIHHMP | IFIHHMB |
| IFIHHMT | IFIHHMI | IFIHHYR | IFIHHYL | IFIHHYNL | IFIHHYP |
| IFIHHYB | IFIHHYT | IFIHHYI |  |  |  |

See the User Documentation for a full discussion of imputation. Imputation flag variables are listed below:

| IMGNEWI | IXPMGI | IHSVALI | IRENTI | IRENTGI | IXPHSNI |
| :--- | :--- | :--- | :--- | :--- | :--- |
| IXPHSGI | IFIHHMNI | IFIHHMLI | IFIHMNLI | IFIHHMPI | IFIHHMBI |
| IFIHHMTI | IFIHHMII | IFIHHYRI | IFIHHYLI | IFIHHYNI | IFIHHYPI |
| IFIHHYBI | IFIHHYTI | IFIHHYII |  |  |  |

## Record Type IINDRESP

This record contains individual data from full and proxy questionnaires. Data from the Household Composition Form is also copied to this record. Proxy and telephone respondents may be distinguished from main questionnaire respondents on the basis of the variable IIVFIO.

From Wave Eight, the means of collection of data on education, training and qualifications has been restructured, based around full-time education spells and other periods of education and training, and the qualifications associated with these spells. Data from these spells, based on questions D19-D27 and D69-D78, have been 'flattened' with up to two full-time spells, and up to three other spells. Previous wave variables for qualifications attained in the last year wQFX to wQFXN and wQFEDX to wNQFEXK, are retained as derived variables, based on the new data structure. Some specific variables however are dropped since they cannot be computed.

Proxy and telephone data is copied to equivalent full questionnaire variables. Where there is no equivalent variable, values are set to -7 (inapplicable). The variables IPRRS2I IPRIPN IPRWHY IPRFEHQ IPRSEHQ IPRFITB IPRJBFT ITELWHY etc correspond to questions which have no direct
equivalent in the full questionnaire. They are inapplicable for full respondents.
Data from the job history are contained on record IJOBHIST, except for a number of derived variables. Similarly detailed data on payment receipts from questions F3a - F3f are contained on record IINCOME.

Cases, from the ECHP and the Scotland and Wales sub-samples can be identified from the variable HMEMORIG.

Derived and additional copied variables are those from IIVFIO to IREGION and from IHGR2R onwards. The variables IREGION IHHSIZE IHHTYPE ITENURE and IFIHHMN are copied from record IHHRESP. The variables IIVFIO IIODC and IHGR2R to IHOH are copied from record IINDALL.

The following variables have data for all missing cases imputed (note that proxy cases do not have imputed values except in the case of IPRFITB):

| IJ2PAY | IFIYRDI | IPRFITB | IPAYGU | IPAYNU | IPAYGTY |
| :--- | :--- | :--- | :--- | :--- | :--- |
| HPAYGLY | IPAYNTY | IPAYNLY | IJSPROF | IJSPAYG | IFIMNP |
| IFIMNB | IFIMNI | IFIMNT | IFIMNNL | IFIMNL | IFIMN |
| IFIYRL | IFIYRNL | IFIYRP | IFIYRB | IFIYRT | IFIYRI |
| IFIYR | ISPPAYG | IFIHHMN |  |  |  |

See the User Documentation for a full discussion of imputation. Imputation flag variables are listed below.

| IJ2PAYI | IFIYRDII | IPRFITBI | IPAYGUI | IPAYNUI | IPAYGTI |
| :--- | :--- | :--- | :--- | :--- | :--- |
| IPAYGLI | IPAYNTI | IPAYNLI | IJSPROFI | IJSPAYGI | IFIMNPI |
| IFIMNBI | IFIMNII | IFIMNTI | IFIMNNLI | IFIMNLI | IFIMNTHI |
| IFIYRLI | IFIYRNLI | IFIYRPI | IFIYRBI | IFIYRTI | IFIYRII |
| IFIYEARI | ISPPAYGI | IFIHHMNI |  |  |  |

## Record Type IJOBHIST

This record contains information from the employment history over the period from 1st September 1998 to the date of interview. There is one record for each spell identified at questions J12-J14, with job characteristic information from questions J 16 to J 31 appended where relevant.

These records will only exist for respondents whose current labour force spell began after 1.9.1998. The additional key IJSPNO, identifies the sequence of job spell, with the most recent first.

Derived variables are those from IJHENDD onwards. Where a job is with the same employer as previously mentioned and/or at the same workplace (IJHSTAT=1), then the values for IJHSIC IJHSECT and IJHSIZE are copied from the relevant record.

The following variables have all missing data imputed:

## IJHGPAY IJHNPAY

See the User Documentation for a full discussion of imputation. Imputation flag variables are listed below.

IJHGPAYI, IJHNPAYI

## Record Type IINCOME

This record contains income and payment data. There is one record for each payment recorded at question F3.

This record will only exist for respondents with one or more payments recorded at question F1, (i.e. where INF1 is greater than 0). For each payment identified at question F1 (i.e. in variables IF101 IF159) then there will exist at least one IINCOME record with a corresponding value of IFICODE.

In those cases where payments from multiple sources were combined in a single payments and
individual receipts could not be distinguished, IINCOME records will exist for each source, but the variables INFR or IFRVAL may indicate that multiple amounts are referred to, or that the amount is given on another record.

IFIM01L - IFIM01N are derived variables indicating the estimated amount received in each month, taking into account joint receipt and changes in welfare benefit levels. These calculations depend on the variable IFRJTVF, which is a flag variable identifying whether a reported jointly received payment can be matched to any other persons payment. The code constructing these variables is in the procedure M9DV.IFIM.

The following variables have all missing data imputed:

## IFRVAL IFIM09L to IFIM04N

See the User Documentation for a full discussion of imputation. Imputation flag variables are listed below. Note that a value is not imputed where the missing value code is -3 'amount included elsewhere'.

IFRVALI (This also implies imputation on IFIM09L to IFIM04N)

## Record Type IEGOALT

This record provides a mechanism for identifying the relationship of each individual in a household to all others. There are two records for each relationship pair to separately identify the relationship in either direction (e.g. one record identifies that person 1 is the parent of person 3, while another record identifies that person 3 is the child of person 1). The relationship codes are not gendered, so the sex of each person is also given.

The relationship given is that of the second person to the first (e.g. if HPNO $=1$ and HOPNO $=3$ and HREL $=4$ (natural child)) then person 3 is the natural child of person 1.

The variable ILWSTAT allows the computation of household composition change measures since Wave Two.

## Record Type IYOUTH

This record type contains responses to the Young persons questionnaire, asked of children aged 11 to 15 on 1st December 1999. There will be one record for each respondent young person. Such respondents have the value 21 for the final interview outcome variable IIVFIO. The variable IYPWGHT contains an individual cross-sectional weight to be used specifically with the young person responses. Note that this weight assumes the inclusion of cases from the ECHP sub-sample. The record contains the normal key variables IHID and IPNO, and children may be matched to their parents through the record IEGOALT. See the note to the record type IINDRESP above for a discussion of corresponding parental questions. Note that these questions are asked of both natural parents and step parents. Young people in the Scotland and Wales new samples did not receive this questionnaire.

## III.20. WAVE TEN: Record Types and Wave-Specific Information

## Record Type JHHSAMP

Record Type JHHSAMP contains fieldwork control, interview outcome and weighting information. There is one record for each issued household, and records for additional households which split off from an issued household. (See the User Documentation for a detailed description of the fieldwork process.)

Respondent households, for which records JHHRESP etc will exist may be identified from the variable JIVFHO. Note that the coding frame for this variable is substantially different from that used at Wave One. Cases from the ECHP and the Scotland and Wales sub-samples can be identified from the variable JHHORIG.

Derived and additional variables are those from JXHWGHT onwards.

## Record Type JIINDSAMP

This record contains individual level variables derived from the Household Cover sheet. The record is keyed on JHID and JPNO. There will be one JINDSAMP record for each issued individidual at each household where they were expected to be found, either at first issue, or as a result of a move uncovered during the fieldwork process, and additionally a record for each new entrant identified at a contacted household. Thus any individual may be represented by more than one JINDSAMP record, if they were understood to have moved. The variable JFINLOC enables the last household where the sample member was expected to be found to be identified. Cases from the ECHP and the Scotland and Wales sub-samples can be identified from the variable JMEMORIG.

This record will contain information about dates of departure and reasons for departure for sample members who left respondent households. It will also contain last enumeration information about sample members who have died.

## Record Type JINDALL

This record contains individual level variables derived from the Household Composition Form. There is one record for each individual enumerated in a respondent household. This record is the only one containing individual level data on children and other non-respondents.

Full and Proxy respondents for whom a corresponding JINDRESP record exists may be identified from the variable JIVFIO (individual interview outcome). Cases from the ECHP and the Scotland and Wales sub-samples can be identified from the variable JMEMORIG.

Derived and additional variables are those from JAGE onwards.
See the User Documentation for a full discussion of the use of the weights contained on this record type.

## Record Type JHHRESP

This record contains data from the Household Questionnaire and household level information from the Household Composition Form for respondent households. There is one record for each household.

Households with response code 14 'telephone interview only' will have JHHRESP records, but with most variables taking the missing value code -7 .

For the households with response code 43 - `proxy taken at Wave One address' the JHHRESP record will exist, entirely consist of missing values. In addition a small number of households were missing household questionnaires - these may be identified from the variable JHHDC. Cases, from the ECHP and the Scotland and Wales sub-samples can be identified from the variable JHHORIG.

Derived and additional variables are those from JHHDC onwards. Of these, JXHWGHT JREGION and JLADISTC are direct copies of variables on record JHHSAMP.

The following variables have data for all missing cases imputed:

| JMGNEW | JXPMG | JHSVAL | JHRENT | JRENTGI | JXPHSN |
| :--- | :--- | :--- | :--- | :--- | :--- |
| JXPHSG | JFIHHMN | JFIHHML | JFIHHMNL | JFIHHMP | JFIHHMB |
| JFIHHMT | JFIHHMI | JFIHHYR | JFIHHYL | JFIHHYNL | JFIHHYP |
| JFIHHYB | JFIHHYT | JFIHHYI |  |  |  |

See Section V. 3 for a full discussion of imputation. Imputation flag variables are listed below:

| JMGNEWI | JXPMGI | JHSVALI | JRENTI | JRENTGI | JXPHSNI |
| :--- | :--- | :--- | :--- | :--- | :--- |
| JXPHSGI | JFIHHMNI | JFIHHMLI | JFIHMNLI | JFIHHMPI | JFIHHMBI |
| JFIHHMTI | JFIHHMII | JFIIHHYRI | JFIHHYLI | JFIHHYNI | JFIHHYPI |
| JFIHHYBI | JFIHHYI | JFIHHYII |  |  |  |

## Record Type JINDRESP

This record contains individual data from full and proxy questionnaires. Data from the Household Composition Form is also copied to this record. Proxy and telephone respondents may be distinguished from main questionnaire respondents on the basis of the variable JIVFIO.

From Wave Eight, the means of collection of data on education, training and qualifications has been restructured, based around full-time education spells and other periods of education and training, and the qualifications associated with these spells. Data from these spells, based on questions D19-D27 and D69-D78, have been 'flattened' with up to two full-time spells, and up to three other spells. Previous wave variables for qualifications attained in the last year wQFX to wQFXN and wQFEDX to wNQFEXK, are retained as derived variables, based on the new data structure. Some specific variables however are dropped since they cannot be computed.

Proxy and telephone data is copied to equivalent full questionnaire variables. Where there is no equivalent variable, values are set to -7 (inapplicable). The variables JPRRS2I JPRIPN JPRWHY JPRFEHQ JPRSEHQ JPRFITB JPRJBFT JTELWHY etc correspond to questions which have no direct equivalent in the full questionnaire. They are inapplicable for full respondents.

Data from the job history are contained on record JJOBHIST, except for a number of derived variables. Similarly detailed data on payment receipts from questions F3a - F3f are contained on record JINCOME.

Cases, from the ECHP and the Scotland and Wales sub-samples can be identified from the variable JMEMORIG.

Derived and additional copied variables are those from JIVFIO to JREGION and from JHGR2R onwards. The variables JREGION JHHSIZE JHHTYPE JTENURE and JFIHHMN are copied from record JHHRESP. The variables JIVFIO JIODC and JHGR2R to JHOH are copied from record JINDALL.

The following variables have data for all missing cases imputed (note that proxy cases do not have imputed values except in the case of JPRFITB):

| JJ2PAY | JFIYRDI | JPRFITB | JPAYGU | JPAYNU | JPAYGTY |
| :--- | :--- | :--- | :--- | :--- | :--- |
| JPAYGLY | JPAYNTY | JPAYNLY | JJSPROF | JJSPAYG | JFIMNP |
| JFIMNB | JFIMNI | JFIMNT | JFIMNNL | JFIMNL | JFIMN |
| JFIYRL | JFIYRNL | JFIYRP | JFIYRB | JFIYRT | JFIYRI |
| JFIYR | JSPPAYG | JFIHHMN |  |  |  |

See Section V. 3 for a full discussion of imputation. Imputation flag variables are listed below.

| JJ2PAYI | JFIYRDII | JPRFITBI | JPAYGUI | JPAYNUI | JPAYGTI |
| :--- | :--- | :--- | :--- | :--- | :--- |
| JPAYGLI | JPAYNTI | JPAYNLI | JJSPROFI | JJSPAYGI | JFIMNPI |
| JFIMNBI | JFIMNII | JFIMNTI | JFIMNNLI | JFIMNLI | JFIMNTHI |
| JFIYRLI | JFIYRNLI | JFIYRPI | JFIYRBI | JFIYRTI | JFIYRII |
| JFIYEARI | JSPPAYGI | JFIHHMNI |  |  |  |

## Record Type JJOBHIST

This record contains information from the employment history over the period from 1st September 1998 to the date of interview. There is one record for each spell identified at questions J12-J14, with job characteristic information from questions J 16 to J 31 appended where relevant.

These records will only exist for respondents whose current labour force spell began after 1.9.1998. The additional key JJSPNO, identifies the sequence of job spell, with the most recent first.

Derived variables are those from JJHENDD onwards. Where a job is with the same employer as previously mentioned and/or at the same workplace (JJHSTAT=1), then the values for JJHSIC JJHSECT and JJHSIZE are copied from the relevant record.

The following variables have all missing data imputed:

JJHGPAY JJHNPAY
See Section V. 3 for a full discussion of imputation. Imputation flag variables are listed below.
JJHGPAYI JJHNPAYI

## Record Type JINCOME

This record contains income and payment data. There is one record for each payment recorded at question F3.

This record will only exist for respondents with one or more payments recorded at question F1, (i.e. where JNF1 is greater than 0). For each payment identified at question F1 (i.e. in variables JF101 JF159) then there will exist at least one JINCOME record with a corresponding value of JFICODE.

In those cases where payments from multiple sources were combined in a single payments and individual receipts could not be distinguished, JINCOME records will exist for each source, but the variables JNFR or JFRVAL may indicate that multiple amounts are referred to, or that the amount is given on another record.

JFIM09L - JFIM04N are derived variables indicating the estimated amount received in each month, taking into account joint receipt and changes in welfare benefit levels. These calculations depend on the variable JFRJTVF, which is a flag variable identifying whether a reported jointly received payment can be matched to any other persons payment. The code constructing these variables is in the procedure M10DV.JFIM.

The following variables have all missing data imputed:
JFRVAL JFIM09L to JFIM04N
See the User Documentation for a full discussion of imputation. Imputation flag variables are listed below. Note that a value is not imputed where the missing value code is -3 `amount included elsewhere'.

JFRVALI (This also implies imputation on JFIM09L to JFIM04N)

## Record Type JEGOALT

This record provides a mechanism for identifying the relationship of each individual in a household to all others. There are two records for each relationship pair to separately identify the relationship in either direction (e.g. one record identifies that person 1 is the parent of person 3, while another record identifies that person 3 is the child of person 1). The relationship codes are not gendered, so the sex of each person is also given.

The relationship given is that of the second person to the first (e.g. if JPNO $=1$ and JOPNO $=3$ and JREL $=4$ (natural child)) then person 3 is the natural child of person 1.

The variable JLWSTAT allows the computation of household composition change measures since Wave Two.

## Record Type JYOUTH

This record type contains responses to the Young persons questionnaire, asked of children aged 11 to 15 on 1st December 2000. There will be one record for each respondent young person. Such respondents have the value 21 for the final interview outcome variable JIVFIO. The variable JYPWGHT contains an individual cross-sectional weight to be used specifically with the young person responses. Note that this weight assumes the inclusion of cases from the ECHP sub-sample. The record contains the normal key variables JHID and JPNO, and children may be matched to their parents through the record JEGOALT. See the note to the record type JINDRESP above for a discussion of corresponding parental questions. Note that these questions are asked of both natural parents and step parents. Young people in the Scotland and Wales new samples did not receive this questionnaire.

## III.21. WAVE ELEVEN: Record Types and Wave-Specific Information

## Record Type KHHSAMP

Record Type KHHSAMP contains fieldwork control, interview outcome and weighting information. There is one record for each issued household, and records for additional households which split off from an issued household. (See the User Documentation for a detailed description of the fieldwork process.)

Respondent households, for which records KHHRESP etc will exist may be identified from the variable KIVFHO. Note that the coding frame for this variable is substantially different from that used at Wave One. Cases from the ECHP, the Scotland and Wales extension samples, and the Northern Ireland sample can be identified from the variable KHHORIG.

Derived and additional variables are those from KXHWGHT onwards.

## Record Type KINDSAMP

This record contains individual level variables derived from the Household Cover sheet. The record is keyed on KHID and KPNO. There will be one KINDSAMP record for each issued individidual at each household where they were expected to be found, either at first issue, or as a result of a move uncovered during the fieldwork process, and additionally a record for each new entrant identified at a contacted household. Thus any individual may be represented by more than one KINDSAMP record, if they were understood to have moved. The variable KFINLOC enables the last household where the sample member was expected to be found to be identified. Cases from the ECHP, the Scotland and Wales extension samples, and the Northern Ireland sample can be identified from the variable KMEMORIG.

This record will contain information about dates of departure and reasons for departure for sample members who left respondent households. It will also contain last enumeration information about sample members who have died.

## Record Type KINDALL

This record contains individual level variables derived from the Household Composition Form. There is one record for each individual enumerated in a respondent household. This record is the only one containing individual level data on children and other non-respondents.

Full and Proxy respondents for whom a corresponding KINDRESP record exists may be identified from the variable KIVFIO (individual interview outcome). Cases from the ECHP, the Scotland and Wales extension samples, and the Northern Ireland sample can be identified from the variable KMEMORIG.

Derived and additional variables are those from KAGE onwards.
See the User Documentation for a full discussion of the use of the weights contained on this record type.

## Record Type KHHRESP

This record contains data from the Household Questionnaire and household level information from the Household Composition Form for respondent households. There is one record for each household.

Households with response code 14 `telephone interview only' will have KHHRESP records, but with most variables taking the missing value code -7 .

For the households with response code 43 - `proxy taken at Wave One address' the KHHRESP record will exist, entirely consist of missing values. In addition a small number of households were missing household questionnaires - these may be identified from the variable KHHDC. Cases, from the ECHP, the Scotland and Wales extension samples, and the Northern Ireland sample can be identified from the variable KHHORIG.

Derived and additional variables are those from KHHDC onwards. Of these, KXHWGHT KREGION and KLADISTC are direct copies of variables on record KHHSAMP.

The following variables have data for all missing cases imputed:

| KMGNEW | KXPMG | KHSVAL | KHRENT | KRENTGI | KXPHSN |
| :--- | :--- | :--- | :--- | :--- | :--- |
| KXPHSG | KFIHHMN | KFIHHML | KFIHHMNL | KFIHHMP | KFIHHMB |
| KFIHHMT | KFIHHMI | KFIHHYR | KFIHHYL | KFIHHYNL | KFIHHYP |
| KFIHHYB | KFIHHYT | KFIHHYI |  |  |  |

See Section V. 3 for a full discussion of imputation. Imputation flag variables are listed below:

| KMGNEWI | KXPMGI | KHSVALI | KRENTI | KRENTGI | KXPHSNI |
| :--- | :--- | :--- | :--- | :--- | :--- |
| KXPHSGI | KFIHHMNI | KFIHHMLI | KFIHMNLI | KFIHHMPI | KFIHHMBI |
| KFIHHMTI | KFIHHMII | KFIHHYRI | KFIHHYLI | KFIHHYNI | KFIHHYPI |
| KFIHHYBI | KFIHHYTI | KFIHHYII |  |  |  |

## Record Type KINDRESP

This record contains individual data from full and proxy questionnaires. Data from the Household Composition Form is also copied to this record. Proxy and telephone respondents may be distinguished from main questionnaire respondents on the basis of the variable KIVFIO.

From Wave Eight, the means of collection of data on education, training and qualifications has been restructured, based around full-time education spells and other periods of education and training, and the qualifications associated with these spells. Data from these spells, based on questions D19-D27 and D69-D78, have been 'flattened' with up to two full-time spells, and up to three other spells. Previous wave variables for qualifications attained in the last year wQFX to wQFXN and wQFEDX to wNQFEXK, are retained as derived variables, based on the new data structure. Some specific variables however are dropped since they cannot be computed.

Proxy and telephone data is copied to equivalent full questionnaire variables. Where there is no equivalent variable, values are set to -7 (inapplicable). The variables KPRRS2I KPRIPN KPRWHY KPRFEHQ KPRSEHQ KPRFITB KPRJBFT KTELWHY etc correspond to questions which have no direct equivalent in the full questionnaire. They are inapplicable for full respondents.

Data from the job history are contained on record KJOBHIST, except for a number of derived variables. Similarly detailed data on payment receipts from questions F3a - F3f are contained on record KINCOME.

Cases from the ECHP, the Scotland and Wales extension samples, and the Northern Ireland sample can be identified from the variable KMEMORIG.

Derived and additional copied variables are those from KIVFIO to KREGION and from KHGR2R onwards. The variables KREGION KHHSIZE KHHTYPE KTENURE and KFIHHMN are copied from record KHHRESP. The variables KIVFIO KIODC and KHGR2R to KHOH are copied from record KINDALL.

The following variables have data for all missing cases imputed (note that proxy cases do not have imputed values except in the case of KPRFITB):

| KJ2PAY | KFIYRDIC | KPRFITB | KPAYGU | KPAYNU | KPAYGTY |
| :--- | :--- | :--- | :--- | :--- | :--- |
| KPAYGLY | KPAYNTY | KPAYNLY | KJSPROF | KJSPAYG | KFIMNP |
| KFIMNB | KFIMNI | KFIMNT | KFIMNNL | KFIMNL | KFIMN |
| KFIYRL | KFIYRNL | KFIYRP | KFIYRB | KFIYRT | KFIYRI |
| KFIYR | KSPPAYG | KFIHHMN |  |  |  |

See Section V. 3 for a full discussion of imputation. Imputation flag variables are listed below.

| KJ2PAYI | KFIYRDII | KPRFITBI | KPAYGUI | KPAYNUI | KPAYGTI |
| :--- | :--- | :--- | :--- | :--- | :--- |
| KPAYGLI | KPAYNTI | KPAYNLI | KJSPROFI | KJSPAYGI | KFIMNPI |
| KFIMNBI | KFIMNII | KFIMNTI | KFIMNNLI | KFIMNLI | KFIMNTHI |
| KFIYRLI | KFIYRNLI | KFIYRPI | KFIYRBI | KFIYRTI | KFIYRII |
| KFIYEARI | KSPPAYGI | KFIHHMNI |  |  |  |

## Record Type KJOBHIST

This record contains information from the employment history over the period from 1st September 1998 to the date of interview. There is one record for each spell identified at questions J12-J14, with job characteristic information from questions J16 to J31 appended where relevant.

These records will only exist for respondents whose current labour force spell began after 1.9.1998. The additional key KJSPNO, identifies the sequence of job spell, with the most recent first.

Derived variables are those from KJHENDD onwards. Where a job is with the same employer as previously mentioned and/or at the same workplace (KJHSTAT=1), then the values for KJHSIC KJHSECT and KJHSIZE are copied from the relevant record.

The following variables have all missing data imputed:
KJHGPAY KJHNPAY
See Section V. 3 for a full discussion of imputation. Imputation flag variables are listed below.
KJHGPAYI KJHNPAYI

## Record Type KINCOME

This record contains income and payment data. There is one record for each payment recorded at question F3.

This record will only exist for respondents with one or more payments recorded at question F1, (i.e. where KNF1 is greater than 0). For each payment identified at question F1 (i.e. in variables KF101 KF159) then there will exist at least one KINCOME record with a corresponding value of KFICODE.

In those cases where payments from multiple sources were combined in a single payments and individual receipts could not be distinguished, KINCOME records will exist for each source, but the variables KNFR or KFRVAL may indicate that multiple amounts are referred to, or that the amount is given on another record.

KFIM09L - KFIM04N are derived variables indicating the estimated amount received in each month, taking into account joint receipt and changes in welfare benefit levels. These calculations depend on the variable KFRJTVF, which is a flag variable identifying whether a reported jointly received payment can be matched to any other persons payment. The code constructing these variables is in the procedure M11DV.KFIM.

The following variables have all missing data imputed:
KFRVAL KFIM09L to KFIM04N
See the User Documentation for a full discussion of imputation. Imputation flag variables are listed below. Note that a value is not imputed where the missing value code is -3 `amount included elsewhere'.

KFRVALI (This also implies imputation on KFIM09L to KFIM04N)

## Record Type KEGOALT

This record provides a mechanism for identifying the relationship of each individual in a household to all others. There are two records for each relationship pair to separately identify the relationship in
either direction (e.g. one record identifies that person 1 is the parent of person 3, while another record identifies that person 3 is the child of person 1). The relationship codes are not gendered, so the sex of each person is also given.

The relationship given is that of the second person to the first (e.g. if $\mathrm{KPNO}=1$ and $\mathrm{KOPNO}=3$ and KREL = 4 (natural child)) then person 3 is the natural child of person 1.

The variable KLWSTAT allows the computation of household composition change measures since Wave Two.

## Record Type KYOUTH

This record type contains responses to the Young persons questionnaire, asked of children aged 11 to 15 on 1st December 2001. There will be one record for each respondent young person. Such respondents have the value 21 for the final interview outcome variable KIVFIO. The variable KYPWGHT contains an individual cross-sectional weight to be used specifically with the young person responses. Note that this weight assumes the inclusion of cases from the ECHP sub-sample and the Scotland and Wales extension samples. The record contains the normal key variables KHID and KPNO, and children may be matched to their parents through the record KEGOALT. See the note to the record type KINDRESP above for a discussion of corresponding parental questions. Note that these questions are asked of both natural parents and step parents. Young people in the Northern Ireland sample did not receive this questionnaire.

## Record Type KMARRIAG

This record, only available for the Scotland and Wales extension sample, contains one record for each reported legal marriage before the current one, if any. It is keyed on KHID, KPNO and KMARNO. Note that the record structure is somewhat different from BMARRIAG, which contains similar data for the original main sample. Marriages are sorted in order from the earliest to the most recent, and KMARNO is in effect the marriage sequence number.

This record also contains information on cohabitation spells with the same partner which may have preceded marriage.

Note that there has been no attempt to enforce consistency between the data contained in this record, and the information about household composition and relationships at Wave Nine or Wave Ten, contained in Record Types IINDALL, JINDALL, IEGOALT and JEGOALT.

See entry for KLIFEMST (below) for a discussion of season codes.

## Record Type KCOHABIT

This record, only available for the Scotland and Wales extension samples, contains information about each cohabitation spell outside legal marriage which the respondent has ever had, excepting those which preceded marriages, for which the information is contained on record KMARRIAG. There is a separate record for each spell reported at questions L20 and L20.

Note that there has been no attempt to enforce consistency between the data contained in this record, and the information about household composition and relationships at Wave Nine or Wave Ten, contained in Record Types IINDALL, JINDALL, IEGOALT and JEGOALT.

See entry for KLIFEMST (below) for a discussion of season codes.

## Record Type KCHILDAD

This record, only available for the Scotland and Wales extension samples, contains information about the children respondent has either adopted, or for whom they have acted as step-parent, and the periods when they resided with the respondent. There is one record for each child reported in answer to question L24.

Note that there has been no attempt to enforce consistency between the data contained in this record, and the information about household composition and relationships at Wave Nine or Wave Ten, contained in Record Types IINDALL, JINDALL, IEGOALT and JEGOALT.

See entry for KLIFEMST (below) for a discussion of season codes.

## Record Type KCHILDNT

This record, only available for the Scotland and Wales extension samples, contains information about natural children respondent has ever had or fathered, and the periods when they resided with the respondent. There is one record for each child reported in answer to question L27
Note that there has been no attempt to enforce consistency between the data contained in this record, and the information about household composition and relationships at Wave Nine or Wave Ten, contained in Record Types IINDALL, JINDALL, IEGOALT and JEGOALT.

See entry for KLIFEMST (below) for a discussion of season codes.

## Record Type KLIFEMST

This record, only available for the Scotland and Wales extension samples, contains information about employment status spells in the period since the respondent first left full time education. There is one record for each spell reported in answer to questions L33, L34 and L35. The record contains end date for each spell except the final spell which should be recorded as not ended. The start date for each spell and the spell length in months are included as derived variables.

While data collected here may have been compared with the single year job history information to resolve internal ambiguities, there has been no attempt to enforce consistency between data collected here and that contained in the records IJOBHIST, JJOBHIST etc.

Season codes were used when the respondent could not remember exact month. Two codes for winter were offered, according to whether the event was towards the beginning or the end of the calendar year. In the calculation of spell length it was assumed, by convention, that winter (beginning of year) would be coded as January, spring as April, summer as July, autumn as October and winter (end of year) as December. However where these season codes are used in a spell which starts and finishes in the same calendar year, the length is set to -3 , indicating less than 12 months but exact length indeterminate.

## III.22. WAVE TWELVE: Record Types and Wave-Specific Information

## Record Type LHHSAMP

Record Type LHHSAMP contains fieldwork control, interview outcome and weighting information. There is one record for each issued household, and records for additional households which split off from an issued household. (See the User Documentation for a detailed description of the fieldwork process.)

Respondent households, for which records LHHRESP etc will exist may be identified from the variable LIVFHO. Note that the coding frame for this variable is substantially different from that used at Wave One. Cases from the Scotland and Wales extension samples, and the Northern Ireland sample can be identified from the variable LHHORIG.

Derived and additional variables are those from LXHWGHT onwards.

## Record Type LINDSAMP

This record contains individual level variables derived from the Household Cover sheet. The record is keyed on LHID and LPNO. There will be one LINDSAMP record for each issued individual at each household where they were expected to be found, either at first issue, or as a result of a move uncovered during the fieldwork process, and additionally a record for each new entrant identified at a contacted household. Thus any individual may be represented by more than one LINDSAMP record, if they were understood to have moved. The variable LFINLOC enables the last household where the sample member was expected to be found to be identified. Cases from the Scotland and Wales extension samples, and the Northern Ireland sample can be identified from the variable LMEMORIG.

This record will contain information about dates of departure and reasons for departure for sample members who left respondent households. It will also contain last enumeration information about sample members who have died.

## Record Type LINDALL

This record contains individual level variables derived from the Household Composition Form. There is one record for each individual enumerated in a respondent household. This record is the only one containing individual level data on children and other non-respondents.

Full and Proxy respondents for whom a corresponding LINDRESP record exists may be identified from the variable LIVFIO (individual interview outcome). Cases from the Scotland and Wales extension samples, and the Northern Ireland sample can be identified from the variable LMEMORIG.

Derived and additional variables are those from LAGE onwards.
See section V. 2 for a full discussion of the use of the weights contained on this record type.

## Record Type LHHRESP

This record contains data from the Household Questionnaire and household level information from the Household Composition Form for respondent households. There is one record for each household.

Households with response code 14 `telephone interview only' will have LHHRESP records, but with most variables taking the missing value code -7 .

For the households with response code 43 - `proxy taken at Wave One address' the LHHRESP record will exist, entirely consist of missing values. In addition a small number of households were missing household questionnaires - these may be identified from the variable LHHDC. Cases, from the Scotland and Wales extension samples, and the Northern Ireland sample can be identified from the variable LHHORIG.

Derived and additional variables are those from LHHDC onwards. Of these, LXHWGHT LREGION and LLADISTC are direct copies of variables on record LHHSAMP.

The following variables have data for all missing cases imputed:

| LMGNEW | LXPMG | LHSVAL | KHRENT | KRENTGI | LXPHSN |
| :--- | :--- | :--- | :--- | :--- | :--- |
| LXPHSG | LFIHHMN | LFIHHML | LFIHHMNL | LFIHHMP | LFIHHMB |
| LFIHHMT | LFIHHMI | LFIHHYR | LFIHHYL | LFIHHYNL | LFIHHYP |
| LFIHHYB | LFIHHYT | LFIHHYI |  |  |  |

See Section V. 3 for a full discussion of imputation. Imputation flag variables are listed below:

| LMGNEWI | LXPMGI | LHSVALI | LRENTI | LRENTGI | LXPHSNI |
| :--- | :--- | :--- | :--- | :--- | :--- |
| LXPHSGI | LFIHHMNI | LFIHHMLI | LFIHMNLI | LFIHHMPI | LFIHHMBI |
| LFIHHMTI | LFIHHMII | LFIHHYRI | LFIHHYLI | LFIHHYNI | LFIHHYPI |
| LFIHHYBI | LFIHHYTI | LFIHHYII |  |  |  |

## Record Type LINDRESP

This record contains individual data from full and proxy questionnaires. Data from the Household Composition Form is also copied to this record. Proxy and telephone respondents may be distinguished from main questionnaire respondents on the basis of the variable LIVFIO.

From Wave Eight, the means of collection of data on education, training and qualifications has been restructured, based around full-time education spells and other periods of education and training, and the qualifications associated with these spells. Data from these spells, based on questions D19-D27 and D69-D78, have been 'flattened' with up to two full-time spells, and up to three other spells. Previous wave variables for qualifications attained in the last year wQFX to wQFXN and wQFEDX to wNQFEXK, are retained as derived variables, based on the new data structure. Some specific variables however are dropped since they cannot be computed.

Proxy and telephone data is copied to equivalent full questionnaire variables. Where there is no equivalent variable, values are set to -7 (inapplicable). The variables LPRRS2I LPRIPN LPRWHY LPRFEHQ LPRSEHQ LPRFITB LPRJBFT LTELWHY etc correspond to questions which have no direct equivalent in the full questionnaire. They are inapplicable for full respondents.

Data from the job history are contained on record LJOBHIST, except for a number of derived variables. Similarly detailed data on payment receipts from questions F3a - F3f are contained on record LINCOME.

Cases from the Scotland and Wales extension samples, and the Northern Ireland sample can be identified from the variable LMEMORIG.

Derived and additional copied variables are those from LIVFIO to LREGION and from LHGR2R onwards. The variables LREGION LHHSIZE LHHTYPE LTENURE and LFIHHMN are copied from record LHHRESP. The variables LIVFIO LIODC and LHGR2R to LHOH are copied from record LINDALL.

The following variables have data for all missing cases imputed (note that proxy cases do not have imputed values except in the case of LPRFITB):

| LJ2PAY | LFIYRDIC | LPRFITB | LPAYGU | LPAYNU | LPAYGTY |
| :--- | :--- | :--- | :--- | :--- | :--- |
| LPAYGLY | LPAYNTY | LPAYNLY | LJSPROF | LJSPAYG | LFIMNP |
| LFIMNB | LFIMNI | LFIMNT | LFIMNNL | LFIMNL | LFIMN |
| LFIYRL | LFIYRNL | LFIYRP | LFIYRB | LFIYRT | LFIYRI |
| LFIYR | LSPPAYG | LFIHHMN |  |  |  |

See Section V. 3 for a full discussion of imputation. Imputation flag variables are listed below.

| LJ2PAYI | LFIYRDII | LPRFITBI | LPAYGUI | LPAYNUI | LPAYGTI |
| :--- | :--- | :--- | :--- | :--- | :--- |
| LPAYGLI | LPAYNTI | LPAYNLI | LJSPROFI | LJSPAYGI | LFIMNPI |
| LFIMNBI | LFIMNII | LFIMNTI | LFIMNNLI | LFIMNLI | LFIMNTHI |
| LFIYRLI | LFIYRNLI | LFIYRPI | LFIYRBI | LFIYRTI | LFIYRII |
| LFIYEARI | LSPPAYGI | LFIHHMNI |  |  |  |

## Record Type LJOBHIST

This record contains information from the employment history over the period from 1st September 2001 to the date of interview. There is one record for each spell identified at questions J12-J14, with job characteristic information from questions J16 to J31 appended where relevant.

These records will only exist for respondents whose current labour force spell began after 1.9.2001. The additional key LJSPNO, identifies the sequence of job spell, with the most recent first.

Derived variables are those from LJHENDD onwards. Where a job is with the same employer as previously mentioned and/or at the same workplace (LJHSTAT=1), then the values for LJHSIC LJHSECT and LJHSIZE are copied from the relevant record.

The following variables have all missing data imputed:

## LJHGPAY LJHNPAY

See Section V. 3 for a full discussion of imputation. Imputation flag variables are listed below.
LJHGPAYI LJHNPAYI

## Record Type LINCOME

This record contains income and payment data. There is one record for each payment recorded at question F3.

This record will only exist for respondents with one or more payments recorded at question F1, (i.e. where LNF1 is greater than 0). For each payment identified at question F1 (i.e. in variables LF101 LF159) then there will exist at least one LINCOME record with a corresponding value of LFICODE.

In those cases where payments from multiple sources were combined in a single payments and individual receipts could not be distinguished, LINCOME records will exist for each source, but the variables LNFR or LFRVAL may indicate that multiple amounts are referred to, or that the amount is
given on another record.
LFIM09L - LFIM04N are derived variables indicating the estimated amount received in each month, taking into account joint receipt and changes in welfare benefit levels. These calculations depend on the variable LFRJTVF, which is a flag variable identifying whether a reported jointly received payment can be matched to any other persons payment. The code constructing these variables is in the procedure M12DV.LFIM.

The following variables have all missing data imputed:
LFRVAL LFIM09L to LFIM04N
See the User Documentation for a full discussion of imputation. Imputation flag variables are listed below. Note that a value is not imputed where the missing value code is -3 `amount included elsewhere'.

LFRVALI (This also implies imputation on LFIM09L to LFIM04N)

## Record Type LEGOALT

This record provides a mechanism for identifying the relationship of each individual in a household to all others. There are two records for each relationship pair to separately identify the relationship in either direction (e.g. one record identifies that person 1 is the parent of person 3, while another record identifies that person 3 is the child of person 1). The relationship codes are not gendered, so the sex of each person is also given.

The relationship given is that of the second person to the first (e.g. if LPNO $=1$ and LOPNO $=3$ and LREL $=4$ (natural child)) then person 3 is the natural child of person 1.

The variable LLWSTAT allows the computation of household composition change measures since Wave Two.

## Record Type LYOUTH

This record type contains responses to the Young persons questionnaire, asked of children aged 11 to 15 on 1st December 2002. There will be one record for each respondent young person. Such respondents have the value 21 for the final interview outcome variable LIVFIO. The variable LYPWGHT contains an individual cross-sectional weight to be used specifically with the young person responses. Note that this weight assumes the inclusion of cases from the Scotland and Wales extension samples. The record contains the normal key variables LHID and LPNO, and children may be matched to their parents through the record LEGOALT. See the note to the record type LINDRESP above for a discussion of corresponding parental questions. Note that these questions are asked of both natural parents and step parents. Young people in the Northern Ireland sample did not receive this questionnaire.

## Record Type LCHILD

This record contains information about the each of the children of the respondent including biological, step, adopted and foster children, given in answer to questions V33 to V55. There is one record for each child reported in answer to question V32. There are no records of this type for Northern Ireland cases.

## Record Type LMARRIAG

This record, only available for the Northern Ireland extension sample, contains one record for each reported legal marriage before the current one, if any. It is keyed on LHID, LPNO and LMARNO. Note that the record structure is somewhat different from BMARRIAG, which contains similar data for the original main sample. Marriages are sorted in order from the earliest to the most recent, and LMARNO is in effect the marriage sequence number.

This record also contains information on cohabitation spells with the same partner which may have preceded marriage.

Note that there has been no attempt to enforce consistency between the data contained in this record, and the information about household composition and relationships at Wave Eleven, contained in Record Types KINDALL and KEGOALT.

See entry for LLIFEMST (below) for a discussion of season codes.

## Record Type LCOHABIT

This record, only available for the Northern Ireland extension samples, contains information about each cohabitation spell outside legal marriage which the respondent has ever had, excepting those which preceded marriages, for which the information is contained on record LMARRIAG. There is a separate record for each spell reported at questions L20 and L20.

Note that there has been no attempt to enforce consistency between the data contained in this record, and the information about household composition and relationships at Wave Eleven, contained in Record Types KINDALL and KEGOALT.

See entry for LLIFEMST (below) for a discussion of season codes.

## Record Type LCHILDAD

This record, only available for the Northern Ireland extension samples, contains information about the children respondent has either adopted, or for whom they have acted as step-parent, and the periods when they resided with the respondent. There is one record for each child reported in answer to question L24.

Note that there has been no attempt to enforce consistency between the data contained in this record, and the information about household composition and relationships at Wave Eleven, contained in Record Types KINDALL and KEGOALT.

See entry for LLIFEMST (below) for a discussion of season codes.

## Record Type LCHILDNT

This record, only available for the Northern Ireland extension samples, contains information about natural children respondent has ever had or fathered, and the periods when they resided with the respondent. There is one record for each child reported in answer to question L27

Note that there has been no attempt to enforce consistency between the data contained in this record, and the information about household composition and relationships at Wave Eleven, contained in Record Types KINDALL and KEGOALT.

See entry for LLIFEMST (below) for a discussion of season codes.

## Record Type LLIFEMST

This record, only available for the Northern Ireland extension samples, contains information about employment status spells in the period since the respondent first left full time education. There is one record for each spell reported in answer to questions L33, L34 and L35. The record contains end date for each spell except the final spell which should be recorded as not ended. The start date for each spell and the spell length in months are included as derived variables.

While data collected here may have been compared with the single year job history information to resolve internal ambiguities, there has been no attempt to enforce consistency between data collected here and that contained in the records KJOBHIST etc.

Season codes were used when the respondent could not remember exact month. Two codes for winter were offered, according to whether the event was towards the beginning or the end of the calendar year. In the calculation of spell length it was assumed, by convention, that winter (beginning of year) would be coded as January, spring as April, summer as July, autumn as October and winter (end of year) as December. However where these season codes are used in a spell which starts and finishes in the same calendar year, the length is set to -3, indicating less than 12 months but exact
length indeterminate.

## III.23. WAVE THIRTEEN: Record Types and Wave-Specific Information

## Record Type MHHSAMP

Record Type MHHSAMP contains fieldwork control, interview outcome and weighting information. There is one record for each issued household, and records for additional households which split off from an issued household. (See the User Documentation for a detailed description of the fieldwork process.)

Respondent households, for which records MHHRESP etc will exist may be identified from the variable MIVFHO. Note that the coding frame for this variable is substantially different from that used at Wave One. Cases from the Scotland and Wales extension samples, and the Northern Ireland sample can be identified from the variable MHHORIG.

Derived and additional variables are those from MXHWGHT onwards.

## Record Type MINDSAMP

This record contains individual level variables derived from the Household Cover sheet. The record is keyed on MHID and MPNO. There will be one MINDSAMP record for each issued individual at each household where they were expected to be found, either at first issue, or as a result of a move uncovered during the fieldwork process, and additionally a record for each new entrant identified at a contacted household. Thus any individual may be represented by more than one MINDSAMP record, if they were understood to have moved. The variable MFINLOC enables the last household where the sample member was expected to be found to be identified. Cases from the Scotland and Wales extension samples, and the Northern Ireland sample can be identified from the variable MMEMORIG.

This record will contain information about dates of departure and reasons for departure for sample members who left respondent households. It will also contain last enumeration information about sample members who have died.

## Record Type MINDALL

This record contains individual level variables derived from the Household Composition Form. There is one record for each individual enumerated in a respondent household. This record is the only one containing individual level data on children and other non-respondents.

Full and Proxy respondents for whom a corresponding MINDRESP record exists may be identified from the variable MIVFIO (individual interview outcome). Cases from the Scotland and Wales extension samples, and the Northern Ireland sample can be identified from the variable MMEMORIG.

Derived and additional variables are those from MAGE onwards.
See section V. 2 for a full discussion of the use of the weights contained on this record type.

## Record Type MHHRESP

This record contains data from the Household Questionnaire and household level information from the Household Composition Form for respondent households. There is one record for each household.

Households with response code 14 'telephone interview only' will have MHHRESP records, but with most variables taking the missing value code -7 .

For the households with response code 43 - `proxy taken at Wave One address' the MHHRESP record will exist, entirely consist of missing values. In addition a small number of households were missing household questionnaires - these may be identified from the variable MHHDC. Cases, from the Scotland and Wales extension samples, and the Northern Ireland sample can be identified from the variable MHHORIG.

Derived and additional variables are those from MHHDC onwards. Of these, MXHWGHT MREGION
and MLADISTC are direct copies of variables on record MHHSAMP.
The following variables have data for all missing cases imputed:

| MMGNEW | MXPMG | MHSVAL | MHRENT | MRENTGI | MXPHSN |
| :--- | :--- | :--- | :--- | :--- | :--- |
| MXPHSG | MFIHHMN | MFIHHML | MFIHHMNL | MFIHHMP | MFIHHMB |
| MFIHHMT | MFIHHMI | MFIHHYR | MFIHHYL | MFIHHYNL | MFIHHYP |
| MFIHHYB | MFIHHYT | MFIHHYI |  |  |  |

See Section V. 3 for a full discussion of imputation. Imputation flag variables are listed below:

| MMGNEWI | MXPMGI | MHSVALI | MRENTI | MRENTGI | MXPHSNI |
| :--- | :--- | :--- | :--- | :--- | :--- |
| MXPHSGI | MFIHHMNI | MFIHHMLI | MFIHMNLI | MFIHHMPI | MFIHHMBI |
| MFIHHMTI | MFIHHMII | MFIHHYRI | MFIHHYLI | MFIHHYNI | MFIHHYPI |
| MFIHHYBI | MFIHHYTI | MFIHHYII |  |  |  |

## Record Type MINDRESP

This record contains individual data from full and proxy questionnaires. Data from the Household Composition Form is also copied to this record. Proxy and telephone respondents may be distinguished from main questionnaire respondents on the basis of the variable MIVFIO.

From Wave Eight, the means of collection of data on education, training and qualifications has been restructured, based around full-time education spells and other periods of education and training, and the qualifications associated with these spells. Data from these spells, based on questions D19-D27 and D69-D78, have been 'flattened' with up to two full-time spells, and up to three other spells. Previous wave variables for qualifications attained in the last year wQFX to wQFXN and wQFEDX to wNQFEXK, are retained as derived variables, based on the new data structure. Some specific variables however are dropped since they cannot be computed.

Proxy and telephone data is copied to equivalent full questionnaire variables. Where there is no equivalent variable, values are set to -7 (inapplicable). The variables MPRRS2I MPRIPN MPRWHY MPRFEHQ MPRSEHQ MPRFITB MPRJBFT MTELWHY etc correspond to questions which have no direct equivalent in the full questionnaire. They are inapplicable for full respondents.

Data from the job history are contained on record MJOBHIST, except for a number of derived variables. Similarly detailed data on payment receipts from questions F3a - F3f are contained on record MINCOME.

Cases from the Scotland and Wales extension samples, and the Northern Ireland sample can be identified from the variable MMEMORIG.

Derived and additional copied variables are those from MIVFIO to MREGION and from MHGR2R onwards. The variables MREGION MHHSIZE MHHTYPE MTENURE and MFIHHMN are copied from record MHHRESP. The variables MIVFIO MIODC and MHGR2R to MHOH are copied from record MINDALL.

The following variables have data for all missing cases imputed (note that proxy cases do not have imputed values except in the case of MPRFITB):

| MJ2PAY | MFIYRDIC | MPRFITB | MPAYGU | MPAYNU | MPAYGTY |
| :--- | :--- | :--- | :--- | :--- | :--- |
| MPAYGLY | MPAYNTY | MPAYNLY | MJSPROF | MJSPAYG | MFIMNP |
| MFIMNB | MFIMNI | MFIMNT | MFIMNNL | MFIMNL | MFIMN |
| MFIYRL | MFIYRNL | MFIYRP | MFIYRB | MFIYRT | MFIYRI |
| MFIYR | MSPPAYG | MFIHHMN |  |  |  |

See Section V. 3 for a full discussion of imputation. Imputation flag variables are listed below.

| MJ2PAYI | MFIYRDII | MPRFITBI | MPAYGUI | MPAYNUI | MPAYGTI |
| :--- | :--- | :--- | :--- | :--- | :--- |
| MPAYGLI | MPAYNTI | MPAYNLI | MJSPROFI | MJSPAYGI | MFIMNPI |
| MFIMNBI | MFIMNII | MFIMNTI | MFIMNNLI | MFIMNLI | MFIMNTHI |
| MFIYRLI | MFIYRNLI | MFIYRPI | MFIYRBI | MFIYRTI | MFIYRII |
| MFIYEARI | MSPPAYGI | MFIHHMNI |  |  |  |

## Record Type MJOBHIST

This record contains information from the employment history over the period from 1st September 2002 to the date of interview. There is one record for each spell identified at questions J12-J14, with job characteristic information from questions J16 to J31 appended where relevant.

These records will only exist for respondents whose current labour force spell began after 1.9.2002. The additional key MJSPNO, identifies the sequence of job spell, with the most recent first.

Derived variables are those from MJHENDD onwards. Where a job is with the same employer as previously mentioned and/or at the same workplace (MJHSTAT=1), then the values for MJHSIC MJHSECT and MJHSIZE are copied from the relevant record.

The following variables have all missing data imputed:
MJHGPAY MJHNPAY
See Section V. 3 for a full discussion of imputation. Imputation flag variables are listed below.

## MJHGPAYI MJHNPAYI

## Record Type MINCOME

This record contains income and payment data. There is one record for each payment recorded at question F3.

This record will only exist for respondents with one or more payments recorded at question F1, (i.e. where MNF1 is greater than 0). For each payment identified at question F1 (i.e. in variables MF101 MF159) then there will exist at least one MINCOME record with a corresponding value of MFICODE.

In those cases where payments from multiple sources were combined in a single payments and individual receipts could not be distinguished, MINCOME records will exist for each source, but the variables MNFR or MFRVAL may indicate that multiple amounts are referred to, or that the amount is given on another record.

MFIM09L - MFIM04N are derived variables indicating the estimated amount received in each month, taking into account joint receipt and changes in welfare benefit levels. These calculations depend on the variable MFRJTVF, which is a flag variable identifying whether a reported jointly received payment can be matched to any other persons payment. The code constructing these variables is in the procedure M13DV.MFIM.

The following variables have all missing data imputed:

## MFRVAL MFIM09L to MFIM04N

See the User Documentation for a full discussion of imputation. Imputation flag variables are listed below. Note that a value is not imputed where the missing value code is -3 `amount included elsewhere'.

MFRVALI (This also implies imputation on MFIM09L to MFIM04N)

## Record Type MEGOALT

This record provides a mechanism for identifying the relationship of each individual in a household to all others. There are two records for each relationship pair to separately identify the relationship in either direction (e.g. one record identifies that person 1 is the parent of person 3, while another record identifies that person 3 is the child of person 1). The relationship codes are not gendered, so the sex of each person is also given.

The relationship given is that of the second person to the first (e.g. if MPNO = 1 and MOPNO $=3$ and MREL $=4$ (natural child)) then person 3 is the natural child of person 1.

The variable MLWSTAT allows the computation of household composition change measures since Wave Two.

## Record Type MYOUTH

This record type contains responses to the Young persons questionnaire, asked of children aged 11 to 15 on 1st December 2003. There will be one record for each respondent young person. Such respondents have the value 21 for the final interview outcome variable MIVFIO. The variable MYPWGHT contains an individual cross-sectional weight to be used specifically with the young person responses. Note that this weight assumes the inclusion of cases from the Scotland and Wales extension samples. The record contains the normal key variables MHID and MPNO, and children may be matched to their parents through the record MEGOALT. See the note to the record type MINDRESP above for a discussion of corresponding parental questions. Note that these questions are asked of both natural parents and step parents. Young people in the Northern Ireland sample did not receive this questionnaire.

## Record Type MCHILD

This record contains information about the each of the children of the respondent including biological, step, adopted and foster children, given in answer to questions V31 to V52. There is one record for each child reported in answer to question V30. These records only exist for cases in Northern Ireland.

## III.24. WAVE FOURTEEN: Record Types and Wave-Specific Information

## Record Type NHHSAMP

Record Type NHHSAMP contains fieldwork control, interview outcome and weighting information. There is one record for each issued household, and records for additional households which split off from an issued household. (See the User Documentation for a detailed description of the fieldwork process.)

Respondent households, for which records NHHRESP etc will exist may be identified from the variable NIVFHO. Note that the coding frame for this variable is substantially different from that used at Wave One. Cases from the Scotland and Wales extension samples, and the Northern Ireland sample can be identified from the variable NHHORIG.

Derived and additional variables are those from NXHWGHT onwards.

## Record Type NINDSAMP

This record contains individual level variables derived from the Household Cover sheet. The record is keyed on NHID and NPNO. There will be one NINDSAMP record for each issued individual at each household where they were expected to be found, either at first issue, or as a result of a move uncovered during the fieldwork process, and additionally a record for each new entrant identified at a contacted household. Thus any individual may be represented by more than one NINDSAMP record, if they were understood to have moved. The variable NFINLOC enables the last household where the sample member was expected to be found to be identified. Cases from the Scotland and Wales extension samples, and the Northern Ireland sample can be identified from the variable NMEMORIG.

This record will contain information about dates of departure and reasons for departure for sample members who left respondent households. It will also contain last enumeration information about sample members who have died.

## Record Type NINDALL

This record contains individual level variables derived from the Household Composition Form. There is one record for each individual enumerated in a respondent household. This record is the only one containing individual level data on children and other non-respondents.

Full and Proxy respondents for whom a corresponding NINDRESP record exists may be identified from the variable NIVFIO (individual interview outcome). Cases from the Scotland and Wales
extension samples, and the Northern Ireland sample can be identified from the variable NMEMORIG.
Derived and additional variables are those from NAGE onwards.
See section V. 2 for a full discussion of the use of the weights contained on this record type.

## Record Type NHHRESP

This record contains data from the Household Questionnaire and household level information from the Household Composition Form for respondent households. There is one record for each household.

Households with response code 14 'telephone interview only' will have NHHRESP records, but with most variables taking the missing value code -7 .

For the households with response code 43 - `proxy taken at Wave One address' the NHHRESP record will exist, entirely consist of missing values. In addition a small number of households were missing household questionnaires - these may be identified from the variable NHHDC. Cases, from the Scotland and Wales extension samples, and the Northern Ireland sample can be identified from the variable NHHORIG.

Derived and additional variables are those from NHHDC onwards. Of these, NXHWGHT NREGION and NLADISTC are direct copies of variables on record NHHSAMP.

The following variables have data for all missing cases imputed:

| NMGNEW | NXPMG | NHSVAL | MHRENT | NRENTGI | NXPHSN |
| :--- | :--- | :--- | :--- | :--- | :--- |
| NXPHSG | NFIHHMN | NFIHHML | NFIHHMNL | NFIHHMP | NFIHHMB |
| NFIHHMT | NFIHHMI | NFIHHYR | MFIHHYL | NFIHHYNL | NFIHHYP |
| NFIHHYB | NFIHHYT | NFIHHYI |  |  |  |

See Section V. 3 for a full discussion of imputation. Imputation flag variables are listed below:

| NMGNEWI | NXPMGI | NHSVALI | NRENTI | NRENTGI | NXPHSNI |
| :--- | :--- | :--- | :--- | :--- | :--- |
| NXPHSGI | NFIHHMNI | NFIHHMLI | NFIHMNLI | NFIHHMPI | NFIHHMBI |
| NFIHHMTI | NFIHHMII | NFIHHYRI | NFIHHYLI | NFIHHYNI | NFIHHYPI |
| NFIHHYBI | NFIHHYTI | NFIHHYII |  |  |  |

## Record Type NINDRESP

This record contains individual data from full and proxy questionnaires. Data from the Household Composition Form is also copied to this record. Proxy and telephone respondents may be distinguished from main questionnaire respondents on the basis of the variable NIVFIO.

From Wave Eight, the means of collection of data on education, training and qualifications has been restructured, based around full-time education spells and other periods of education and training, and the qualifications associated with these spells. Data from these spells, based on questions D19-D27 and D69-D78, have been 'flattened' with up to two full-time spells, and up to three other spells. Previous wave variables for qualifications attained in the last year wQFX to wQFXN and wQFEDX to wNQFEXK, are retained as derived variables, based on the new data structure. Some specific variables however are dropped since they cannot be computed.

Proxy and telephone data is copied to equivalent full questionnaire variables. Where there is no equivalent variable, values are set to -7 (inapplicable). The variables NPRRS2I NPRIPN NPRWHY NPRFEHQ NPRSEHQ NPRFITB NPRJBFT NTELWHY etc correspond to questions which have no direct equivalent in the full questionnaire. They are inapplicable for full respondents.

Data from the job history are contained on record NJOBHIST, except for a number of derived variables. Similarly detailed data on payment receipts from questions F3a - F3f are contained on record NINCOME.

Cases from the Scotland and Wales extension samples, and the Northern Ireland sample can be identified from the variable NMEMORIG.

Derived and additional copied variables are those from NIVFIO to NREGION and from NHGR2R onwards. The variables NREGION NHHSIZE NHHTYPE NTENURE and NFIHHMN are copied from record NHHRESP. The variables NIVFIO NIODC and NHGR2R to NHOH are copied from record NINDALL.

The following variables have data for all missing cases imputed (note that proxy cases do not have imputed values except in the case of NPRFITB):

| NJ2PAY | NFIYRDIC | NPRFITB | NPAYGU | NPAYNU | NPAYGTY |
| :--- | :--- | :--- | :--- | :--- | :--- |
| NPAYGLY | NPAYNTY | NPAYNLY | NJSPROF | NJSPAYG | NFIMNP |
| NFIMNB | NFIMNI | NFIMNT | NFIMNNL | NFIMNL | NFIMN |
| NFIYRL | NFIYRNL | NFIYRP | NFIYRB | NFIYRT | NFIYRI |
| NFIYR | NSPPAYG | NFIHHMN |  |  |  |

See Section V. 3 for a full discussion of imputation. Imputation flag variables are listed below.

| NJ2PAYI | NFIYRDII | NPRFITBI | NPAYGUI | NPAYNUI | NPAYGTI |
| :--- | :--- | :--- | :--- | :--- | :--- |
| NPAYGLI | NPAYNTI | NPAYNLI | NJSPROFI | NJSPAYGI | NFIMNPI |
| NFIMNBI | NFIMNII | NFIMNTI | NFIMNNLI | NFIMNLI | NFIMNTHI |
| NFIYRLI | NFIYRNLI | NFIYRPI | NFIYRBI | NFIYRTI | NFIYRII |
| NFIYEARI | NSPPAYGI | NFIHHMNI |  |  |  |

## Record Type NJOBHIST

This record contains information from the employment history over the period from 1st September 2003 to the date of interview. There is one record for each spell identified at questions J12-J14, with job characteristic information from questions J16 to J31 appended where relevant.

These records will only exist for respondents whose current labour force spell began after 1.9.2003. The additional key NJSPNO, identifies the sequence of job spell, with the most recent first.

Derived variables are those from NJHENDD onwards. Where a job is with the same employer as previously mentioned and/or at the same workplace (NJHSTAT=1), then the values for NJHSIC NJHSECT and NJHSIZE are copied from the relevant record.

The following variables have all missing data imputed:
NJHGPAY NJHNPAY
See Section V. 3 for a full discussion of imputation. Imputation flag variables are listed below.
NJHGPAYI NJHNPAYI

## Record Type NINCOME

This record contains income and payment data. There is one record for each payment recorded at question F3.

This record will only exist for respondents with one or more payments recorded at question F1, (i.e. where NNF1 is greater than 0). For each payment identified at question F1 (i.e. in variables NF101 NF159) then there will exist at least one NINCOME record with a corresponding value of NFICODE.

In those cases where payments from multiple sources were combined in a single payments and individual receipts could not be distinguished, NINCOME records will exist for each source, but the variables NNFR or NFRVAL may indicate that multiple amounts are referred to, or that the amount is given on another record.

NFIM09L - NFIM04N are derived variables indicating the estimated amount received in each month, taking into account joint receipt and changes in welfare benefit levels. These calculations depend on the variable NFRJTVF, which is a flag variable identifying whether a reported jointly received payment can be matched to any other persons payment. The code constructing these variables is in the procedure N13DV.NFIM.

The following variables have all missing data imputed:
NFRVAL NFIM09L to NFIM04N
See the User Documentation for a full discussion of imputation. Imputation flag variables are listed below. Note that a value is not imputed where the missing value code is -3 `amount included elsewhere'.

NFRVALI (This also implies imputation on NFIM09L to NFIM04N)

## Record Type NEGOALT

This record provides a mechanism for identifying the relationship of each individual in a household to all others. There are two records for each relationship pair to separately identify the relationship in either direction (e.g. one record identifies that person 1 is the parent of person 3, while another record identifies that person 3 is the child of person 1). The relationship codes are not gendered, so the sex of each person is also given.

The relationship given is that of the second person to the first (e.g. if NPNO $=1$ and NOPNO $=3$ and NREL = 4 (natural child)) then person 3 is the natural child of person 1.

The variable NLWSTAT allows the computation of household composition change measures since Wave Two.

## Record Type NYOUTH

This record type contains responses to the Young persons questionnaire, asked of children aged 11 to 15 on 1st December 2004. There will be one record for each respondent young person. Such respondents have the value 21 for the final interview outcome variable NIVFIO. The variable NYPWGHT contains an individual cross-sectional weight to be used specifically with the young person responses. Note that this weight assumes the inclusion of cases from the Scotland and Wales extension samples. The record contains the normal key variables NHID and NPNO, and children may be matched to their parents through the record NEGOALT. See the note to the record type NINDRESP above for a discussion of corresponding parental questions. Note that these questions are asked of both natural parents and step parents. Young people in the Northern Ireland sample did not receive this questionnaire.

## III.25. WAVE FIFTEEN: Record Types and Wave-Specific Information

## Record Type OHHSAMP

Record Type OHHSAMP contains fieldwork control, interview outcome and weighting information. There is one record for each issued household, and records for additional households which split off from an issued household. (See the User Documentation for a detailed description of the fieldwork process.)

Respondent households, for which records OHHRESP etc will exist may be identified from the variable OIVFHO. Note that the coding frame for this variable is substantially different from that used at Wave One. Cases from the Scotland and Wales extension samples, and the Northern Ireland sample can be identified from the variable OHHORIG.

Derived and additional variables are those from OXHWGHT onwards.

## Record Type OINDSAMP

This record contains individual level variables derived from the Household Cover sheet. The record is keyed on OHID and OPNO. There will be one OINDSAMP record for each issued individual at each household where they were expected to be found, either at first issue, or as a result of a move uncovered during the fieldwork process, and additionally a record for each new entrant identified at a contacted household. Thus any individual may be represented by more than one OINDSAMP record, if they were understood to have moved. The variable OFINLOC enables the last household where the sample member was expected to be found to be identified. Cases from the Scotland and Wales
extension samples, and the Northern Ireland sample can be identified from the variable OMEMORIG.
This record will contain information about dates of departure and reasons for departure for sample members who left respondent households. It will also contain last enumeration information about sample members who have died.

## Record Type OINDALL

This record contains individual level variables derived from the Household Composition Form. There is one record for each individual enumerated in a respondent household. This record is the only one containing individual level data on children and other non-respondents.

Full and Proxy respondents for whom a corresponding OINDRESP record exists may be identified from the variable OIVFIO (individual interview outcome). Cases from the Scotland and Wales extension samples, and the Northern Ireland sample can be identified from the variable OMEMORIG.

Derived and additional variables are those from OAGE onwards.
See section V .2 for a full discussion of the use of the weights contained on this record type.

## Record Type OHHRESP

This record contains data from the Household Questionnaire and household level information from the Household Composition Form for respondent households. There is one record for each household.

Households with response code 14 'telephone interview only' will have OHHRESP records, but with most variables taking the missing value code -7 .

For the households with response code 43 - `proxy taken at Wave One address' the OHHRESP record will exist, entirely consist of missing values. In addition a small number of households were missing household questionnaires - these may be identified from the variable OHHDC. Cases, from the Scotland and Wales extension samples, and the Northern Ireland sample can be identified from the variable OHHORIG.

Derived and additional variables are those from OHHDC onwards. Of these, OXHWGHT OREGION and OLADISTC are direct copies of variables on record OHHSAMP.

The following variables have data for all missing cases imputed:

| OMGNEW | OXPMG | OHSVAL | OHRENT | ORENTGI | OXPHSN |
| :--- | :--- | :--- | :--- | :--- | :--- |
| OXPHSG | OFIHHMN | OFIHHML | OFIHHMNL | OFIHHMP | OFIHHMB |
| OFIHHMT | OFIHHMI | OFIHHYR | OFIHHYL | OFIHHYNL | OFIHHYP |
| OFIHHYB | OFIHHYT | OFIHHYI |  |  |  |

See Section V. 3 for a full discussion of imputation. Imputation flag variables are listed below:

| OMGNEWI | OXPMGI | OHSVALI | ORENTI | ORENTGI | OXPHSNI |
| :--- | :--- | :--- | :--- | :--- | :--- |
| OXPHSGI | OFIHHMNI | OFIHHMLI | OFIHMNLI | OFIHHMPI | OFIHHMBI |
| OFIHHMTI | OFIHHMII | OFIHHYRI | OFIHHYLI | OFIHHYNI | OFIHHYPI |
| OFIHHYBI | OFIHHYTI | OFIHHYII |  |  |  |

## Record Type OINDRESP

This record contains individual data from full and proxy questionnaires. Data from the Household Composition Form is also copied to this record. Proxy and telephone respondents may be distinguished from main questionnaire respondents on the basis of the variable OIVFIO.

From Wave Fifteen, the means of collection of data on qualifications has been restructured. Respondents are asked at one point whether they have obtained qualifications in the last year, instead of being asked about qualifications obtained associated with each spell of education and training, as was the case between waves 8 and 14. Other information about these spells is still collected. Qualifications attained in the last year are contained in the variables wQFX to wQFXN and WQFEDX to wNQFEXK, which were derived variables between wave 8 and 14.

Proxy and telephone data is copied to equivalent full questionnaire variables. Where there is no equivalent variable, values are set to -7 (inapplicable). The variables OPRRS2I OPRIPN OPRWHY OPRFEHQ OPRSEHQ OPRFITB OPRJBFT OTELWHY etc correspond to questions which have no direct equivalent in the full questionnaire. They are inapplicable for full respondents.

Data from the job history are contained on record OJOBHIST, except for a number of derived variables. Similarly detailed data on payment receipts from questions F3a - F3f are contained on record OINCOME.

Cases from the Scotland and Wales extension samples, and the Northern Ireland sample can be identified from the variable OMEMORIG.

Derived and additional copied variables are those from OIVFIO to OREGION and from OHGR2R onwards. The variables OREGION OHHSIZE OHHTYPE OTENURE and OFIHHMN are copied from record OHHRESP. The variables OIVFIO OIODC and OHGR2R to OHOH are copied from record OINDALL.

The following variables have data for all missing cases imputed (note that proxy cases do not have imputed values except in the case of OPRFITB):

| OJ2PAY | OFIYRDIC | OPRFITB | OPAYGU | OPAYNU | OPAYGTY |
| :--- | :--- | :--- | :--- | :--- | :--- |
| OPAYGLY | OPAYNTY | OPAYNLY | OJSPROF | OJSPAYG | OFIMNP |
| OFIMNB | OFIMNI | OFIMNT | OFIMNNL | OFIMNL | OFIMN |
| OFIYRL | OFIYRNL | OFIYRP | OFIYRB | OFIYRT | OFIYRI |
| OFIYR | OSPPAYG | OFIHHMN |  |  |  |

See Section V. 3 for a full discussion of imputation. Imputation flag variables are listed below.

| OJ2PAYI | OFIYRDII | OPRFITBI | OPAYGUI | OPAYNUI | OPAYGTI |
| :--- | :--- | :--- | :--- | :--- | :--- |
| OPAYGLI | OPAYNTI | OPAYNLI | OJSPROFI | OJSPAYGI | OFIMNPI |
| OFIMNBI | OFIMNII | OFIMNTI | OFIMNNLI | OFIMNLI | OFIMNTHI |
| OFIYRLI | OFIYRNLI | OFIYRPI | OFIYRBI | OFIYRTI | OFIYRII |
| OFIYEARI | OSPPAYGI | OFIHHMNI |  |  |  |

## Record Type OJOBHIST

This record contains information from the employment history over the period from 1st September 2004 to the date of interview. There is one record for each spell identified at questions J12-J14, with job characteristic information from questions J16 to J31 appended where relevant.

These records will only exist for respondents whose current labour force spell began after 1.9.2004. The additional key OJSPNO, identifies the sequence of job spell, with the most recent first.

Derived variables are those from OJHENDD onwards. Where a job is with the same employer as previously mentioned and/or at the same workplace (OJHSTAT=1), then the values for OJHSIC OJHSECT and OJHSIZE are copied from the relevant record.

The following variables have all missing data imputed:

## OJHGPAY OJHNPAY

See Section V. 3 for a full discussion of imputation. Imputation flag variables are listed below.

## OJHGPAYI OJHNPAYI

## Record Type OINCOME

This record contains income and payment data. There is one record for each payment recorded at question F3.

This record will only exist for respondents with one or more payments recorded at question F1, (i.e. where ONF1 is greater than 0). For each payment identified at question F1 (i.e. in variables OF101 -

OF159) then there will exist at least one OINCOME record with a corresponding value of OFICODE.
In those cases where payments from multiple sources were combined in a single payments and individual receipts could not be distinguished, OINCOME records will exist for each source, but the variables ONFR or OFRVAL may indicate that multiple amounts are referred to, or that the amount is given on another record.

OFIM09L - OFIM04N are derived variables indicating the estimated amount received in each month, taking into account joint receipt and changes in welfare benefit levels. These calculations depend on the variable OFRJTVF, which is a flag variable identifying whether a reported jointly received payment can be matched to any other persons payment. The code constructing these variables is in the procedure O13DV.NFIM.

The following variables have all missing data imputed:

## OFRVAL OFIM09L to OFIM04N

See the User Documentation for a full discussion of imputation. Imputation flag variables are listed below. Note that a value is not imputed where the missing value code is -3 `amount included elsewhere'.

OFRVALI (This also implies imputation on OFIM09L to OFIM04N)

## Record Type OEGOALT

This record provides a mechanism for identifying the relationship of each individual in a household to all others. There are two records for each relationship pair to separately identify the relationship in either direction (e.g. one record identifies that person 1 is the parent of person 3, while another record identifies that person 3 is the child of person 1). The relationship codes are not gendered, so the sex of each person is also given.

The relationship given is that of the second person to the first (e.g. if OPNO $=1$ and OOPNO $=3$ and OREL $=4$ (natural child)) then person 3 is the natural child of person 1.

The variable OLWSTAT allows the computation of household composition change measures since Wave Two.

## Record Type OYOUTH

This record type contains responses to the Young persons questionnaire, asked of children aged 11 to 15 on 1st December 2005. There will be one record for each respondent young person. Such respondents have the value 21 for the final interview outcome variable OIVFIO. The variable OYPWGHT contains an individual cross-sectional weight to be used specifically with the young person responses. Note that this weight assumes the inclusion of cases from the Scotland, Wales and Northern Ireland extension samples. The record contains the normal key variables OHID and OPNO, and children may be matched to their parents through the record OEGOALT. See the note to the record type OINDRESP above for a discussion of corresponding parental questions. Note that these questions are asked of both natural parents and step parents.

## III.26. WAVE SIXTEEN: Record Types and Wave-Specific Information

## Record Type PHHSAMP

Record Type PHHSAMP contains fieldwork control, interview outcome and weighting information. There is one record for each issued household, and records for additional households which split off from an issued household. (See the User Documentation for a detailed description of the fieldwork process.)

Respondent households, for which records PHHRESP etc will exist may be identified from the variable PIVFHO. Note that the coding frame for this variable is substantially different from that used at Wave One. Cases from the Scotland and Wales extension samples, and the Northern Ireland sample can be identified from the variable PHHORIG.

Derived and additional variables are those from PXHWGHT onwards.

## Record Type PINDSAMP

This record contains individual level variables derived from the Household Cover sheet. The record is keyed on PHID and PPNO. There will be one PINDSAMP record for each issued individual at each household where they were expected to be found, either at first issue, or as a result of a move uncovered during the fieldwork process, and additionally a record for each new entrant identified at a contacted household. Thus any individual may be represented by more than one PINDSAMP record, if they were understood to have moved. The variable PFINLOC enables the last household where the sample member was expected to be found to be identified. Cases from the Scotland and Wales extension samples, and the Northern Ireland sample can be identified from the variable PMEMORIG.

This record will contain information about dates of departure and reasons for departure for sample members who left respondent households. It will also contain last enumeration information about sample members who have died.

## Record Type PINDALL

This record contains individual level variables derived from the Household Composition Form. There is one record for each individual enumerated in a respondent household. This record is the only one containing individual level data on children and other non-respondents.

Full and Proxy respondents for whom a corresponding PINDRESP record exists may be identified from the variable PIVFIO (individual interview outcome). Cases from the Scotland and Wales extension samples, and the Northern Ireland sample can be identified from the variable PMEMORIG.

Derived and additional variables are those from PAGE onwards.
See section V. 2 for a full discussion of the use of the weights contained on this record type.

## Record Type PHHRESP

This record contains data from the Household Questionnaire and household level information from the Household Composition Form for respondent households. There is one record for each household.

Households with response code 14 `telephone interview only' will have PHHRESP records, but with most variables taking the missing value code -7 .

For the households with response code 43 - `proxy taken at Wave One address' the PHHRESP record will exist, entirely consist of missing values. In addition a small number of households were missing household questionnaires - these may be identified from the variable PHHDC. Cases, from the Scotland and Wales extension samples, and the Northern Ireland sample can be identified from the variable PHHORIG.

Derived and additional variables are those from PHHDC onwards. Of these, PXHWGHT and PREGION are direct copies of variables on record PHHSAMP.

The following variables have data for all missing cases imputed:

| PMGNEW | PXPMG | PHSVAL | PHRENT | PRENTGI | PXPHSN |
| :--- | :--- | :--- | :--- | :--- | :--- |
| PXPHSG | PFIHHMN | PFIHHML | PFIHHMNL | PFIHHMP | PFIHHMB |
| PFIHHMT | PFIHHMI | PFIHHYR | PFIHHYL | PFIHHYNL | PFIHHYP |
| PFIHHYB | PFIHHYT | PFIHHYI |  |  |  |

See Section V. 3 for a full discussion of imputation. Imputation flag variables are listed below:

| PMGNEWI | PXPMGI | PHSVALI | PRENTI | PRENTGI | PXPHSNI |
| :--- | :--- | :--- | :--- | :--- | :--- |
| PXPHSGI | PFIHHMNI | PFIHHMLI | PFIHMNLI | PFIHHMPI | PFIHHMBI |
| PFIHHMTI | PFIHHMII | PFIHHYRI | PFIHHYLI | PFIHHYNI | PFIHHYPI |
| PFIHHYBI | PFIHHYTI | PFIHHYII |  |  |  |

## Record Type PINDRESP

This record contains individual data from full and proxy questionnaires. Data from the Household Composition Form is also copied to this record. Proxy and telephone respondents may be distinguished from main questionnaire respondents on the basis of the variable PIVFIO.

From Wave Fifteen, the means of collection of data on qualifications has been restructured. Respondents are asked at one point whether they have obtained qualifications in the last year, instead of being asked about qualifications obtained associated with each spell of education and training, as was the case between waves 8 and 14. Other information about these spells is still collected. Qualifications attained in the last year are contained in the variables wQFX to wQFXN and wQFEDX to wNQFEXK, which were derived variables between wave 8 and 14.

Proxy and telephone data is copied to equivalent full questionnaire variables. Where there is no equivalent variable, values are set to -7 (inapplicable). The variables PPRRS2I PPRIPN PPRWHY PPRFEHQ PPRSEHQ PPRFITB PPRJBFT PTELWHY etc correspond to questions which have no direct equivalent in the full questionnaire. They are inapplicable for full respondents.

Data from the job history are contained on record PJOBHIST, except for a number of derived variables. Similarly detailed data on payment receipts from questions F3a - F3f are contained on record PINCOME.

Cases from the Scotland and Wales extension samples, and the Northern Ireland sample can be identified from the variable PMEMORIG.

Derived and additional copied variables are those from PIVFIO to PREGION and from PHGR2R onwards. The variables PREGION PHHSIZE PHHTYPE PTENURE and PFIHHMN are copied from record PHHRESP. The variables PIVFIO PIODC and PHGR2R to PHOH are copied from record PINDALL.

The following variables have data for all missing cases imputed (note that proxy cases do not have imputed values except in the case of PPRFITB):

| PJ2PAY | PFIYRDIC | PPRFITB | PPAYGU | PPAYNU | PPAYGTY |
| :--- | :--- | :--- | :--- | :--- | :--- |
| PPAYGLY | PPAYNTY | PPAYNLY | PJSPROF | PJSPAYG | PFIMNP |
| PFIMNB | PFIMNI | PFIMNT | PFIMNNL | PFIMNL | PFIMN |
| PFIYRL | PFIYRNL | PFIYRP | PFIYRB | PFIYRT | PFIYRI |
| PFIYR | PSPPAYG | PFIHHMN |  |  |  |

See Section V. 3 for a full discussion of imputation. Imputation flag variables are listed below.

| PJ2PAYI | PFIYRDII | PPRFITBI | PPAYGUI | PPAYNUI | PPAYGTI |
| :--- | :--- | :--- | :--- | :--- | :--- |
| PPAYGLI | PPAYNTI | PPAYNLI | PJSPRPFI | PJSPAYGI | PFIMNPI |
| PFIMNBI | PFIMNII | PFIMNTI | PFIMNNLI | PFIMNLI | PFIMNTHI |
| PFIYRLI | PFIYRNLI | PFIYRPI | PFIYRBI | PFIYRTI | PFIYRII |
| PFIYEARI | PSPPAYGI | PFIHHMNI |  |  |  |

## Record Type PJOBHSTD

This record contains information from the employment history over the period from 1st September 2005 to the date of interview. There is one record for each spell identified at questions J10 and J10b. In contrast to the annual employment history collected at waves 1 to 15 , and contained in record wJOBHIST, the sequence of spells works forward from the situation at the time of the previous which is fed forward using dependent interviewing (or is asked if the respondent was not interviewed at the previous waves). See section IV. 18 for further information on dependent interviewing. Data from this record have been reconstructed into the format as collected at previous waves. These data are contained in record PJOBHIST.

These records will only exist for respondents whose current labour force spell began after 1.9.2005. The additional key PJSPNO, identifies the sequence of job spell, with the most recent first. Note that values of PJSPNO on PJOBHIST and PJOBHSTD refer to different spells.

## Record Type PINCOME

This record contains income and payment data. There is one record for each payment recorded at question F3.

This record will only exist for respondents with one or more payments recorded at question F1, (i.e. where PNF1 is greater than 0). For each payment identified at question F1 (i.e. in variables PF101 PF159) then there will exist at least one PINCOME record with a corresponding value of PFICODE.

In those cases where payments from multiple sources were combined in a single payments and individual receipts could not be distinguished, PINCOME records will exist for each source, but the variables PNFR or PFRVAL may indicate that multiple amounts are referred to, or that the amount is given on another record.

PFIM09L - PFIM04N are derived variables indicating the estimated amount received in each month, taking into account joint receipt and changes in welfare benefit levels. These calculations depend on the variable PFRJTVF, which is a flag variable identifying whether a reported jointly received payment can be matched to any other persons payment. The code constructing these variables is in the procedure P16DV.NFIM.

The following variables have all missing data imputed:
PFRVAL PFIM09L to PFIM04N
See the User Documentation for a full discussion of imputation. Imputation flag variables are listed below. Note that a value is not imputed where the missing value code is -3 `amount included elsewhere'.

PFRVALI (This also implies imputation on PFIM09L to PFIM04N)

## Record Type PEGOALT

This record provides a mechanism for identifying the relationship of each individual in a household to all others. There are two records for each relationship pair to separately identify the relationship in either direction (e.g. one record identifies that person 1 is the parent of person 3, while another record identifies that person 3 is the child of person 1). The relationship codes are not gendered, so the sex of each person is also given.

The relationship given is that of the second person to the first (e.g. if PPNO $=1$ and POPNO $=3$ and PREL = 4 (natural child)) then person 3 is the natural child of person 1.

The variable PLWSTAT allows the computation of household composition change measures since Wave Two.

## Record Type PYOUTH

This record type contains responses to the Young persons questionnaire, asked of children aged 11 to 15 on 1st December 2006. There will be one record for each respondent young person. Such respondents have the value 21 for the final interview outcome variable PIVFIO. The variable PYPWGHT contains an individual cross-sectional weight to be used specifically with the young person responses. Note that this weight assumes the inclusion of cases from the Scotland, Wales and Northern Ireland extension samples. The record contains the normal key variables PHID and PPNO, and children may be matched to their parents through the record PEGOALT. See the note to the record type PINDRESP above for a discussion of corresponding parental questions. Note that these questions are asked of both natural parents and step parents.

## Record Type PJOBHIST

This record contains information from the employment history over the period from 1st September 2005 to the date of interview. It is derived from the data contained in PJOBHSTD, which is collected in a different format from that used at waves 1 to 15, and is based on fed forward data from the previous wave. It has the same structure as wJOBHIST for previous waves with the order of spells being backward from the current spell to 1st September 2005. For continuing respondents, information
about the situation at the time of the last interview has been copied from previous wave. For new respondents detailed information about the job held 12 months earlier is not available.

These records will only exist for respondents whose current labour force spell began after 1.9.2005. The additional key PJSPNO, identifies the sequence of job spell, with the most recent first. Note that values of PJSPNO on PJOBHIST and PJOBHSTD refer to different spells.

Derived variables are those from PJHENDD onwards. Where a job is with the same employer as previously mentioned and/or at the same workplace (OJHSTAT=1), then the values for PJHSIC PJHSECT and PJHSIZE are copied from the relevant record.

The following variables have all missing data imputed:

## PJHGPAY PJHNPAY

See Section V. 3 for a full discussion of imputation. Imputation flag variables are listed below.

```
PJHGPAYI PJHNPAYI
```


## III.27. WAVE SEVENTEEN: Record Types and Wave-Specific Information

## Record Type QHHSAMP

Record Type QHHSAMP contains fieldwork control, interview outcome and weighting information. There is one record for each issued household, and records for additional households which split off from an issued household. (See the User Documentation for a detailed description of the fieldwork process.)

Respondent households, for which records QHHRESP etc will exist may be identified from the variable QIVFHO. Note that the coding frame for this variable is substantially different from that used at Wave One. Cases from the Scotland and Wales extension samples, and the Northern Ireland sample can be identified from the variable QHHORIG.

Derived and additional variables are those from QXHWGHT onwards.

## Record Type QINDSAMP

This record contains individual level variables derived from the Household Cover sheet. The record is keyed on QHID and QPNO. There will be one QINDSAMP record for each issued individual at each household where they were expected to be found, either at first issue, or as a result of a move uncovered during the fieldwork process, and additionally a record for each new entrant identified at a contacted household. Thus any individual may be represented by more than one QINDSAMP record, if they were understood to have moved. The variable QFINLOC enables the last household where the sample member was expected to be found to be identified. Cases from the Scotland and Wales extension samples, and the Northern Ireland sample can be identified from the variable QMEMORIG.

This record will contain information about dates of departure and reasons for departure for sample members who left respondent households. It will also contain last enumeration information about sample members who have died.

## Record Type QINDALL

This record contains individual level variables derived from the Household Composition Form. There is one record for each individual enumerated in a respondent household. This record is the only one containing individual level data on children and other non-respondents.

Full and Proxy respondents for whom a corresponding QINDRESP record exists may be identified from the variable QIVFIO (individual interview outcome). Cases from the Scotland and Wales extension samples, and the Northern Ireland sample can be identified from the variable QMEMORIG.

Derived and additional variables are those from QAGE onwards.

See section V. 2 for a full discussion of the use of the weights contained on this record type.

## Record Type QHHRESP

This record contains data from the Household Questionnaire and household level information from the Household Composition Form for respondent households. There is one record for each household.

Households with response code 14 'telephone interview only' will have QHHRESP records, but with most variables taking the missing value code -7 .

For the households with response code 43 - `proxy taken at Wave One address' the QHHRESP record will exist, entirely consist of missing values. In addition a small number of households were missing household questionnaires - these may be identified from the variable QHHDC. Cases, from the Scotland and Wales extension samples, and the Northern Ireland sample can be identified from the variable QHHORIG.

Derived and additional variables are those from QHHDC onwards. Of these, QXHWGHT and QREGION are direct copies of variables on record QHHSAMP.

The following variables have data for all missing cases imputed:

| QMGNEW | QXPMG | QHSVAL | QHRENT | QRENTGI | QXPHSN |
| :--- | :--- | :--- | :--- | :--- | :--- |
| QXPHSG | QFIHHMN | QFIHHML | QFIHHMNL | QFIHHMP | QFIHHMB |
| QFIHHMT | QFIHHMI | QFIHHYR | QFIHHYL | QFIHHYNL | QFIHHYP |
| QFIHHYB | QFIHHYT | QFIHHYI |  |  |  |

See Section V. 3 for a full discussion of imputation. Imputation flag variables are listed below:

| QMGNEWI | QXPMGI | QHSVALI | QRENTI | QRENTGI | QXPHSNI |
| :--- | :--- | :--- | :--- | :--- | :--- |
| QXPHSGGI | QFIHHMNI | QFIHHMLI | QFIHMNLI | QFIIHHMPI | QFIHHMBI |
| QFIHHMTI | QFIHHMII | QFIHHYRI | QFIHHYLI | QFIHHYNI | QFIHHYPI |
| QFIHHYBI | QFIHHYTI | QFIHHYII |  |  |  |

## Record Type QINDRESP

This record contains individual data from full and proxy questionnaires. Data from the Household Composition Form is also copied to this record. Proxy and telephone respondents may be distinguished from main questionnaire respondents on the basis of the variable QIVFIO.

From Wave Fifteen, the means of collection of data on qualifications has been restructured. Respondents are asked at one point whether they have obtained qualifications in the last year, instead of being asked about qualifications obtained associated with each spell of education and training, as was the case between waves 8 and 14. Other information about these spells is still collected. Qualifications attained in the last year are contained in the variables WQFX to WQFXN and wQFEDX to wNQFEXK, which were derived variables between wave 8 and 14 .

Proxy and telephone data is copied to equivalent full questionnaire variables. Where there is no equivalent variable, values are set to -7 (inapplicable). The variables QPRRS2I QPRIPN QPRWHY QPRFEHQ QPRSEHQ QPRFITB QPRJBFT QTELWHY etc correspond to questions which have no direct equivalent in the full questionnaire. They are inapplicable for full respondents.

Data from the job history are contained on record QJOBHIST, except for a number of derived variables. Similarly detailed data on payment receipts from questions F3a - F3f are contained on record QINCOME.

Cases from the Scotland and Wales extension samples, and the Northern Ireland sample can be identified from the variable QMEMORIG.

Derived and additional copied variables are those from QIVFIO to QREGION and from QHGR2R onwards. The variables QREGION QHHSIZE QHHTYPE QTENURE and QFIHHMN are copied from record QHHRESP. The variables QIVFIO QIODC and QHGR2R to QHOH are copied from record QINDALL.

The following variables have data for all missing cases imputed (note that proxy cases do not have imputed values except in the case of QPRFITB):

| QJ2PAY | QFIYRDIC | QPRFITB | QPAYGU | QPAYNU | QPAYGTY |
| :--- | :--- | :--- | :--- | :--- | :--- |
| QPAYGLY | QPAYNTY | QPAYNLY | QJSPROF | QJSPAYG | QFIMNP |
| QFIMNB | QFIMNI | QFIMNT | QFIMNNL | QFIMNL | QFIMN |
| QFIYRL | QFIYRNL | QFIYRP | QFIYRB | QFIYRT | QFIYRI |
| QFIYR | QSPPAYG | QFIHHMN |  |  |  |

See Section V. 3 for a full discussion of imputation. Imputation flag variables are listed below.

| QJ2PAYI | QFIYRDII | QPRFITBI | QPAYGUI | QPAYNUI | QPAYGTI |
| :--- | :--- | :--- | :--- | :--- | :--- |
| QPAYGLI | QPAYNTI | QPAYNLI | QJSPRPFI | QJSPAYGI | QFIMNPI |
| QFIMNBI | QFIMNII | QFIMNTI | QFIMNNLI | QFIMNLI | QFIMNTHI |
| QFIYRLI | QFIYRNLI | QFIYRPI | QFIYRBI | QFIYRTI | QFIYRII |
| QFIYEARI | QSPPAYGI | QFIHHMNI |  |  |  |

## Record Type QJOBHSTD

This record contains information from the employment history over the period from the date of the interview at wave 16 or 1st September 2006 if there was no interview to the date of wave 17 interview. There is one record for each spell identified at questions J 10 and J 10 b . In contrast to the annual employment history collected at waves 1 to 15, and contained in record wJOBHIST, the sequence of spells works forward from the situation at the time of the previous interview which is fed forward using dependent interviewing (or is asked if the respondent was not interviewed at the previous waves). See section IV. 18 for further information on dependent interviewing. Data from this record have been reconstructed into the format as collected at previous waves. These data are contained in record QJOBHIST.

These records will only exist for respondents whose current labour force spell began after 1.9.2006. The additional key QJSPNO, identifies the sequence of job spell, with the most recent first. Note that values of QJSPNO on QJOBHIST and QJOBHSTD refer to different spells.

## Record Type QINCOME

This record contains income and payment data. There is one record for each payment recorded at question F3.

This record will only exist for respondents with one or more payments recorded at question F1, (i.e. where QNF1 is greater than 0). For each payment identified at question F1 (i.e. in variables QF101 QF159) then there will exist at least one QINCOME record with a corresponding value of QFICODE.

In those cases where payments from multiple sources were combined in a single payments and individual receipts could not be distinguished, QINCOME records will exist for each source, but the variables QNFR or QFRVAL may indicate that multiple amounts are referred to, or that the amount is given on another record.

QFIM09L - QFIM04N are derived variables indicating the estimated amount received in each month, taking into account joint receipt and changes in welfare benefit levels. These calculations depend on the variable QFRJTVF, which is a flag variable identifying whether a reported jointly received payment can be matched to any other persons payment. The code constructing these variables is in the procedure M17DV.QFIM.

The following variables have all missing data imputed:
QFRVAL QFIM09L to QFIM04N
See the User Documentation for a full discussion of imputation. Imputation flag variables are listed below. Note that a value is not imputed where the missing value code is -3 `amount included elsewhere'.

QFRVALI (This also implies imputation on QFIM09L to QFIM04N)

## Record Type QEGOALT

This record provides a mechanism for identifying the relationship of each individual in a household to all others. There are two records for each relationship pair to separately identify the relationship in either direction (e.g. one record identifies that person 1 is the parent of person 3, while another record identifies that person 3 is the child of person 1). The relationship codes are not gendered, so the sex of each person is also given.

The relationship given is that of the second person to the first (e.g. if QPNO $=1$ and QOPNO $=3$ and QREL $=4$ (natural child)) then person 3 is the natural child of person 1.

The variable QLWSTAT allows the computation of household composition change measures since Wave Two.

## Record Type QYOUTH

This record type contains responses to the Young persons' questionnaire, asked of children aged 11 to 15 on 1st December 2007. There will be one record for each respondent young person. Such respondents have the value 21 for the final interview outcome variable QIVFIO. The variable QYPWGHT contains an individual cross-sectional weight to be used specifically with the young person responses. Note that this weight assumes the inclusion of cases from the Scotland, Wales and Northern Ireland extension samples. The record contains the normal key variables QHID and QPNO, and children may be matched to their parents through the record QEGOALT. See the note to the record type QINDRESP above for a discussion of corresponding parental questions. Note that these questions are asked of both natural parents and step parents.

## Record Type QJOBHIST

This record contains information from the employment history over the period from 1st September 2006 to the date of interview. It is derived from the data contained in QJOBHSTD, which is collected in a different format from that used at waves 1 to 15 , and is based on fed forward data from the previous wave. It has the same structure as wJOBHIST for previous waves with the order of spells being backward from the current spell to 1st September 2007. For continuing respondents, information about the situation at the time of the last interview has been copied from previous wave. For new respondents detailed information about the job held 12 months earlier is not available.

These records will only exist for respondents whose current labour force spell began after 1.9.2006. The additional key QJSPNO, identifies the sequence of job spell, with the most recent first. Note that values of QJSPNO on QJOBHIST and QJOBHSTD refer to different spells.

Derived variables are those from QJHENDD onwards. Where a job is with the same employer as previously mentioned and/or at the same workplace (OJHSTAT=1), then the values for QJHSIC QJHSECT and QJHSIZE are copied from the relevant record.

The following variables have all missing data imputed:

> QJHGPAY QJHNPAY

See Section V. 3 for a full discussion of imputation. Imputation flag variables are listed below.

```
QJHGPAYI QJHNPAYI
```


## Record Type QCHILD

This record contains information about the each of the children of the respondent including biological, step, adopted and foster children, given in answer to questions RV46 to V69. There is one record for each child reported in answer to question RV45.

## III.28. WAVE EIGHTEEN: Record Types and Wave-Specific Information

## Record Type RHHSAMP

Record Type RHHSAMP contains fieldwork control, interview outcome and weighting information. There is one record for each issued household, and records for additional households which split off from an issued household. (See the User Documentation for a detailed description of the fieldwork process.)

Respondent households, for which records RHHRESP etc will exist may be identified from the variable RIVFHO. Note that the coding frame for this variable is substantially different from that used at Wave One. Cases from the Scotland and Wales extension samples, and the Northern Ireland sample can be identified from the variable RHHORIG.

Derived and additional variables are those from RXHWGHT onwards.

## Record Type RINDSAMP

This record contains individual level variables derived from the Household Cover sheet. The record is keyed on RHID and RPNO. There will be one RINDSAMP record for each issued individual at each household where they were expected to be found, either at first issue, or as a result of a move uncovered during the fieldwork process, and additionally a record for each new entrant identified at a contacted household. Thus any individual may be represented by more than one RINDSAMP record, if they were understood to have moved. The variable RFINLOC enables the last household where the sample member was expected to be found to be identified. Cases from the Scotland and Wales extension samples, and the Northern Ireland sample can be identified from the variable RMEMORIG.

This record will contain information about dates of departure and reasons for departure for sample members who left respondent households. It will also contain last enumeration information about sample members who have died.

## Record Type RINDALL

This record contains individual level variables derived from the Household Composition Form. There is one record for each individual enumerated in a respondent household. This record is the only one containing individual level data on children and other non-respondents.

Full and Proxy respondents for whom a corresponding RINDRESP record exists may be identified from the variable RIVFIO (individual interview outcome). Cases from the Scotland and Wales extension samples, and the Northern Ireland sample can be identified from the variable RMEMORIG.

Derived and additional variables are those from RAGE onwards.
See section V. 2 for a full discussion of the use of the weights contained on this record type.

## Record Type RHHRESP

This record contains data from the Household Questionnaire and household level information from the Household Composition Form for respondent households. There is one record for each household.

Households with response code 14 `telephone interview only' will have RHHRESP records, but with most variables taking the missing value code -7 .

For the households with response code 43 - `proxy taken at Wave One address' the RHHRESP record will exist, entirely consist of missing values. In addition a small number of households were
missing household questionnaires - these may be identified from the variable RHHDC. Cases, from the Scotland and Wales extension samples, and the Northern Ireland sample can be identified from the variable RHHORIG.

Derived and additional variables are those from RHHDC onwards. Of these, RXHWGHT and RREGION are direct copies of variables on record RHHSAMP.

The following variables have data for all missing cases imputed:

| RMGNEW | RXPMG | RHSVAL | RHRENT | RRENTGI | RXPHSN |
| :--- | :--- | :--- | :--- | :--- | :--- |
| RXPHSG | RFIHHMN | RFIHHML | RFIHHMNL | RFIHHMP | RFIHHMB |
| RFIHHMT | RFIHHMI | RFIHHYR | RFIHHYL | RFIHHYNL | RFIHHYP |
| RFIHHYB | RFIHHYT | RFIHHYI |  |  |  |

See Section V. 3 for a full discussion of imputation. Imputation flag variables are listed below:

| RMGNEWI | RXPMGI | RHSVALI | RRENTI | RRENTGI | RXPHSNI |
| :--- | :--- | :--- | :--- | :--- | :--- |
| RXPHSGI | RFIHHMNI | RFIHHMLI | RFIHMNLI | RFIHHMPI | RFIHHMBI |
| RFIHHMTI | RFIHHMII | RFIHHYRI | RFIHHYLI | RFIHHYNI | RFIHHYPI |
| RFIHHYBI | RFIHHYTI | RFIHHYII |  |  |  |

## Record Type RINDRESP

This record contains individual data from full and proxy questionnaires. Data from the Household Composition Form is also copied to this record. Proxy and telephone respondents may be distinguished from main questionnaire respondents on the basis of the variable RIVFIO.

From Wave Fifteen, the means of collection of data on qualifications has been restructured. Respondents are asked at one point whether they have obtained qualifications in the last year, instead of being asked about qualifications obtained associated with each spell of education and training, as was the case between waves 8 and 14. Other information about these spells is still collected. Qualifications attained in the last year are contained in the variables wQFX to wQFXN and wQFEDX to wNQFEXK, which were derived variables between wave 8 and 14 .

Proxy and telephone data is copied to equivalent full questionnaire variables. Where there is no equivalent variable, values are set to -7 (inapplicable). The variables RPRRS2I RPRIPN RPRWHY RPRFEHQ RPRSEHQ RPRFITB RPRJBFT RTELWHY etc correspond to questions which have no direct equivalent in the full questionnaire. They are inapplicable for full respondents.

Data from the job history are contained on record RJOBHIST, except for a number of derived variables. Similarly detailed data on payment receipts from questions F3a - F3f are contained on record RINCOME.

Cases from the Scotland and Wales extension samples, and the Northern Ireland sample can be identified from the variable RMEMORIG.

Derived and additional copied variables are those from RIVFIO to RREGION and from RHGR2R onwards. The variables RREGION RHHSIZE RHHTYPE RTENURE and RFIHHMN are copied from record RHHRESP. The variables RIVFIO RIODC and RHGR2R to RHOH are copied from record RINDALL.

The following variables have data for all missing cases imputed (note that proxy cases do not have imputed values except in the case of RPRFITB):

| RJ2PAY | RFIYRDIC | RPRFITB | RPAYGU | RPAYNU | RPAYGTY |
| :--- | :--- | :--- | :--- | :--- | :--- |
| RPAYGLY | RPAYNTY | RPAYNLY | RJSPROF | RJSPAYG | RFIMNP |
| RFIMNB | RFIMNI | RFIMNT | RFIMNNL | RFIMNL | RFIMN |
| RFIYRL | RFIYRNL | RFIYRP | RFIYRB | RFIYRT | RFIYRI |
| RFIYR RSPPAYG | RFIHHMN |  |  |  |  |

See Section V. 3 for a full discussion of imputation. Imputation flag variables are listed below.

| RJ2PAYI | RFIYRDII | RPRFITBI | RPAYGUI | RPAYNUI | RPAYGTI |
| :--- | :--- | :--- | :--- | :--- | :--- |
| RPAYGLI | RPAYNTI | RPAYNLI | RJSPRPFI | RJSPAYGI | RFIMNPI |
| RFIMNBI | RFIMNII | RFIMNTI | RFIMNNLI | RFIMNLI | RFIMNTHI |
| RFIYRLI | RFIYRNLI | RFIYRPI | RFIYRBI | RFIYRTI | RFIYRII |
| RFIYEARI | RSPPAYGI | RFIHHMNI |  |  |  |

## Record Type RJOBHSTD

This record contains information from the employment history over the period from the date of the interview at wave 16 or 1st September 2006 if there was no interview to the date of wave 17 interview. There is one record for each spell identified at questions J 10 and J10b. In contrast to the annual employment history collected at waves 1 to 15 , and contained in record wJOBHIST, the sequence of spells works forward from the situation at the time of the previous interview which is fed forward using dependent interviewing (or is asked if the respondent was not interviewed at the previous waves). See section IV. 18 for further information on dependent interviewing. Data from this record have been reconstructed into the format as collected at previous waves. These data are contained in record RJOBHIST.

These records will only exist for respondents whose current labour force spell began after 1.9.2006. The additional key RJSPNO, identifies the sequence of job spell, with the most recent first. Note that values of RJSPNO on RJOBHIST and RJOBHSTD refer to different spells.

## Record Type RINCOME

This record contains income and payment data. There is one record for each payment recorded at question F3.

This record will only exist for respondents with one or more payments recorded at question F1, (i.e. where RNF1 is greater than 0). For each payment identified at question F1 (i.e. in variables RF101 RF159) then there will exist at least one RINCOME record with a corresponding value of RFICODE.

In those cases where payments from multiple sources were combined in a single payments and individual receipts could not be distinguished, RINCOME records will exist for each source, but the variables RNFR or RFRVAL may indicate that multiple amounts are referred to, or that the amount is given on another record.

RFIM09L - RFIM04N are derived variables indicating the estimated amount received in each month, taking into account joint receipt and changes in welfare benefit levels. These calculations depend on the variable RFRJTVF, which is a flag variable identifying whether a reported jointly received payment can be matched to any other persons payment. The code constructing these variables is in the procedure M18DV.RFIM.

The following variables have all missing data imputed:

## RFRVAL RFIM09L to RFIM04N

See the User Documentation for a full discussion of imputation. Imputation flag variables are listed below. Note that a value is not imputed where the missing value code is -3 `amount included elsewhere'.

RFRVALI (This also implies imputation on RFIM09L to RFIM04N)

## Record Type REGOALT

This record provides a mechanism for identifying the relationship of each individual in a household to all others. There are two records for each relationship pair to separately identify the relationship in either direction (e.g. one record identifies that person 1 is the parent of person 3, while another record identifies that person 3 is the child of person 1). The relationship codes are not gendered, so the sex of each person is also given.

The relationship given is that of the second person to the first (e.g. if RPNO $=1$ and ROPNO $=3$ and RREL $=4$ (natural child)) then person 3 is the natural child of person 1.

The variable RLWSTAT allows the computation of household composition change measures since Wave Two.

## Record Type RYOUTH

This record type contains responses to the Young persons' questionnaire, asked of children aged 11 to 15 on 1st December 2007. There will be one record for each respondent young person. Such respondents have the value 21 for the final interview outcome variable RIVFIO. The variable RYPWGHT contains an individual cross-sectional weight to be used specifically with the young person responses. Note that this weight assumes the inclusion of cases from the Scotland, Wales and Northern Ireland extension samples. The record contains the normal key variables RHID and RPNO, and children may be matched to their parents through the record REGOALT. See the note to the record type RINDRESP above for a discussion of corresponding parental questions. Note that these questions are asked of both natural parents and step parents.

## Record Type RJOBHIST

This record contains information from the employment history over the period from 1st September 2006 to the date of interview. It is derived from the data contained in RJOBHSTD, which is collected in a different format from that used at waves 1 to 15, and is based on fed forward data from the previous wave. It has the same structure as wJOBHIST for previous waves with the order of spells being backward from the current spell to 1st September 2007. For continuing respondents, information about the situation at the time of the last interview has been copied from previous wave. For new respondents detailed information about the job held 12 months earlier is not available.

These records will only exist for respondents whose current labour force spell began after 1.9.2006. The additional key RJSPNO, identifies the sequence of job spell, with the most recent first. Note that values of RJSPNO on RJOBHIST and RJOBHSTD refer to different spells.

Derived variables are those from RJHENDD onwards. Where a job is with the same employer as previously mentioned and/or at the same workplace (OJHSTAT=1), then the values for RJHSIC RJHSECT and RJHSIZE are copied from the relevant record.

The following variables have all missing data imputed:
RJHGPAY RJHNPAY
See Section V. 3 for a full discussion of imputation. Imputation flag variables are listed below.
RJHGPAYI RJHNPAYI

## III.29. Related Data Sets

A number of additional BHPS datasets have been deposited with the Data Archive. They contain additional derived variables and restructured data to facilitate particular types of analysis.

1. Derived Net Income Variables for BHPS Waves 1-18, deposited by Horacio Levy and Stephen Jenkins

## NOTE THAT THE DATA DESCRIBED HERE IS NOW INCORPORATED WITH THE BHPS MAIN DATA RELEASE

This data set provided net income variables for BHPS waves 1-18 for household in which all eligible adults gave a full interview (i.e. BHPS variable \{a|b|c|d|e|f ivfho\}=10). Observe that the derived variables in the main release refer to gross income, i.e. income before deductions for income tax, NI, pension contributions and local taxes have been made. Our net incomes for waves 1-18 have been derived using the June 2010 release of the BHPS.

Our aim has been to produce a longitudinal complement to the cross section income distribution information provided by the Department for Work and Pension's Households Below Average Income (HBAI) reports, and to this end we have adhered closely to the HBAI definition of net income (DSS 1993). The authors have used these data in research covering various aspects of income mobility and poverty dynamics in the UK.

## 2. Unified BHPS work-life histories deposited by Brendan Halpin.

The British Household Panel Study collects extensive labour market history information from its respondents, both during the panel period and retrospectively from labour market entry. That this information is of necessity stored in multiple locations, and of varying levels of detail, has made use somewhat inconvenient. This group of datasets brings the labour market information together in more convenient formats including both monthly calendar files and spell files. The documentation discusses some of the problems of retrospective and panel longitudinal data, and discusses issues of recall error and measurement error which have had to be reached in bringing these data together. Technical paper 13 Unified BHPS Work-life Histories: Combining Multiple Sources into a User-friendly Format Brendan Halpin (1997) discusses the creation of this data set in more detail.

## 3. BHPS Sampler Teaching Data Sets

Under the programme of the longitudinal component of the Economic and Social Data Service Longitudinal, teaching data sets based on the BHPS have been created. These include a selection of variables related to a particular and combine variables from several waves into a single data set. At present two of these samplers exist: one containing variables relating to work, family, health and social status, and the other concerning social and political attitudes. Both contain data from waves 1 to 11. The data sets can be browsed using the Data Archive Nesstar system.

## 4. BHPS Consolidated Marital, Cohabitation and Fertility Histories, 1991-2009

This project undertaken by Chiara Pronzato used data from the British Household Panel Survey (BHPS), to compile a consolidated marital, cohabitation and fertility file, containing retrospective lifetime histories and subsequent panel data related to respondents' partnerships and childbearing.

## 5. BHPS: Programs for Generating Consistent Work-Life Histories: Waves 1-18, 1991-2009

This project undertaken by David Mare developed programmes and a dataset to extract consistent work-life histories from 18 waves of the BHPS data. The methods used to reconcile the various sources of work-life histories in the BHPS are documented in an accompanying ISER working paper. The programmes allow users to apply their own rules for dealing with inconsistencies in survey responses. The derived work-life history files in this deposit should be seen as a complement to other BHPS Work-Life History files (1990-2005) available from the UK Data Archive under SN 3954 (number 3 above).

## 6. Area identifiers and other matched spatial data

A number of area identifiers for respondent locations, as well as data relating to these areas, which are not included in the main data set are available from the Data Archive under special licence conditions. Further information about these data is available at http://www.iser.essex.ac.uk/ulsc/bhps/acquiring/area .

Separate documentation is available for these datasets. Please contact the Data Archive for further information

| BHPS USER DATABASE STRUCTURE : WAVE SPECIFIC RECORDS, FROM WAVE TWO ONWARDS |  |  |  |
| :--- | :--- | :--- | :--- |
| RECORD <br> NAME | UNIT OF ANALYSIS | KEY <br> VARIABLES | CONTENT |
| BMARRIAG | Current and past marriage spells of respondents. | BHID <br> BPNO <br> BMARNO | Dates of : marriages, cohabitations leading to marriage and their dissolutions. <br> Also (if ended) how ended. Identification of current marriage partner. |
| BCOHABIT | All spells of respondents' cohabitation of three months or <br> more which did not result in marriage. | BHID <br> BPNO <br> BCSNO | Dates of start and end of all cohabitation spells. |
| BCHILDAD | All adopted or step children who have ever lived with <br> respondent. | BHID <br> BPNO <br> BLACNO | Dates of birth, sex, status and dates of being in the care of the respondent. |
| BCHILDNT | All children born to or fathered by respondents. | BHID <br> BPNO <br> BLNCNO | Dates of birth, sex, and dates of being in the care of the respondent. |
| BLIFEMST | All employment status spells since leaving full-time <br> education. | BHID <br> BPNO <br> BLESHNO | Dates of start and finish, length in months and status of employment spells. |
| CLIFEJOB | All job spells from first leaving full-time education up to <br> $1.9 .1990 . ~$ | CHID <br> CPNO <br> CLJSEQ | Dates of start and finish, length in months and major job characteristics, <br> including occupation, industry, job status, reason for leaving. |
| DYOUTH | All person aged 11-15 on 1.12.94 who responded to <br> young persons questionnaire | DHID <br> DPNO | All information from Young Persons Questionnaire covering health, and health <br> related behaviour, social attitudes and aspirations. |
| EYOUTH | All person aged 11-15 on 1.12.95 who responded to <br> young persons questionnaire | EHID <br> EPNO | All information from Young Persons Questionnaire covering health, and health <br> related behaviour, social attitudes and aspirations. |

## Table 9

STATISTICS FOR RECORD TYPES

| Record Type | Wave One |  | Wave Two |  | Wave Three |  | Wave Four |  | Wave Five |  | Wave Six |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number <br> of <br> Variables | Number of Records | Number <br> of <br> Variables | Number <br> of <br> Records | Number <br> of <br> Variables | Number of Records | Number <br> of <br> Variables | Number of Records | Number <br> of <br> Variables | Number of Records | Number <br> of <br> Variables | Number of Records |
| wHHSAMP | 20 | 8524 | 20 | 5984 | 21 | 6534 | 23 | 6558 | 23 | 6553 | 23 | 6487 |
| wINDSAMP | NA | NA | 30 | 15213 | 27 | 16110 | 27 | 15903 | 27 | 15756 | 27 | 15659 |
| wINDALL | 41 | 13840 | 51 | 13151 | 51 | 13104 | 50 | 12851 | 50 | 12549 | 50 | 12720 |
| wHHRESP | 225 | 5511 | 208 | 5227 | 216 | 5232 | 216 | 5127 | 221 | 5033 | 254 | 5064 |
| wINDRESP | 816 | 10264 | 874 | 9845 | 896 | 9600 | 946 | 9481 | 1019 | 9249 | 925 | 9438 |
| wJOBHIST | 43 | 3382 | 40 | 2918 | 40 | 2918 | 40 | 3011 | 40 | 3112 | 40 | 3019 |
| wINCOME | 45 | 10462 | 48 | 9939 | 48 | 9336 | 48 | 9437 | 48 | 9611 | 48 | 9723 |
| wEGOALT | 10 | 30626 | 10 | 29266 | 10 | 29034 | 10 | 28474 | 10 | 27262 | 10 | 28272 |
| wMARRIAG | NA | NA | 23 | 7967 | NA | NA | NA | NA | NA | NA | NA | NA |
| wCOHABIT | NA | NA | 11 | 1664 | NA | NA | NA | NA | NA | NA | NA | NA |
| wCHILDNT | NA | NA | 12 | 14383 | NA | NA | NA | NA | NA | NA | NA | NA |
| wCHILDAD | NA | NA | 15 | 850 | NA | NA | NA | NA | NA | NA | NA | NA |
| wLIFEMST | NA | NA | 13 | 35474 | NA | NA | NA | NA | NA | NA | NA | NA |
| CLIFEJOB | NA | NA | NA | NA | 28 | 32773 | NA | NA | NA | NA | NA | NA |
| WYOUTH | NA | NA | NA | NA | NA | NA | 101 | 773 | 99 | 749 | 99 | 748 |

STATISTICS FOR RECORD TYPES

| Record Type | Wave Seven |  | Wave Eight |  | Wave Nine |  | Wave Ten |  | Wave Eleven |  | Wave Twelve |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number <br> of <br> Variables | Number of Records | Number <br> of Variables | Number of Records | Number <br> of Variables | Number of Records | Number <br> of Variables | Number of Records | Number <br> of <br> Variables | Number of Records | Number <br> of <br> Variables | Number of Records |
| wHHSAMP | 26 | 6531 | 25 | 7295 | 27 | 11944 | 27 | 12282 | 21 | 13986 | 26 | 12209 |
| wINDSAMP | 27 | 15583 | 26 | 17461 | 26 | 24553 | 30 | 25967 | 30 | 31458 | 35 | 29294 |
| wINDALL | 52 | 12552 | 52 | 14835 | 56 | 21566 | 60 | 21602 | 60 | 26586 | 62 | 23435 |
| wHHRESP | 257 | 5025 | 260 | 6005 | 262 | 8797 | 268 | 8761 | 268 | 10631 | 267 | 9352 |
| wINDRESP | 961 | 9373 | 1195 | 10906 | 1279 | 15623 | 1250 | 15603 | 1421 | 18867 | 1388 | 16597 |
| wJOBHIST | 39 | 3125 | 38 | 3505 | 38 | 5179 | 38 | 5451 | 40 | 5973 | 40 | 5043 |
| wINCOME | 64 | 9603 | 48 | 11873 | 54 | 18668 | 53 | 18767 | 53 | 22066 | 53 | 18414 |
| wEGOALT | 10 | 27398 | 10 | 32440 | 10 | 46650 | 10 | 47188 | 10 | 59710 | 10 | 52486 |
| BMARRIAG | NA | NA | NA | NA | NA | NA | NA | NA | 16 | 1375 | 16 | 598 |
| BCOHABIT | NA | NA | NA | NA | NA | NA | NA | NA | 9 | 1099 | 9 | 312 |
| BCHILDNT | NA | NA | NA | NA | NA | NA | NA | NA | 10 | 7840 | 10 | 5487 |
| BCHILDAD | NA | NA | NA | NA | NA | NA | NA | NA | 12 | 385 | 12 | 124 |
| BLIFEMST | NA | NA | NA | NA | NA | NA | NA | NA | 11 | 16215 | 11 | 7697 |
| CLIFEJOB | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| wYOUTH | 94 | 720 | 94 | 946 | 79 | 938 | 79 | 1414 | 79 | 1413 | 90 | 1279 |
| wCHILD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 34 | 6489 |

STATISTICS FOR RECORD TYPES

| Record Type | Wave Thirteen |  | Wave Fourteen |  | Wave Fifteen |  | Wave Sixteen |  | Wave Seventeen |  | Wave Eighteen |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number <br> of <br> Variables | Number of Records | Number <br> of <br> Variables | Number of Records | Number <br> of Variables | Number of Records | Number <br> of <br> Variables | Number of Records | Number <br> of <br> Variables | Number of Records | Number <br> of Variables | Number of Records |
| wHHSAMP | 27 | 12176 | 28 | 12090 | 26 | 11915 | 26 | 11507 | 26 | 11498 | 26 | 11415 |
| wINDSAMP | 34 | 29028 | 34 | 28490 | 34 | 28011 | 34 | 27160 | 34 | 26845 | 34 | 26403 |
| wINDALL | 62 | 22574 | 62 | 22127 | 62 | 21730 | 62 | 21389 | 62 | 20715 | 67 | 20177 |
| wHHRESP | 267 | 9045 | 273 | 8897 | 273 | 8709 | 281 | 8603 | 281 | 8346 | 288 | 8144 |
| wINDRESP | 1454 | 16238 | 1321 | 15791 | 1277 | 15627 | 1477 | 15392 | 1358 | 14910 | 1364 | 14419 |
| wJOBHIST | 39 | 4803 | 39 | 4418 | 39 | 4489 | 39 | 3162 | 39 | 3241 | 40 | 2945 |
| wJOBHSTD |  |  |  |  |  |  | 24 | 3253 | 24 | 3241 | 24 | 2945 |
| wINCOME | 53 | 19597 | 53 | 19478 | 54 | 20382 | 54 | 22452 | 54 | 21133 | 43 | 20660 |
| wEGOALT | 10 | 50106 | 10 | 48982 | 10 | 48290 | 10 | 47272 | 10 | 45728 | 10 | 44298 |
| BMARRIAG | NA |  |  |  |  |  |  |  |  |  |  |  |
| BCOHABIT | NA |  |  |  |  |  |  |  |  |  |  |  |
| BCHILDNT | NA |  |  |  |  |  |  |  |  |  |  |  |
| BCHILDAD | NA |  |  |  |  |  |  |  |  |  |  |  |
| BLIFEMST | NA |  |  |  |  |  |  |  |  |  |  |  |
| CLIFEJOB | NA |  |  |  |  |  |  |  |  |  |  |  |
| wYOUTH | 90 | 1219 | 95 | 1397 | 88 | 1413 | 97 | 1360 | 100 | 1245 | 101 | 1222 |
| wCHILD | 33 | 1649 |  |  |  |  |  |  | 34 | 6676 |  |  |

# IV. Sampling and Survey Methods 

## IV.1. Sample Design for Wave One

A sample of 8217 addresses was drawn by CACI to a specification supplied by the Research Centre. The initial selection of households for inclusion in the panel survey was made using a two-stage clustered probability design and systematic sampling. This was approximately equivalent to the current sample design of the General Household Survey (GHS). The frame used for the selection of sample units was the small users Postcode Address File (PAF) for Great Britain south of the Caledonian canal (i.e. excluding Northern Ireland). This is the frame generally used by large government surveys and has several desirable features. Full details of this selection and the results are given below.

The British Household Panel Survey is a longitudinal survey of private households in Great Britain. The initial selection of households for inclusion in the panel survey was made using a two-stage stratified systematic method as a balance between efficiency and cost and is approximately equivalent to the current sample design of the GHS (Smythe and Browne, Appendix C: Sample Design and Response, 1992). This sample design is an approximately equal probability of selection method (espem) design. The frame used for the selection of sample units was the small users Postcode Address File (PAF) for Great Britain (ie excluding Northern Ireland). This is the main frame now used by large government surveys and is, in general, the most acceptable of available frames for the selection of a sample of households in Great Britain (Wilson \& Elliot, 1987; Butcher, 1988). In the first stage of selection 250 postcode sectors were selected as the primary sampling units (PSUs) from an implicitly stratified listing of all sectors on the PAF using a systematic sampling method. In the second stage of selection, delivery points, which are approximately equivalent to addresses, were sampled from each selected PSU using an analogous systematic procedure. The details of the selection procedure are given below.

## IV.1.1. Sample Selection Procedure

## IV.1.1.1. Stage One Selection: Stratification and PSU Selection

At the first stage of sampling, 250 postcode sectors were selected as the Primary Sampling Units (PSUs), which on average contain 2,500 delivery points (equivalent to addresses). In order to make this selection, the population of delivery points was implicitly stratified into an ordered listing by region and three socio-demographic variables. The socio-demographic variables were derived from information obtained for the 1981 Census. Implicit stratification, through ordering the frame listing, allows for the use of systematic selection procedures and is preferred over explicit stratification, the definition of strata and subsequent independent sampling within each strata, since it is a more practical procedure when a large amount of stratification is employed, and helps to ensure an epsem sample. The PSUs were then selected from this listing using a systematic procedure with a random integer start and a systematically applied sampling interval.

For the purposes of stratification and selection, the size of each PSU was estimated as follows: for PSUs in England and Wales, size was estimated as the total number of delivery points in a given PSU; for those in Scotland, size was estimated as the sum of the Multiple Occupancy Indicators (MOI) for a given PSU. The MOI is an estimate of the number of separate units or households at a given delivery point. A full description of the stages of stratification and the PSU selection procedure is given below:
a. The population of postcode sectors was ordered into 18 regions (see Table 10). All PSUs were then checked for size to ensure that they contained, at minimum, 500 households. Where PSUs did not meet the size criterion they were grouped, prior to the first stage selection, with their nearest adjacent sector, where adjacent was defined as the shortest straight line distance from the centre of the undersized sector.
b. Within each of these implicit regional strata, PSUs were ranked in order by the proportion of
heads of households in socio-economic groups 1 to 5 and 13 (that is, the proportion of heads of households in professional or managerial positions). Within each region, PSUs were then split into major strata of approximately equal size (on the basis of estimated delivery points as calculated above). PSUs were not split between strata. The number of major strata varies by region from two to three, depending on region size and is detailed in Table 10.
c. Within the major strata created within regions, PSUs were then re-ranked by the proportion of the population of pensionable age (ie females over 60 and males over 65). The order of sorting alternated between ascending and descending within each successive major strata (i.e. a serpentine listing), in order to ensure that the listing was as heterogeneous as possible so that potential periodicity problems in the frame could be avoided. The major strata were then split into two minor strata each of approximately equal size, PSUs not being split between strata.
d. Finally, within the minor strata PSUs were re-ranked, again using serpentine listing under the following scheme:
(i) PSUs in non-metropolitan areas were ranked by the proportion of the employed PSU population working in agriculture (denoted AGEMP in Table 10) and
(ii) PSUs in metropolitan areas were ranked by the proportion of the PSU population that was both under pensionable age and living in single person households (denoted SPH in Table 10).

Two separate factors were used, since they discriminated overall population characteristics more effectively in the two types of area.

For example, Table 11 gives a diagrammatic representation of the stratified listing for PSUs in Outer London:

From the resulting implicitly stratified ordered listing of the population of PSUs on the frame, 250 were selected with the probability of selection being proportional to the size of the PSU, using a systematic procedure with a random integer start and consistently applied sampling interval, with the list being treated as circular.

## IV.1.1.2. Stage Two Selection: Address Selection

From each of the 250 PSUs selected at stage one, it was intended to select on average thirty three delivery points using a systematic sampling procedure. Since it was necessary, for reasons of fieldwork efficiency, to allocate interviewers to selected areas some time before the fieldwork period began the PSUs were selected some time before the final selection of delivery points. It was thought appropriate to select delivery points from the PAF as late as possible to ensure the use of the most recent possible list of addresses. In order to retain equal selection probability, some account had to be taken of changes in PSU size arising from PAF updates in the interval between the first and second stage selections. As a consequence, the final selected sample varied slightly from the required 33 addresses per section with, in total, 8166 delivery points being selected. The lowest number in any sector was 21 with the highest being 36 .

There were slight differences in the methods of address selection in Scotland compared to England and Wales as described below.

## Table 10 Definition of Regions and Strata

| REGION | MAJOR STRATA | MINOR STRATA | PSUs RANKED BY |
| :---: | :---: | :---: | :---: |
| INNER LONDON | 2 | 2 | SPH |
| OUTER LONDON | 3 | 2 | SPH |
| REST OF SOUTH EAST | 3 | 2 | AGEMP |
| SOUTH WEST | 3 | 2 | AGEMP |
| EAST ANGLIA | 2 | 2 | AGEMP |
| EAST MIDLANDS | 3 | 2 | AGEMP |
| WEST MIDLANDS CONURBATION | 2 | 2 | SPH |
| REST OF WEST MIDLANDS | 2 | 2 | AGEMP |
| GREATER MANCHESTER | 2 | 2 | SPH |
| MERSEYSIDE | 2 | 2 | SPH |
| REST OF NORTH WEST | 2 | 2 | AGEMP |
| SOUTH YORKSHIRE | 2 | 2 | SPH |
| WEST YORKSHIRE | 2 | 2 | SPH |
| REST OF YORKSHIRE AND HUMBERSIDE | 2 | 2 | AGEMP |
| TYNE AND WEAR | 2 | 2 | SPH |
| REST OF NORTH ENGLAND | 2 | 2 | AGEMP |
| WALES | 2 | 2 | AGEMP |
| SCOTLAND | 3 | 2 | AGEMP |

Table 11 Outer London PSUs

| \% HouseHolds in <br> SEG 1-5 \& 13 | HIGH |  | MEDIUM |  | LOW |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| \% Population <br> Pensionable | HIGH | LOW | LOW | HIGH | HIGH | LOW |
| \% Population <br> Under Pensionable <br> Age in SPH | HI>LO | LO>HI | HI>LO | LO>HI | HI>LO | LO>HI |

## Selection of Sectors in England and Wales

Each delivery point was selected with equal probability. Sampling was carried out by means of a random number start and a systematically applied sampling interval. The random start was an integer chosen from the range 1 up to and including the interval. Since changes had occurred in the sizes of some of the selected sectors in the updated PAF, the applied sampling interval was taken as the new sector size divided by the required number of addresses (ie 33) adjusted by the ratio of the old sector size to the new sector size.

## Selection of Sectors in Scotland

Each delivery point was selected with probability proportional to its MOI. An analogous systematic procedure was used as defined above using the same definitions of the random start integer and the sampling interval.

## IV.1.1.3. Stage Three Selection: Selection of Households within Delivery Points

Non-residential addresses were excluded from the sample at the interviewing stage of Wave One, as were institutions. For the purposes of the survey, an institution was defined as
an address at which four or more unrelated people sleep; while they may or may not eat communally, the establishment must be run or managed by a person or persons employed for this purpose by the owner.

Selection of households from delivery points was carried out by the interviewers at the time of fieldwork. The selection procedure used by the interviewers was as follows: for a selected delivery point with up to three households present, all households were included in the sample. If there were more than three households at an address, a random selection procedure defined on the total number of households present was used to select three households from the total number available for inclusion in the sample. This was operationalised using a Kish Grid on the Multi-Household Selection Sheet. Ideally, given the different address selection procedures in Scotland, a different procedure would have been adopted for multiple households there. However, it was found to be impossible to carry out a more precise selection procedure due to fieldwork and organisational constraints. The design weights allow for this problem (see section on Weighting and Imputation).

The standard OPCS definition of a household was used to establish the sample:
one person living alone or a group of people who either share living accommodation OR share one meal a day and who have the address as their only or main residence.

Up to six months continuous residence during the year was a minimum requirement, thus excluding students who might have been at a parental home during vacation. Students sampled at their term-time address were included if this was non-institutional (i.e. not a hall of residence). Interviewers identified a

Household Reference Person (HRP) using the following definition: the person legally or financially responsible for the accommodation or the elder of two people equally responsible.

Interviews were sought with all resident household members who were aged 16 or over on 1st December 1991. Proxy interviews were attempted for all eligible members of the household who could not be interviewed because of illness or absence.

## IV.1.2. Sample Size Calculations

The target sample size was set at 5000 households with the following calculations defining the required number of addresses to be selected in order to achieve this. The divergence of the selected sample from the calculations presented here was due to the updating of the PAF between the times of PSU and address selection, as explained above.
a. Assuming a $67.5 \%$ response rate:
$5000 \times 1 / .675=7407$ households need to be selected
b. Assuming, on average, 1.02 households per address:
$7407 \times 1 / 1.02=7262$ addresses need to be selected
c. Assuming $12 \%$ of addresses on the frame are ineligible:
$7262 \times 1 / .88=8252$ addresses need to be selected
d. Given that the sample is approximately equally spread over 250 PSUs:

8252/250 = 33 addresses need be selected per PSU

## IV.1.3. Bibliography

Butcher, R. (1988) "The use of the post-code address file as a sampling frame." The Statistician, 37; pp 15-24.

Smythe, M. and Browne, F. (1992) General Household Survey 1990, OPCS Series GHS no.21, HMSO: London.

Wilson, P.R., \& Elliot, D.J., (1987) An Evaluation of the Postcode Address File as a Sampling Frame and its Uses with OPCS., JRSS(A), 150(3), pp 230-240.

## IV.2. Sampling and Following Rules after Wave One

This section reproduces information also appearing in Section II.
The sample for Wave Two and beyond consists of all eligible adults in all households where at least one interview was obtained in Wave One, regardless of whether that individual had been interviewed in Wave One. Thus, with a few exceptions, an attempt was made to interview all those individuals in responding households who had refused to participate at Wave One, or for any reason had been unable to take part. All these sample members are known as Original Sample Members (OSMs). In addition, a number of households where no contact had been made in Wave One were approached for interview in Wave Two after confirmation that no household moves between waves had taken place.
The following rules applied in subsequent waves differed from the sample rules in Wave One in only one respect. In both, eligibility depends on domestic residence in England, Wales, or Scotland below the Caledonian Canal. However, OSMs were followed into institutions (unless in prison or in circumstances where the respondent was not available for interview e.g. too frail, mentally impaired and so on) in waves after Wave One, or into Scotland north of the Caledonian Canal.

New eligibility for sample inclusion could occur between waves in the following ways:

1. A baby born to an OSM.
2. An OSM move into a household with one or more new people.
3. One or more new people move in with an OSM.

Children born to OSMs after the start of the study automatically count as OSMs. New Entrants to the sample (categories two and three) become eligible for interview on the standard OPCS household definition, (i.e. as long as they were living with an OSM and `either share living accommodation OR share one meal a day and have the address as their only or main residence'). The main requirement for marginal cases of household membership was six months continuous residence during the year. This excluded students who might have been at a parental home during vacation (students were treated as members of their term-time household). The household non-contacts from Wave One referred to above count technically as OSMs but for all practical purposes (in particular the need to obtain `initial conditions' data) were treated as new entrants. The sample for each wave thus consists of all adult OSMs plus their natural descendants plus other adult members of their households, known as Temporary Sample Members (TSMs).

Once household membership is determined, interviews are sought with all resident household members aged 16 or over on 1 December of the sample year, thus including OSMs previously coded as children. Proxy interviews with another household member were carried out for eligible members who were either too ill or too busy to be interviewed.

Where OSMs were not found at the expected address, interviewers attempted to trace them using a variety of methods. These are described below. Interviewees who do not qualify as OSMs are only reinterviewed in subsequent years if they are still co-resident in households with OSMs. However, a subset of TSMs become permanent sample members, and are followed even if they no longer reside with an OSM. The criteria for this status is that the TSM is the parent, with an OSM of a new OSM birth.

In Wave One, the sample was of individuals in private households; in subsequent waves, however, the sample consists of all original sample members from Wave One plus people co-resident with OSMs. Sample members in institutions are interviewed whenever possible, excluding, as in Wave One, those in permanent or long-stay institutions where the respondent was too elderly or too unwell to be approached, and those in prison.

All non-responding adults within responding households were `re-issued' in Wave Two and beyond, while whole-household non-responders are withdrawn. An exception was made, however, in the case of a non-contact at a located address, partly in order to see whether their characteristics differed significantly from those of the main sample. From fieldwork through to analysis, this group has been treated as a distinct sub-sample.

In Wave One, 288 households fell into the above category. A number of these may have been genuinely unoccupied; even where occupied, the occupants may have moved out between Waves One and Two. Only those originally resident could count as eligible for the attempted re-contact. A brief questionnaire was therefore sent to each of these addresses asking if the resident was living there before the end of Wave One fieldwork (taken for this purpose as the end of 1991). Negative replies were received from 15 addresses. All of those remaining, other than three refusals, were reissued in Wave Two. Interviews were achieved in 43 households, producing 79 OSMs, of whom 62 were adults (and including five new entrants). The exercise produced 60 interviews or proxies.

## IV.3. Data Collection and Fieldwork

The Research Centre together with NOP Social and Political (a part of MAI), who were commissioned to conduct the fieldwork, worked closely together on all aspects of data collection, implementing an agreed set of survey-specific procedures designed to ensure adequate response and effective data quality.

For field purposes, the British Household Panel Survey is called simply `Living in Britain.' The complexity of the survey and the need to maintain the panel year-on-year necessitated a close and continuous working relationship between the Centre and its fieldwork agency throughout the year. NOP organised and controlled fieldwork, editing, coding and data-entry, and at the same time advised on the design of all research instruments. Primary responsibility for design work and production of interviewer instructions, as well as design and production of additional briefing materials remained with the Centre, which also provided staff on a regular basis to advise on editing and coding decisions. The Centre also played a major role in quality control through specification of fieldwork practices, editing and coding requirements; random review of editing outputs; accompaniment of interviewers; supplementing checks
on interviews with telephone calls to respondents; and subjecting fieldwork progress to detailed weekly scrutiny. An agreed set of survey-specific procedures designed to ensure adequate response and effective data quality reinforced this working relationship. Full details of these, and other technical aspects of the data collection and fieldwork, coding, and data processing can be found in The British Household Panel Study Technical Reports. See Appendix 5 for a full list of BHPS publications.

## IV.4. Preparatory Work for Wave One

The first stage of the Wave One Mainstage survey was preceded by a number of pretests and pilots. Pretest interviewing allowed draft questionnaires and procedures to be tested, evaluated and improved. Pilot interviewing was a "dress rehearsal" testing of the data collection instruments and procedures. By way of example, the schedule for this is illustrated in Table 12.

| Table 12 |  |  |  |
| :---: | :---: | :---: | :---: |
| PRETESTS (50-300 issued addresses) |  |  |  |
| Tests | Location | Fieldwork Organisation | Date |
| Household and employment | Colchester and Sheffield | Research Centre | April 1990 |
| All schedules | Colchester and Sheffield | Research Centre | May 1990 |
| All schedules and full procedures | Colchester and Sheffield | Research Centre | June/July 1990 |
|  | London | NOP |  |
| Calendar Design | Colchester | Research Centre | September 1990 |
| PILOTS |  |  |  |
| Full Dress Rehearsal (effective sample size $=657 \mathrm{HH}$ ) | National | NOP | Oct/Nov 1990 |
| Full Dress Rehearsal (effective sample size $=609 \mathrm{HH})$ | National | NOP | April/May 1991 |
| Note: Effective sample size = issued addresses minus ineligible addresses. The achieved response rate in the first pilot was deemed inadequate as a preparation for mainstage; the second pilot was established to ensure a successful full-scale rehearsal. |  |  |  |

## IV.5. Preparatory Work for Subsequent Waves

For subsequent waves, mainstage fieldwork is preceded by two pre-tests and (Waves Two and Three) a full-scale pilot. Pretests were used to test the variable component that was added to each wave. Feedback from interviewers in debriefings after both pretests and the pilot facilitates important revisions of both the new section of the questionnaire and the longitudinal fieldwork procedures.

## IV.6. Interviewers

For Wave One, 243 interviewers were employed to cover 250 areas in the sample, generally one per area. Because of the demanding nature of the BHPS special attempts were made to use interviewers of above average levels of experience and ability.

In subsequent waves, the great majority of respondents still lived in the same two 250 sectors, but because of household and individual moves, the sample has become slightly, but progressively more, dispersed over time. Details of movers are given to NOP and local NOP field managers are advised on which of the 250 original interviewer allocations it was most sensible to put each mover. Thus, to all intents and purposes, there remain 250 sample areas. With the exception of the Inter-Penetrated Sample, described below, generally speaking one interviewer works in each of the 250 areas in the sample. In total, for example, 237 interviewers worked on Wave Two, all but 35 of whom had also worked on Wave One.

## IV.7. Briefings

For Wave One, all interviewers and field supervisors were briefed at one of 14 two-day briefing sessions, presented jointly by the Research Centre and NOP all round the country. A special training video was prepared by the Centre for use in these briefings.

In subsequent waves, interviewers and area managers are briefed at one of 14 briefing sessions, held in different locations. All the interviewers with previous BHPS experience attend one-day briefings, while the interviewers new to the survey attend a two-day briefing, conducted jointly by NOP executives and Research Centre staff. Again, a short video is included as part of the one day briefing, designed to give interviewers a greater understanding of the way in which the whole Living in Britain survey works. In particular, it shows the coding team using the CASOC (Computer Aided Standard Occupational Classification) coding and the problems that can arise from inadequate job descriptions.

## IV.8. The Fieldwork Process

The Wave One fieldwork period started on 3 September, and ended in mid-December with some minimal follow-up work in early 1992.

Before contacting any of their sample, interviewers mailed out an introductory letter from the Research Centre to all sampled addresses (addressed to "The Occupier"), together with a small leaflet outlining the purpose of the survey. The interviewer called within a week of dispatch. All participating households later received a more detailed brochure, giving further information about the survey and thanking respondents for participating. Copies of the documents sent to respondents can be obtained from the Institute for Social and Economic Research.

A minimum of six calls was made at each sampled address before it was considered a non-contact; interviewers were encouraged to make further calls, if possible. If the Centre considered a conversion of those households which refused to participate worthwhile, a special conversion letter was sent by the Centre. In all, 685 refusals were re-contacted, and 62 extra interviews were obtained by supervisors converting refusals into interviews. In total, interviews were achieved in 5538 households, with full or proxy interviews with 10,302 individuals.

In subsequent waves, all eligible respondents, excluding a small number of firm refusals, were sent an advance letter prior to contact by the interviewer. Interviewers were supplied with this introductory letter for every eligible member of their sample households and were responsible for posting this just before expecting to call on the household.

The fieldwork period thus starts in early September, though the start is staggered over three weeks because of the spread of briefings. Most of the fieldwork is completed by the beginning of December, but with the time-lag resulting from the process of tracing of movers and conversion of refusals, a small number of interviews are undertaken in the first three months of the next year.

In line with the overall concern for quality control, all interviewers are accompanied at the beginning of the interview period by their supervisor, who complete a duplicate copy of the interview. A twice weekly field progress monitor carried out by supervisors assesses interviewer progress. This information is, from Wave Two, fed into a specially designed computer database, which produces weekly summary report which are sent to the Centre. Two forms of post interview quality control are carried out: a postal recall on $10 \%$ of all completed interviews, and field supervisor recalling on completed interviews by
phone to check that an interview has taken place in that household, and that the claimed individual interviews has been conducted. The Research Centre supplements the call-back quality control process by telephone. In addition to the above consistency checks, this provides an indication of respondents' reactions to the BHPS interview on issues such as the length of the interview, content, concerns about personal questions obtaining personal and possibly sensitive information and other overall impressions.

## IV.9. Refusal Conversion

At each wave, the Centre and NOP undertake a thorough refusal conversion process to attempt to minimise attrition due to refusal and other forms of non-response. This process covers both previous wave refusals, and also new refusals encountered in the current wave. This section describes this refusal conversion process, and the conditions under which we withdraw previous wave refusals from the BHPS survey process. For illustrative purposes, the situation for Wave Three is discussed here.

## IV.9.1. Previous wave refusal

The refusal conversion work undertaken at Wave Two left a complicated pattern of types of refusal to deal with in Wave Three. In total, there were 654 refusing households at Wave Two, broken down into the categories given in Table 13 below.

Table 13

| Wave Two Whole Household Refusal | $\mathbf{N}$ | \% |
| :--- | :---: | :---: |
| No conversion attempted | 197 | 30.0 |
| NOP attempted conversion but failed | 181 | 28.0 |
| Centre attempted conversion but failed | 241 | 37.0 |
| Centre converted by phone. NOP were refused interview | 35 | 5.0 |
| Total | $\mathbf{6 5 4}$ | $\mathbf{1 0 0 \%}$ |

With regard to whole household refusal, the Wave Two conversion programme mounted by the Centre comprehensively reviewed these cases, contacting and returning to those which it was considered might be converted. In addition, up to three attempts were made to convert these households (interviewer, supervisor, Centre). We did not seek to interview any households in these categories again unless there was reason to believe that the refusal was for Wave Two only and that the respondent would agree to be interviewed this year. Prior to Wave Three, all Wave Two refusals were extensively reviewed. Out of all 654 Wave Two refusing households, 354 ( $54 \%$ ) were re-issued at Wave Three.

## IV.9.2. Current wave new refusals

When new refusals were encountered at Wave Three, a number of procedures were implemented:

1. A refusal form was used consisting of a full A4 page integrated within the coversheet. This allowed the interviewer to give more detail on the nature and reason for refusal. Each subsequent conversion attempt was logged on this form or continuation sheets.
2. A wider group of experienced interviewers was asked to take on conversions in order to limit the distance field managers have to travel.
3. A bonus payment was given to interviewers for successful conversions.
4. In some circumstances interviewers were issued with vouchers prior to returning to attempt
conversion.
Different types of refusal warranted different responses as highlighted below:
5. Weak reasons for refusal: can't be bothered, too busy, boring, did not receive vouchers last time, and so on: these respondents were sent a conversion letter and reissued with vouchers to be given on successful completion of interview.
6. Strong reasons for refusal but not conclusive: I am busy looking after very ill parent, I have just come out of hospital: these respondents were sent a conversion letter, and telephoned if possible from Centre. If there was no telephone number, respondents were written to, with a return slip indicating willingness for continued co-operation. If the respondent decided to continue to take part, they were reissued with vouchers.
7. Conclusive refusal: do not darken my door again, and so on: no action was taken with respondents in this wave. Judgement as to whether to try again at the next wave will be made by the Centre. Two consecutive conclusive refusals are seen as signalling the household's withdrawal from the survey after tailored persuasion letters have failed to have any affect.

Table 14 illustrates the variety of reasons given by households for non-participation at Wave Three. Although the total number of household refusals (758) initially looks quite high, 354 (47\%) of these households had also refused to participate at Wave Two, but had been reissued in the hope that their situation might have changed.

When a phone number was available and a conversion attempt was judged possible, the Centre attempted telephone conversions from January 4th 1994 onwards. When the attempt was successful, the household was reissued to the original interviewer, who had to call within 7 days of receipt of the coversheet. If successful, the interviewer received the usual interview fee plus a bonus; if not, the interviewer got the usual non-contact fee plus the bonus.

An aspect of refusal conversion new to Wave Three and a feature of all later waves was the introduction of a short telephone interview, carried out by a single, very experienced interviewer, hired directly by the Research Centre. Her initial approach on each call was to elicit the respondent's view of the survey and what aspect of it, if any, had led to their refusal. The telephone interview is only taken with respondents who are definitely unable to be interviewed at the current wave and would therefore refuse any other approach.

Table 14

| Reasons given for Household Refusal at Wave Three | Frequency | Percentage |
| :---: | :---: | :---: |
| Competence of Respondent |  |  |
| Too ill | 83 | 11.0 |
| Too elderly | 6 | 1.0 |
| Respondent is senile or incompetent | 22 | 3.0 |
| Respondent does not speak English | 5 | 1.0 |
| Stressful family situation | 49 | 6.5 |
| Too Busy |  |  |
| Looking after ill/elderly | 6 | 1.0 |
| Looking after child(ren) | 3 | 0.5 |
| Respondent almost never home | 29 | 4.0 |
| Respondent is temporarily absent | 8 | 1.0 |
| Too busy (not elsewhere specified) | 70 | 9.0 |
| Personal Reasons |  |  |
| Unhappy about confidentiality | 5 | 0.5 |
| Questions too personal | 20 | 2.5 |
| Attitudes towards survey |  |  |
| Respondent does not want to be bothered | 172 | 23.0 |
| Nothing has changed since last year | 10 | 1.0 |
| Survey is too long | 20 | 2.5 |
| Survey is waste of time | 19 | 2.5 |
| Previous bad experience with surveys (in general) | 4 | 0.5 |
| Had problems with LIB voucher payment in past | 16 | 2.0 |
| Family Pressure |  |  |
| Other family member opposes Respondent participating | 23 | 3.0 |
| Someone has convinced Respondent to refuse | 3 | 0.5 |
| Other HH member refuses on behalf of Respondent | 29 | 4.0 |
| Other |  |  |
| Other | 10 | 1.0 |
| No reason given | 146 | 19.0 |
| Total | 758 | 100\% |

They fell mainly into the following groups:
a) Too ill/old, e.g. respondents who were unable to give an appointment because of the changing conditions of their health or would find it difficult to sit through a one-hour interview.
b) Personal Circumstances, e.g. respondents who had recent bereavements in the family or are going through a divorce.
c) Too busy, e.g. respondents who were carers or had other heavy commitments and just didn't have the time.

Telephone interviews were carried out only with those who had been interviewed either at Wave One or Wave Two.

Where no telephone was available, but conversion was judged possible, the Centre sent the respondent a letter with a bonus voucher and a refusal card. If the card was not returned within 7 days, the nearest interviewer called. For a successful interview at this point, the double interview rate was paid. Respondents achieved a further voucher payment following the interview.

Letters were sent to those without a phone number, followed by a visit from an interviewer with access to all the notes made by the previous interviewer and, where applicable, the relevant field executive. (In most cases, the re-call was made by the original interviewer, who received a bonus for a successful conversion.) In addition, respondents received an extra gift voucher, partly as an acknowledgement that more approaches had already been made to them seeking an interview than in other cases (for instance, by a field executive after the first refusal). To maximise response, this voucher was sent in advance of the interview.

Conversion procedures were implemented on 546 households during Wave Three. The impressive results of this exercise can be seen in Table 15

Table 15

| Summary of Wave Three Refusal-Conversion Exercise |  |  |
| :--- | :---: | :---: |
|  | $\mathbf{N}$ | $\%$ |
| Telephone Conversions | 95 | 17.0 |
| Postal Conversions | 12 | 2.0 |
| Telephone Interviews | 254 | $47 / 0$ |
| Total Converted | 361 | 66.0 |
| Not Converted | 185 | 34.0 |
| Total Attempted | 546 | 100 |

## IV.10. Maintaining Contact with Respondents

The process of maintaining contact with respondents is obviously, in a household panel study, a crucial and complex one which continues throughout the year. The description below outlines some of the techniques used in the BHPS to maintain contact with panel respondents, and to trace those who moved in the period between fieldwork periods of successive waves.

## IV.10.1. Panel maintenance

The Centre maintains an extensive database of information on respondents' location; this database is continuously up-dated with new information which it receives. This database is the basis on which all fieldwork documents for successive waves of the survey are prepared.

At least two types of communication with respondents are made between each wave, both to ensure accurate information on residence before entering the field in September, and to foster a sense of identity with the survey among respondents. After the interview, a thank-you letter is sent from the Research Centre to all those interviewed, enclosing a gift voucher and a change-of-address card requesting notification of any intended move. Prior to fieldwork for the next wave, a summary report of findings was sent to all adults (except refusals), enclosing an address-confirmation card. Interviewers were subsequently informed of all address confirmations so that they could identify addresses which required checking early in the fieldwork period. Cards also requested information on any moves by respondents from the household in the past year, even if members of the original household were still remaining at the original address. This not only minimised the amount of tracing work required of interviewers during fieldwork but also aided the preparation of correct documents for each address. The cards were also often forwarded to the Centre in cases where a whole household had moved, or a new resident returned the card giving the forwarding address. Finally, some deaths were also notified to the Centre through this means. (A letter of condolence is usually sent where this is considered appropriate.)

The result of this work means that some major aspects of the sample issued in each wave are significantly different from that which existed at the end of the previous wave, with many new addresses, household splits, and moves out-of-scope (or into an institution). Deaths could also be taken into account.

## IV.10.2. Procedures during fieldwork

Within the Centre, cover sheets were produced containing the last known address of sample members, using information from the panel maintenance database mentioned above. Moves notified subsequent to this but prior to the briefings were given to interviewers on separate listings. Moves discovered by interviewers during fieldwork were dealt with in two ways:

1. The interviewer was required to seek a forwarding address or phone number from other respondents, any new residents, neighbours. Failing these sources they were asked to consult local phone directories, shops or the post office where appropriate.
2. Where no forwarding address was available, they were required to enter details of the missing respondents on a movers form for return to the Research Centre. Panel maintenance staff then approached people that respondents had given as points of contact at the end of the previous wave (see tracking section in the household composition form (Volume B). Attempts were made to trace people who failed to give contact names, or where no forwarding information was obtained from these, through access to the computerised telephone directory, though this helped in only a very small number of cases.

## IV.11. Confidentiality and Informed Consent

The Research Centre has adopted, in full, the Ethical Guidelines of the Social Research Association, which conform very closely with those of the International Statistical Institute. To ensure confidentiality, names and addresses are separated from substantive data in both its computer and paper records, and strict internal procedures are enforced. All staff are required to sign an undertaking of confidentiality. Every attempt was made to ensure that people approached for interview could respond on the basis of informed consent, by:
a. sending letters to sampled households in advance of fieldwork, enclosing a freephone number, allowing time and opportunity for potential respondents to seek further information or to refuse an interview.
b. providing background information through a leaflet and a brochure, either before or during interview, and a report on findings some time after interview. It also made available a Statement of Confidentiality upon request. (Copies of these, and other respondent documents, can be supplied on request).
c. requiring interviewers to read the following statement before interview:

This interview is completely voluntary. If we should come to any question that you don't want to answer, just let me know and we'll go on to the next question.
d. requiring interviewers to make clear before leaving each respondent that the survey would continue in the following year. Tracking information is obtained to allow respondents to be traced in case of loss of contact. No attempts are made to persuade respondents to commit themselves to the entire life of the panel.

The Centre has registered its analysis of the BHPS data with the Data Protection Registrar.

## IV.12. Data Processing

BHPS data have gone through two major processing phases, carried out by the fieldwork agency NOP and at the Research Centre:

Visual edits and data input;
Data cleaning.
Figure 5 presents an overview of the BHPS Survey Data Processing steps

## IV.12.1. Visual edits and data input

The BHPS data were collected via a paper and pencil questionnaire. Visual edits are restricted to a small number of crucial checks, including one to ensure that identifiers have been correctly carried over between schedules. After coding of open ended questions, data are keyed to disk by the fieldwork agency (NOP), 100\% verified, and are then subject to a small number of checks for the overall integrity of the raw data structures prior to being sent to the Centre for more in-depth processing.

## IV.12.2. Data cleaning

During the initial period of the data processing cycle, the Centre receive small amounts of data from NOP on a periodic basis. At the Centre, they are put through a staged series of procedures to check both for consistency and plausibility.

On receipt, each batch of raw data are scanned to produce a listing of card types associated with each household and with each person in it; this listing is cross-checked against the schedules received to ensure both that no schedules have been lost and that all schedules have been punched. In addition, a small number of checks are run to ensure that the data can be loaded into the "survey" database with the minimal number of structural errors.

Once error free to this point, the raw data file is restructured, loaded into the survey database, and subjected to a more intensive cycle of checking and cleaning.


Figure 6 Overview of BHPS Survey Data Processing

The "survey" database refers to the data structures in use during the data cleaning process. The structures have been designed to represent as accurately as possible the structure and content of the questionnaire, and have been implemented as a "caseless" (i.e. non-hierarchical) SIR database. ${ }^{1}$ It is necessary to restructure the raw data in order to map its "card" based logic on to the "record" based logic of a SIR database, and to define a suitable household level identifier for each Record Type.

Range checks are implemented across all variables, and the data undergo two major sets of consistency checking and cleaning procedures. The first set checks for major continuity errors, data assignment errors, errors in inter-person referencing within a household, as well as a wide range of checks on the integrity of the job history section. The second set deals with the remaining continuity errors. At all points, "global" edits are employed whenever the detailed examination of a set of errors indicated a systematic problem which can be corrected by a general re-code.

Additionally, Centre staff have access to the data throughout the cleaning period, and their analyses have also contributed to the data cleaning exercise.

## IV.13. Coding

All occupations are coded to the 1990 OPCS Standard Occupational Classification and also to the 1990 Standard Industrial Classification. SOC coding was carried out using the Computer Assisted Standard Occupational Classification (CASOC) system developed by Peter Elias. ${ }^{2}$ This involves keying into a computer the verbatim description of occupation recorded by the interviewer. The computer then suggests a single suggested code, or a series of suggestions. In the latter case, the coder uses other information on the questionnaire, and other information about the codes supplied by the computer, in order to assign a final code for that occupation. In all cases a full 6 digit code was assigned, the first three digits being the normal three-digit SOC, and the other three being special codes used to permit matching between 1990 SOC and previous occupational classifications. A special feature of CASOC is that is contains the algorithms to re-code SOC codes into SEG, RGSC, Goldthorpe, Hope-Goldthorpe, Cambridge Scale and ILO-ISCO 88. This re-coding has been carried out in the current release of BHPS. All the derived occupation/class variables data have been done via the CAMCON utility in CASOC.

Coding of all other open questions are carried by trained coders using traditional paper based methods. In some instances this is carried out using pre-existing coding frames, such as the 1980 Standard Industrial Classification. Where such frames do not exist, they are developed by the Research Centre on the basis of listings of verbatim responses.

As a validation exercise on the coding, a sample of questionnaires was subjected to blind re-coding by a second coder. All questions coded were included in the re-coding, with a sample of 5\% or 250 cases being re-coded. The results of this validation exercise are in BHPS Technical Paper 7.

## IV.14. The Inter-Penetrating Sample

As part of the Research Centre's on-going programme of methodological research, an experiment was conducted in Wave Two to try to measure correlated response variance, in the form of interviewer effects. Normally interviewer effect is hard to assess in a survey because each sampling point is only worked by one interviewer, and so it is impossible to separate interviewer from other effects.

An inter-penetrating design was implemented in a sample of PSUs in Wave Two of the survey. Due to field requirements and travel costs, the BHPS adopted a constrained form of randomisation in which addresses were allocated to interviewers at random within geographic `pools'. These pools consisted of two or three nearby PSUs. All PSUs whose centroid was a minimum of 10 kilometres away from the centroid of at least one other PSU were eligible for inclusion in the design. One hundred and fifty three

[^2]of the 250 PSUs in the BHPS sample were eligible. Mutually exclusive and exhaustive combinations of these 153 eligible PSU's were then formed. This process resulted in 70 pools of two or three PSUs each. A systematic sample of 35 pools was then selected for inclusion in the inter-penetrating sample design.

Twenty six of the 35 geographic pools included 2 interviewers and 2 PSUs, 5 included 3 interviewers and 3 PSUs, and four proved to be ineligible as the same interviewer was needed to cover all of the PSUs in the pool. Within a given pool, households were randomly assigned to the interviewers working in those PSUs.

Households involved in the experiment are indicated in the dataset by the variable BIVIPS, where $1=$ Designated for experiment, $2=$ Not designated for experiment, and $3=$ Designated for experiment but ineligible because moved out of pool. The case of a 2 interviewer/2 PUS pool can be conceived of as a two-by-two table.

AREA (BIVIA)
001 006

001
Interviewer assignment (BIVIAM)

006


As area and interviewer variance components are no longer confounded, one can obtain a separate estimate of the correlated response variance due to interviewers. This can be thought of as a pseudo design factor for interviewers, that is

$$
\text { pseudo-deft }=\sqrt{ }(1+p(m-1))
$$

where \#m\# is the average interviewer workload and $p$ is the intraclass correlation coefficient for interviewers. This has an effect on confidence intervals in the same way as a standard deft.

$$
\text { estimated proportion + } 1.96 \times \text { (pseudo-deft x se se(prop)srs }
$$

Ideally both pseudo-deft and deft should be considered in the width of the confidence interval. Incorporating an independent estimate of each of these in the above formula, however, will overestimate the width of the confidence interval as the two defts are correlated. ${ }^{3}$

## IV.15. The Young Person's Survey: The British Youth Panel (BYP)

## Background to the survey

The BHPS was supplemented in wave four to include children in sample households and this has been maintained in subsequent waves. The age band is 11 and 15 inclusive but with slight alteration at each end of this range in line with the BHPS criterion for selection into the adult sample. Those 15 -year olds turning 16 by 1 December in the current wave are interviewed as adults rather than in the youth survey even if interviewed before then, while 10-year olds turning 11 by this date are included.

The Institute is very grateful to the Health Education Authority for its help in funding this extension to the BHPS in wave 4 and subsequently. The BYP offers for the first time in this country a yearly panel survey which offers three important research advantages:
3. A thorough exploration of data from the experiment was conducted by $P$. Campanelli (Survey Methods Centre, SCPR) and C O'Muircheartaigh (LSE). P Campanelli (35 Northampton Square, London EC1V OAX, 071-250-1866) can be contacted for further information.

1. Because of the transitional nature of adolescence, youth panels are a scarce resource. The BYP is an on-going panel with an increasing pool of transitions which can be studied as new 11 -year olds are added and as the cohorts move upwards one year. Every year the number of wave-on-wave and longer transitions increases.
2. Equally, as respondents move into the adult survey analysis of their responses in the BYP can be linked to their responses in the BHPS.
3. As with the BHPS, the full range of household information is available to enable analysis of the impacts of both home context and of specific relationships, whether with parents, siblings, or other household members.

## Interview procedure

The questions for the children are tape-recorded and delivered through use of a personal stereo system, which respondents can control at their own pace. The child can therefore also complete the questionnaire while adult members of the household are being interviewed. The interviewer's only task is to hand over the personal stereo equipment, tape and questionnaire form, and to collect the completed questionnaire.

The main purpose of the personal stereo system is to ensure confidentiality even where family members might be present. This is further assisted by printing only response categories, that is without the questions themselves, on the questionnaire form. Any household member scanning the child's responses would therefore not be able to link these with the original questions.

## The questionnaires

The questions are different from the adult survey. While about two thirds of these have been retained throughout the life of the BYP as a continuous core, the questionnaire was revised for wave 5 and then for wave 7. The non-core questions are therefore replaced or rotated every two years. In wave 4 the main focus was the health, health behaviour, psychological well-being and aspirations of young people, and in particular to see how these are associated with family relationships. For this reason also, the adult questionnaire contained a small number of new questions for parents of eligible children which were designed to match key questions in the Young Person's questionnaire. In waves 5 and 6 further questions on health behaviour and psychological well-being were asked, while in waves 7 and 8 the focus has shifted to social networks.

## Panel Design

The BYP is effectively a variant of the standard rotating panel. That is, while a core group remains within the panel for some time (a maximum of five waves) every wave one year group is "lost" (to the adult survey) to be "replaced" by previous "rising-elevens". The full scheme over the current four waves is as follows.

|  | Age |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | $\mathbf{1 1}$ | $\mathbf{1 2}$ | 13 | $\mathbf{1 4}$ | $\mathbf{1 5}$ | 16 | 17 | 18 |
| wave 4 | A | B | C | D | E |  |  |  |
| wave 5 | $F$ | A | B | C | D | $E$ |  |  |
| wave 6 | $G$ | $F$ | A | B | C | $D$ | $E$ |  |
| wave 7 | $H$ | $G$ | $F$ | A | B | $C$ | $D$ | $E$ |

Each letter represents a specific year group over time. Thus only A and B are interviewed over four waves. The italics on the left-hand side show the new entrants to the 11-15 survey over time. The italics on the right-hand side show the departure at the other end of the age range into the adult survey. Thus by wave 7 only those aged 11 and 12 in wave 4 remain in the adolescent group, but there are 3 additional groups ( F to H ), one of which has been interviewed over three years and another over two. Meanwhile three of the original age groups have been interviewed as adults (now aged 16-18), one of which has given an adult interview three times but an adolescent interview only once.

This complexity means that change can be measured in several ways, taking the above table as a
starting-point:

1. Each wave can be analysed cross-sectionally (that is, taking the rows of the table). Using the correct statistical procedures all four waves can also be pooled for analysis of changes over the cross-sections.
2. Treating the table in terms of the columns produces a pooled cohort design (though with an unbalanced panel: that is, there are four waves of 13 and 14 -year olds but only three of thirteen-year olds, and so on.)
3. A full panel design would use the diagonals to follow each individual over time. This approaches closer to a full balanced panel the shorter the range of the transition (ie most wave four respondents have been interviewed in the BYP twice; analysis restricting itself to a single transition would therefore be both balanced and nearly complete).

In practice, none of these approaches are mutually exclusive.

## Sample size and response rates

In wave 4 there were 605 households containing eligible, co-operating children. Numbers of youth interviews for each of the four waves are as follows. The response rate for the baseline figure in wave 4 of $89 \%$ is itself based on the number known to be in the right age group in the previous wave plus a small number of new entrants. Non-response is divided fairly equally between refusal or non-contact with the household and with the respondent.

| wave | number |
| :---: | :---: |
| 4 | $773(89 \%)$ |
| 5 | 749 |
| 6 | 748 |
| 7 | 720 |

The following set of response rates is for the initial wave four sample of 773 only. The baseline in each subsequent wave is the number of interviews in the previous wave. (For instance, in wave 7 the 262 youth interviews were $65 \%$ of the remaining 403 interviews from wave 6 while another 120 of the latter were interviewed as adults).

## Youth outcome adult outcome non-response

| wave | $\mathbf{N}$ | $\%$ | $\mathbf{N}$ | \% | $\mathbf{N}$ | \% |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 4 | 773 | 89 |  |  |  |  |
| 5 | 580 | 75 | 131 | 17 | 62 | 8 |
| 6 | 403 | 69 | 156 | 27 | 21 | 4 |
| 7 | 262 | 65 | 120 | 30 | 21 | 5 |

The following shows the proportion of interviews amongst the total number of young people who have been interviewed at least once. Adult interviews indicate an adult interview in all post-BYP waves, otherwise respondents fall into the "some non-response" category.

|  | N |  | \% |  |
| :---: | :---: | :---: | :---: | :---: |
| 4 youth interviews | 262 |  | 20.5 |  |
| 3 youth interviews |  |  |  |  |
| complete response, adult in wave 7 | 287 | 12 | 22.5 | 9.4 |
| complete response, new entrant wave 5 |  | 141 |  | 11.1 |
| one-wave non-response |  | 26 |  | 2.0 |
| 2 youth interviews |  |  |  |  |
| complete response, adult in wave 6 | 355 | 147 | 27.9 | 11.5 |
| complete response, new entrant wave 6 |  | 155 |  | 12.2 |
| some non-response |  | 53 |  | 4.2 |
| 1 youth interview |  |  |  |  |
| adult in wave 5 | 371 | 118 | 29.1 | 9.3 |
| new entrant, 7 |  | 153 |  | 12.0 |
| some non-response |  | 100 |  | 7.8 |
| Total | 1275 |  | 100 |  |

In terms of adult interviews this produces the following outcomes:
interview status $\mathbf{N}$
1 youth, 3 adult 118
2 youth, 2 adult 147
3 youth, 1 adult 120

## File structure

The data from the Young Person's survey are available in the SIR record type wYOUTH or its equivalent SPSS file. The parental questions can be found in the values section of the adult individual questionnaire. (The question numbers in wave 4 run from V22 to V37.) Data for these are therefore found in wINDRESP.

The wYOUTH file or record type contains the normal key identifiers, that is wHID, and wPNO. Selection of co-operating respondents is through code 21 ("youth interview") in the individual outcome variable wIVFIO, in the wINDALL file or record type. WYOUTH contains an individual weight wYPWGHT specific to the youth responses. However, no longitudinal weight additional to the standard longitudinal enumeration weight (wLEWGHT) is provided.

For longitudinal analysis it is necessary as with all BHPS files to use the PID identifier, which is unique to each individual over time. For analysis where information from parents is to be used, the relationship of youth respondents to other household members can be obtained through wHGR2R, wHGMNO, wHGFNO in file wINDALL. These and other variables in this file help to ascertain relationships (for instance, which are the natural parents). The process of matching youth respondents with adult household members will require utilisation of the wINDRESP files mentioned above. This includes the entire BHPS adult sample and it will be necessary to exclude adults not related to youth respondents when the match has been made.

## IV. 16 The transition from PAPI to CAPI at Wave 9.

At Wave 9 of the BHPS, the survey moved from a pen-and paper (PAPI) mode of data collection to a Computer Assisted Personal Interview (CAPI) mode of collection. This represents the most significant methodological shift in the life of the BHPS to date with potentially wide ranging implications for data quality.

There were three main reasons for making the move to CAPI. The first and most important reason was the potential for improving data quality that would be offered by a CAPI system. The BHPS individual paper questionnaire runs to 45 minutes and contains some complex routing which inevitably produces errors from interviewers. As CAPI ensures the routing is enforced consistently and correctly throughout the questionnaire, it provides significant benefits in data quality through minimising missing data while reducing the level of data cleaning and editing post fieldwork.

The second reason was a longer-term aim to speed data turnaround and release of the data to the user community. At Wave 9 we have not increased the speed of data turn around times as various data processing systems needed to be rebuilt to deal with the CAPI environment (see Banks, R. and Laurie, H., 2000 for further details). The Wave 9 data were deposited for public use by December 2000 as usual. In the future, as the post field data processing systems become more streamlined we are aiming for improvements in this area.

The final reason for shifting the BHPS to CAPI was a significant savings in our fieldwork costs. As a longitudinal annual survey, with a questionnaire that changes relatively little year on year, the BHPS is an ideal vehicle for CAPI as the initial development costs can be recouped over the whole period of the survey.

National Opinion Polls (NOP), the fieldwork agency that has carried out the BHPS since 1991, were responsible for programming the CAPI questionnaire to the design and specifications provided by ISER. ISER carried out all testing and checking of the CAPI scripts.

NOP interviewers were equipped with touch screen laptops, which were, light to carry, robust and had good screen resolution. The laptops are easy to use and do not rely on interviewers having keyboard skills. The CAPI software used was In2itive, a product owned and supported by SPSS MR. Completed interviews were dialled into a central server via a modem.

A Pilot study of 100 households was carried out in May 1999 to test the CAPI questionnaires, to get feed back from interviewers on usability, to assess the reaction of respondents to the lap-top and to test data delivery and processing systems. The Pilot was successful with no adverse reactions from either interviewers or respondents to the laptop. The Pilot identified areas within the script and the data processing systems that required improvements. Revisions to the CAPI script and the surrounding systems for data management and processing were carried out with a further small-scale field test of the instruments in July 1999. Fieldwork for Wave 9 of the BHPS began on September $1^{\text {st }}$ 1999 as usual.

The whole of the BHPS sample was moved to CAPI at Wave 9 in order to minimise any potential disruption to either response rates or to the time series data. This decision meant that we did not attempt to implement any large-scale experiments to assess mode effects at the point CAPI was introduced. We were confident of making the move as experimental research on mode effects conducted by others had not produced evidence of significant adverse effects by moving to CAPI from PAPI in a longitudinal context.

A further element at Wave 9 was the introduction of the booster samples in each of Scotland and Wales (see page A4-24 for details of these samples). These newly recruited respondents were also interviewed using the CAPI instruments.

## IV.16.1 Questionnaire design and implementation

At Wave 9 the Household Questionnaire and Individual Questionnaire were the two schedules conducted using CAPI. All other questionnaires and fieldwork documents remained in their standard paper format.

To minimise the potential for mode effects, the CAPI implementation followed the design of the paper questionnaires as far as possible while exploiting the benefits of CAPI. While there is considerable evidence that the only mode effects of moving from PAPI to CAPI are positive effects in that routing is followed correctly and the levels of item non-response are reduced (Couper, M. et al (eds) 1998), we were still concerned to maintain as close a representation to the paper questionnaire as possible.

Clear conventions for screen layouts, colours and fonts were established to produce a questionnaire with a consistent look and feel for interviewers. All question wording and response categories were in
black and interviewer instructions were in red. The screen design was simple and uncluttered so that interviewers could easily see what they needed to ask and where responses were to be coded.

Checks were included within the CAPI script to ensure the correct identification of households and individuals, the entry of valid ranges of responses, and the consistency of date reporting. Standard types of error messages were developed. In some cases 'soft' checks were used which asked the interviewer to confirm an entry was correct e.g. if there were date inconsistencies between two items. Other checks were 'hard' and required the interviewer to return to a specific question to correct an error e.g. the entry of the household identifier had to be valid. Interviewers were able at any point in the interview to go back to previous questions to alter earlier responses if necessary.

On-screen information to guide the interviewer through complex sections of the questionnaire was also provided. For example, the annual training and education history collects repeated education or training events over the past year, and these events were displayed on screen to help the interviewer navigate through the section. The same type of on-screen information was also used in the annual job history to aid navigation through the section and provide a summary of employment or nonemployment spells already entered.

Questions and screens were of five main types. Closed category single response, closed category multiple response, grid entry, text entry of amounts and text entry of verbatim responses.

- Single and multiple response closed category questions used a radio button beside each response category for interviewers to code the response.
- Single response questions could not be multi-coded.
- Questions administered with a showcard had the category number beside the response categories on screen so that when respondents gave the number on the card it could be found quickly by interviewers.
- All response categories for a given question were visible on screen simultaneously so that interviewers did not have to scroll to find them. This is important where long lists of potential responses are used to prevent any bias from a failure to code off-screen responses.
- Grid entry questions were of the type where a number of categories had the same range of responses e.g. opinion questions using a five point disagree/agree scale or frequency of various leisure activities.
- As the laptops did not have a conventional keyboard, questions that required entry of an amount or date had a pop-up number pad appear on screen.
- Wherever dates were delimited by a known possible time period (e.g. the reference period for the receipt of benefits or house moves reported in the previous twelve months), pre-coded year and month categories were provided on screen instead of a text box for date entry in order to minimise entry errors by interviewers.
- Questions requiring a verbatim text response had a pop-up keyboard appear on screen for entry by the interviewer.
- Where an 'other specify' category was included a text box for entry of the response was provided on screen.

Under CAPI, all questions require an answer of some type before the programme will move on to the next question. On all questions where the paper questionnaire had always carried an explicit 'don't know' or 'refused' category, these appeared on screen as possible valid responses. For all other questions, apart from key routing questions where a response was required (e.g. whether an employee or self-employed) a 'not answered' code was provided on screen. If interviewers used this code, they were required to enter the reason it had been used in a pop-up text box. Interviewers could also enter explanatory marginal comments at any point in the questionnaire by clicking on a comments field which brought up a text box.

NOP developed an on-line coding system for the post field coding of verbatim responses. The same team of coders who had previously worked on the BHPS coded Wave 9 using the on-line system. This system simply picked up the identifiers and verbatim text for the question concerned from the database of interviews held on the central server and displayed these on the coder's screen together with any contextual information needed for coding. For example, when coding occupational descriptions the details of the industry, whether an employee or self-employed, and managerial duties were also displayed. The coders used the standard BHPS coding frames to code the responses and
entered the codes directly. The coded responses were then merged back into the completed interview data for each individual.

## IV.16.2 Fieldwork procedures and interviewer training

Fieldwork procedures at Wave 9 did not alter in any respect other than the introduction of CAPI. Interviewer experience of CAPI and good training were critical elements in a successful transition to CAPI. The fieldwork agency was responsible for providing specific training on using the laptops to interviewers and this training was required prior to the interviewer briefings for the main survey.

The BHPS has a policy of sending the same interviewer back to households they have previously interviewed in order to maintain continuity and a rapport with respondents. As there is evidence that maintaining the same interviewer for respondents has been beneficial to response rates over the life of the survey (Laurie, H. et al, 1999), we wished to minimise any response effects from interviewer turnover. The majority of the regular BHPS interviewers had prior experience of using NOP's CAPI system in the field and very few of the regular interviewers dropped out due to the shift to CAPI. Of the 220 interviewers working on the main survey only 16 were newly recruited to the BHPS for Wave 9 and all had prior CAPI experience.

How respondents would react to the move to CAPI, particularly in relation to issues of confidentiality and sensitivity, were also of concern. While there is a body of evidence which shows that the vast majority of both interviewers and respondents react very favourably to CAPI, any drop in our wave on wave reinterview response rates would be unwelcome. CAPI was introduced to respondents in an intentionally low-key manner. Respondents were not forewarned that the survey was moving to CAPI with the interviewers being instructed to simply pick up and start using the laptop in the same way they would have when using the paper questionnaires. The reaction from both interviewers and respondents during the pre-testing and piloting of the CAPI questionnaire was very positive. During the mainstage fieldwork all comments from respondents were carefully monitored with no evidence of an adverse reaction to the laptops. The interviewer observations completed after every individual interview also show no evidence of an adverse reaction from respondents.

The individual re-interview response rates remained high with $97.1 \%$ of those respondents interviewed at every wave of the survey being re-interviewed at Wave 9 . The response rate data shown in tables 19h and 21, suggest show no significant differences to the previous paper waves. For the core BHPS longitudinal respondents, there is no evidence that the response was affected by the move the CAPI, while the response for all respondents interviewed at the previous wave is virtually identical to the previous paper wave.

## IV.16.3 Mode effects on key measures

The key concern in shifting to CAPI midway in the life of the panel was the danger of introducing unexpected mode effects that could compromise longitudinal comparability of the data. While maintaining comparability with the design of the paper questionnaire, fieldwork procedures and data collection had been central aims in making the transition, it was always possible that we could inadvertently introduce an element which produced markedly different responses under CAPI.

To date, no significant mode effects that can be attributed to the introduction of CAPI have been found within the Wave 9 data as compared to earlier paper waves. The distributions on key demographic items including age, sex, marital status, employment status, ethnicity, occupation and industry are virtually identical to earlier paper sweeps. The entry of dates and amounts produce distributions consistent with earlier waves as do verbatim items coded post field (see Laurie, H., 2000 for further details).

## References

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## IV. 17 Scotland and Wales Extension Samples

A major development at Wave 9 was the recruitment of two additional samples to the BHPS in Scotland and Wales. There were two main aims of the extensions. First, to increase the relatively small Scottish and Welsh sample sizes (around 400-500 households in each country in the initial BHPS sample) in order to permit independent analysis of the two countries. Second, to facilitate analysis of the two countries compared to England in order to assess the impacts of the substantial public policy changes which may be expected to follow from devolution. A consultation period in the early part of 1999 established the requirements of the Scottish and Welsh user-communities. Provision of comparable data between the different parts of Great Britain required using identical questionnaires and fieldwork arrangements for the additional samples to those used for the main BHPS sample.

A sample of 2,475 addresses in each country was drawn from the Postcode Address File, sufficient to yield approximately 1,500 respondent households after allowance for non-residential addresses and non-response. The geographic areas sampled included the "Highlands and Islands" in Scotland, areas that were not included in the original BHPS sample. In all other respects, the sample designs for both Scotland and Wales were comparable with the Wave 1 BHPS design. The primary sampling units (PSU's) were postcode sectors selected with probability proportional to size (i.e. number of addresses). Stratification was carried out to ensure balanced geographical representation and by socio-economic characteristics to reduce sampling error and improve the precision of estimates. For each country, 75 PSU's were selected with 33 addresses randomly selected within each PSU. The new samples consist of all those individuals resident at the selected addresses at the time of interview.

NOP Research Group, the BHPS fieldwork contractor since 1991, carried out the recruitment and fieldwork for the new samples. By using the same fieldwork agency we aimed to maximise comparability with the main BHPS sample by employing the same methodological techniques and fieldwork procedures as well as exploiting the expertise of interviewers familiar with working on the BHPS. The Scottish and Welsh extensions used the same questionnaire instruments as the BHPS, following the routings for new entrants to respondent households to collect initial conditions data such as place of birth, ethnicity, qualifications and some key life events. In recognition of the importance of these extensions as a way of addressing issues relating to devolution, new questions on national identity and attitudes to the Government were included both in the extension samples and in the whole BHPS sample.

Fieldwork commenced for both the main sample and the extensions on 1 September, 1999. NOP used existing BHPS interviewers where this was possible, and trained new interviewers where necessary. Because of the extra load on existing interviewers, and some need to recruit interviewers, interviews in Scotland and Wales took place rather later than on original sample of BHPS, and substantial number took place in the early months of 2000. Response rates for the new sample are presented in section IV.18.

At Wave 10, the second wave for these new samples, we reissued all of the first wave non-contact households, and refusal households except those which were judged to be permanent adamant refusals. Significant numbers of these households were interviewed, and their members will be treated as OSMs.

## IV. 18 Dependent Interviewing in the BHPS

This section discusses briefly the introduction of dependent interviewing in wave 16 of the BHPS. Dependent interviewing (DI) is a method of designing questions in longitudinal surveys, where
information about respondents obtained in past interviews is used to personalise the questionnaire and adapt it to the respondent's situation in future interviews. With computer assisted interviewing, previous information can be included in the formulation of questions, to remind respondents of previous responses and ask whether their situation has changed. Previous information can also be used to compute edit checks during the interview. In this case, the computer script compares responses with previous responses and prompts edit check questions if these differ.

The main motivation for introducing dependent interviewing in the BHPS was to improve data quality, in particular the longitudinal consistency of responses. DI can however also be used to identify and route around redundant questions, if the respondent's situation has not changed. The design of DI for the BHPS was inspired by other panel studies around the world and based on an earlier experimental study called 'Improving Survey Measurement of Income and Employment' (ISMIE). This study tested the effects of DI for different types of questions on a former sample associated with the BHPS. Based on the findings from this study, DI was introduced in three sections of the individual questionnaire: current employment, the labour market activity history and the household finance sections.

For the current employment questions, responses given in previous interviews were used to ask respondents whether their situation had changed. Respondents were for example reminded of their occupation at the previous wave and asked whether this was still the same. Similar questions were used to collect information about the employer, industry, whether employee or self-employed, managerial duties and size of employer organisation. This approach should make the survey task easier for respondents and thereby improve the consistency of data on employment characteristics across waves.

DI was also used for the questions asking about earnings from employment. Here the previous reports were used to compute automatic edit checks, whereby the current response was compared with the response from the previous interview. If there appeared to be an unusually large change in earnings, then a follow-up question was prompted, to check whether the change was real or due to an error in the data. This approach will reduce the number of outliers, by catching keying and reporting errors during the interview.

For the questions about respondents' labour market activities since the previous interview, the previous information was used as a starting point into the history. Respondents were reminded of the activity they were doing at the time of the previous interview and then asked what they had been doing since. In contrast, in previous waves respondents were asked about their activities in reverse chronological order, starting with their current situation. The new approach will make it easier for respondents to remember activities in the past, and to provide reports that are more consistent with previous reports.

In the household finance section, DI is used to remind respondents of sources of unearned income which they have reported in the past, but not mentioned in the current interview. This will help respondents recall and identify sources, from the list of 35 about which they are asked, and as a result reduce the extent of under-reporting of incomes.

The implementation of these DI questions required substantial development of the computer scripts. Previous responses also had to be edited and prepared to be 'fed-forward'. A pilot study was carried out to check that all procedures were working and to obtain feedback on the reactions of respondents and interviewers before introducing DI in the BHPS.

The changes will have implications for data users. The standard BHPS variables will still be provided for the whole sample. Additional information will however be available to analysts, indicating how a variable for a particular respondent was collected, whether using DI or by asking the independent question. Thus while analyses which made use of standard variables should still work in the same way users should consider the implications of the different way in which data have been collected. Relevant sections of the annotated individual questionnaire are questions E1 to E10 (pages 51-56 at wave 16), E54 and E55 (page 68), J1 to J29 (pages 86 to 94), NFA to NFH (pages 111 to 112).

For further information about the introduction of dependent interviewing in the BHPS, see Jäckle, Annette, Heather Laurie, SC Noah Uhrig (May 2007) 'The Introduction of Dependent Interviewing on the British Household Panel Survey', ISER Working Paper 2007-07. Colchester: University of Essex. This can be found at http://www.iser.essex.ac.uk/pubs/workpaps/pdf/2007-07.pdf . This contains full information about the routing of the DI sections and the nature of the data which was fed forward.

## IV. 19 Northern Ireland Household Panel Survey

At wave 11 a substantial new sample in Northern Ireland, the Northern Ireland Household Panel Survey (NIHPS) was added. This sample is jointly funded by the ESRC and government departments in Northern Ireland. Since the start of the BHPS it has been recognised that a sample was needed in Northern Ireland so that the coverage of the panel was UK wide rather than Great Britain only. Until now, funding has not been available to run a panel that was large enough to enable comparative analysis between Northern Ireland and the rest of the UK. More recently, having longitudinal data that is comparable with Great Britain has become something of a priority for the Northern Ireland policy makers as well as for the wider academic community. There are three years of funding in the first instance.

Following tendering, the contract to carry out the fieldwork was awarded to the Central Survey Unit (CSU) of the Northern Ireland Statistics and Research Agency and the first wave of fieldwork was carried out in 2001. The design of the panel and content of the questionnaire follows the BHPS with ISER staff overseeing and working with staff at CSU responsible for data collection.

The wave 1 fieldwork was carried out between October 2001 and March 2002. A random sample of addresses was selected by CSU and, as with wave 1 of the BHPS, all individuals resident at those addresses when the interviewer called were eligible for inclusion in the sample. Interviews were achieved in 1,979 households across Northern Ireland, giving an extremely good household response rate of $69 \%$. A total of 3,528 full individual interviews were achieved plus 200 proxy interviews, representing an individual response rate for eligible adults found of $89 \%$.

The design and content of the survey is largely similar to the BHPS to provide comparability. There are some changes in content due to local circumstances and some additional questions that are specific to Northern Ireland. The data from wave 1 of NIHPS have been processed by ISER using the standard BHPS procedures.

## IV. 20 Response Rates

Interview outcomes at Wave One in terms of the original issued sample are shown in Table 16, at the household level. Thus around $13 \%$ of issued addressed did not contain households, but multiple occupied addresses meant the addition of around $4 \%$ to the number of households in the sample. On this basis, there was at least one interview in $74 \%$ of eligible households, complete coverage of eligible adults, including proxies in 69\% of households, and full interviews with all eligible members in 65\% of households. Responses at the individual level within respondent households are shown in Table 17.

After the first wave of a Panel Study, the main focus of interest shifts to response at the individual level, and the calculation of response rates becomes increasingly complex. We may distinguish between a wave-on-wave response rate (i.e. how many of the people interviewed last wave are re-interviewed in the current wave), and a longitudinal response rate (i.e. how many of the people interviewed at Wave One are interviewed at the latest wave). This is further complicated since individual's eligibility status may change, e.g. they may die or move out of scope, or children may reach the age of 16 and become eligible for interview. In addition, it is still possible from a fieldwork point of view to speak of household response patterns, though these are rather unreliable due to uncertainty as to the eligibility of issued households.

In this section we show response outcomes in the following ways:
For each wave, we show the outcomes for all issued and enumerated individuals in terms of their response at the previous wave.

For each wave, we show the outcomes for the combination of all issued households and new households encountered in the field.

For all full interview respondents at Wave One, we show response status at each subsequent wave.

Table 18a shows wave-on-wave response status for Wave Two at the individual level. Thus $86.4 \%$ of Wave One respondents gave an interview at Wave Two. Given that a number had died or moved out of scope, this gives a wave-on-wave response rate of $87.7 \%$. Table $18 b$ shows equivalent information for Wave Three in tems of Wave Two response status. Once ineligible new entrants are excluded the wave on wave response rate is around $90 \%$. Table 18c shows Wave Four information. Here the wave on wave response rate is almost $95 \%$.

Table 19 shows response at the household level. In a household panel study, this is complex since households may have split since the previous wave. Some of this is known before fieldwork, thus at Wave Two the total number of issued households, at 5611, was larger than the number of respondent households at Wave One (5511). However, an additional 331 households were found during the course of fieldwork. In addition to this, Wave One non-contact households were reissued, and the 44 which responded are included in the table above. Similar patterns emerge in subsequent waves. Note that the base for each wave includes a significant number of previous wave non-repsondent households.

Table 20 shows the response status of Wave One full interview respondents at each subsequent wave. Thus $76.4 \%$ of Wave One respondents were interviewed at Wave Four. Once those who have died or moved out of scope are excluded this turns into a response rate of $80.0 \%$.

Table 16 Wave One Individual Outcomes

| Enumerated Individuals | 13840 (100\%) |
| :--- | :---: |
| Ineligible Children (Under 16) | 3089 (22\%) |
| Eligible Adults | 10751 (100\%) |
|  | 426 (4\%) |
| Refusals | 48 (0\%) |
| Non-Contact / Absent | 13 (0\%) |
| Age / Infirmity / Disability or Language <br> Difficulty | 9912 (92\%) |
| Full Interviews | 352 (3\%) |
| Proxy Interviews | $10264(95 \%)$ |
| Total Interviews |  |

[^3]Table 17 Wave One Household Outcomes and Response Rates *

| Addresses Issued | 8167 |
| :--- | :---: |
| Vacant/Non-residential/Foreign | 1033 |
| Multi-Households Addition to Sample | 357 |
| Effective Sample Size | 7491 |
|  | $123(2 \%)$ |
| Refusal to Field Agency/Research Centre | $1420(19 \%)$ |
| Household Refusal to Interviewer | $288(4 \%)$ |
| Household Non-contact | $122(2 \%)$ |
| Language/Age/Infirmity Problems | $4862(65 \%)$ |
|  | $5143(69 \%)$ |
| Complete Household Interview | $5538(74 \%)$ |
| Complete Household Coverage (inc. proxies) |  |
| Partial Household Coverage |  |

* In 29 households included here with respondent households (10 complete interviews, and 19 partial coverage) documents were missing or otherwise unusable, and there are no response data on the database. These cases have a response code of 19.

Table 18a: Wave Two Individual Outcomes by Wave One Response Status

| Wave Two Response <br> Status | Wave One Response Status |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Full <br> Interview | Proxy | Refusal | Child <br> Under 16 | New <br> Entrant/Other* | TOTAL |
| Full Interview | $8586(86.4)$ | $112(31.8)$ | $73(15.2)$ | $153(5.0)$ | $552(58.4)$ | $9459(64.0)$ |
| Proxy Interview | $150(1.5)$ | $140(39.8)$ | $47(9.8)$ | $7(0.2)$ | $42(4.4)$ | $386(2.6)$ |
| Within HH Refusal | $112(1.1)$ | $27(7.7)$ | $170(35.3)$ | $5(0.2)$ | $61(6.4)$ | $375(2.5)$ |
| Other Non-Interview | $12(0.1)$ | $3(0.9)$ | $8(1.7)$ | $1(0.0)$ | $14(1.5)$ | $38(0.3)$ |
| Child Under 16 |  | $657(6.6)$ | $34(9.7)$ | $149(31.0)$ | $180(5.8)$ | $18(1.9)$ |
| Refusal Household | $274(2.8)$ | $18(5.1)$ | $29(6.0)$ | $80(2.6)$ | $14(1.5)$ | $1038(7.0)$ |
| Non-contact Household | $58(0.6)$ | $3(0.9)$ | $2(0.4)$ | $13(0.4)$ | $1(0.1)$ | $415(2.8)$ |
| Out of Scope | $81(0.8)$ | $15(4.3)$ | $3(0.6)$ | $2(0.2)$ |  | $77(0.5)$ |
| Dead | $9912(67.1)$ | $352(2.4)$ | $481(3.3)$ | $3090(20.9)$ | $947(6.4)$ | $14782(100.0)$ |
| TOTAL |  |  | $2651(85.8)$ | $242(25.6)$ | $2893(19.6)$ |  |

* Included Members of Wave One Non-Contact Households

Table 18b: Wave Three Individual Outcomes by Wave Two Response Status

| Wave Three Response Status | Wave Two Response Status |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Full Interview | Proxy Interview | Refusal | Child Under 16 years | Refusal/ Non-contact Household | New Entrant | TOTAL |
| Full Interview | 8209 (86.9) | 74 (19.2) | 36 (8.7) | 140 (4.8) | 165 (15.4) | 400 (51.5) | 9024 (60.2) |
| Proxy Interview | 103 (1.1) | 157 (40.7) | 27 (6.5) | 4 (0.1) | 9 (0.8) | 24 (3.1) | 324 (2.2) |
| Telephone Interview | 190 (2.0) | 3 (0.8) | 2 (0.5) | 1 (0.0) | 54 (5.0) | 2 (0.3) | 254 (1.7) |
| Within HH Refusal | 133 (1.4) | 48 (12.4) | 221 (53.5) | 8 (0.3) | 53 (4.9) | 85 (10.9) | 548 (3.7) |
| Other Non-Interview | 35 (0.4) | 21 (5.4) | 15 (3.6) | 2 (0.1) | 11 (1.0) | 29 (3.7) | 113 (0.7) |
| Child Under 16 |  |  |  | 2550 (88.1) | 57 (5.3) | 236 (30.5) | 2843 (19.0) |
| Refusal Household | 296 (3.1) | 34 (8.8) | 63 (15.3) | 112 (3.9) | 339 (31.6) |  | 844 (5.6) |
| Non-contact Household | 145 (1.5) | 24 (6.2) | 30 (7.3) | 56 (1.9) | 291 (27.1) |  | 546 (3.6) |
| Out of Scope | 35 (0.4) | 7 (1.8) | 3 (0.7) | 6 (0.2) | 81 (7.5) |  | 132 (0.9) |
| No One Eligible in HH | 214 (2.3) | 9 (2.3) | 15 (3.6) | 14 (0.5) | 2 (0.2) |  | 254 (1.7) |
| Dead | 99 (1.0) | 9 (2.3) | 1 (0.2) |  | 11 (1.0) |  | 120 (0.8) |
| TOTAL | 9459 (63.1) | 386 (2.6) | 413 (2.8) | 2893 (19.3) | 1073 (7.2) | 776 (5.2) | 15000 (100.0) |

Table 18c: Wave Four Individual Outcomes by Wave Three Response Status

| Wave Four Response Status | Wave Three Response Status |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Full Interview | Proxy Interview | Telephone Interview | Refusal | Child Under 16 years | Refusal/ Non-contact Household | New Entrant | TOTAL |
| Full Interview | 8178 (90.6) | 65 (20.1) | 125 (49.6) | 75 (11.3) | 147 (5.2) | 86 (8.2) | 384 (52.7) | 9060 (60.9) |
| Proxy Interview | 73 (0.8) | 164 (50.6) | 2 (0.8) | 47 (7.1) | 2 (0.1) | 3 (0.8) | 18 (2.3) | 309 (2.1) |
| Telephone Interview | 64 (0.7) | 1 (0.3) | 37 (14.7) | 3 (0.5) | 1 (0.0) | 6 (0.6) |  | 112 (0.8) |
| Within HH Refusal | 67 (0.7) | 31 (9.6) | 10 (4.0) | 334 (50.5) | 7 (0.2) | 21 (2.0) | 76 (10.4) | 546 (3.7) |
| Other Non-Interview | 12 (0.1) | 3 (0.9) |  | 11 (1.7) | 3 (0.1) | 2 (0.2) | 12 (1.6) | 43 (0.3) |
| Child Under 16 |  |  |  |  | 2526 (88.8) | 29 (2.8) | 226 (31.0) | 2781 (18.7) |
| Refusal Household | 191 (2.1) | 26 (8.0) | 65 (25.8) | 92 (13.9) | 76 (2.7) | 283 (27.1) | 12 (1.6) | 745 (5.0) |
| Non-contact Household | 106 (1.2) | 11 (3.4) | 9 (3.6) | 35 (5.3) | 36 (1.3) | 465 (44.5) |  | 662 (4.5) |
| Out of Scope | 46 (0.5) | 5 (1.5) | 2 (0.8) | 11 (1.7) | 21 (0.7) | 134 (12.8) |  | 219 (1.5) |
| No One Eligible in HH | 207 (2.3) | 9 (2.8) | 1 (0.4) | 49 (7.4) | 24 (0.8) | 5 (0.5) |  | 295 (2.0) |
| Dead | 80 (0.9) | 9 (2.8) | 1 (0.4) | 4 (0.6) |  | 10 (1.0) |  | 104 (0.7) |
| TOTAL | 9024 (60.7) | 324 (2.2) | 252 (1.7) | 661 (4.4) | 2843 (19.1) | 1044 (7.0) | 728 (4.9) | 14876 (100.0) |

Table 18d: Wave Five Individual Outcomes by Wave Four Response Status

| Wave Five Response Status | Wave Four Response Status |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Full Interview | Proxy Interview | Telephone Interview | Refusal | Child Under 16 years | Refusal/ Non-contact Household | New Entrant | TOTAL |
| Full Interview | 8125 (89.7) | 52 (16.8) | 45 (40.2) | 49 (8.3) | 139 (5.0) | 85 (6.6) | 332 (48.4) | 8827 (59.6) |
| Proxy Interview | 69 (0.8) | 161 (52.1) |  | 21 (3.6) | 3 (0.1) | 11 (0.9) | 21 (3.1) | 286 (1.9) |
| Telephone Interview | 85 (0.9) | 4 (1.3) | 23 (20.5) | 5 (0.8) | 2 (0.1) | 15 (1.2) | 2 (0.3) | 136 (0.9) |
| Within HH Refusal | 64 (0.7) | 28 (9.1) | 5 (4.5) | 325 (55.2) | 11 (0.4) | 1.5 (1.5) | 87 (12.7) | 539 (3.6) |
| Other Non-Interview | 22 (0.2) | 6 (1.9) |  | 17 (2.9) |  |  | 25 (3.6) | 70 (0.5) |
| Child Under 16 |  |  |  |  | 2446 (88.0) | 33 (2.6) | 212 (30.9) | 2691 (18.2) |
| Refusal Household | 191 (2.1) | 23 (7.4) | 32 (28.6) | 87 (14.8) | 90 (3.2) | 286 (22.3) | 7 (1.0) | 716 (4.8) |
| Non-contact Household | 126 (1.4) | 15 (4.9) | 7 (6.3) | 25 (4.2) | 66 (2.4) | 592 (46.1) |  | 831 (5.6) |
| Out of Scope | 40 (0.4) | 2 (0.6) |  | 4 (0.7) | 5 (0.2) | 222 (173) |  | 273 (1.8) |
| No One Eligible in HH | 251 (2.8) | 11 (3.6) |  | 53 (9.0) | 19 (0.7) | 10 (0.8) |  | 344 (2.3) |
| Dead | 87 (1.0) | 7 (2.3) |  | 3 (0.5) |  | 11 (0.9) |  | 108 (0.7) |
| TOTAL | 9060 (61.1) | 309 (2.1) | 112 (0.8) | 589 (4.0) | 2781 (18.8) | 1284 (8.7) | 686 (4.6) | 14821 (100.0) |

Table 18e: Wave Six Individual Outcomes by Wave Five Response Status

| Wave Six Response Status | Wave Five Response Status |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Full Interview | Proxy Interview | Telephone Interview | Refusal | Child Under 16 years | Refusal/ Non-contact Household | New Entrant | TOTAL |
| Full Interview | 8237 (93.3) | 63 (22.0) | 65 (47.8) | 67 (11.0) | 163 (6.1) | 148 (9.6) | 394 (51.7) | 9137 (61.5) |
| Proxy Interview | 51 (0.6) | 153 (53.5) | 2 (1.5) | 26 (4.3) | 1 (0.0) | 3 (0.2) | 13 (1.7) | 249 (1.7) |
| Telephone Interview | 31 (0.4) | 1 (0.3) | 10 (7.4) | 3 (0.5) |  | 6 (0.4) | 1 (0.1) | 52 (0.4) |
| Within HH Refusal | 17 (0.2) | 29 (10.1) | 4 (2.9) | 349 (57.4) | 7 (0.3) | 14 (0.9) | 88 (11.5) | 508 (3.4) |
| Other Non-Interview | 14 (0.2) | 3 (1.0) | 1 (0.7) | 18 (3.0) |  | 2 (0.1) | 26 (3.4) | 64 (0.4) |
| Child Under 16 |  |  |  |  | 2435 (90.5) | 44 (2.9) | 231 (30.3) | 2710 (18.3) |
| Refusal Household | 95 (1.1) | 10 (3.5) | 45 (33.1) | 48 (7.9) | 40 (1.5) | 358 (23.3) | 9 (1.2) | 605 (4.1) |
| Non-contact Household | 59 (0.7) | 4 (1.4) | 7 (5.1) | 20 (3.3) | 26 (1.0) | 656 (42.8) |  | 772 (5.2) |
| Out of Scope | 26 (0.3) | 2 (0.7) |  | 4 (0.7) | 6 (0.2) | 265 (17.5) |  | 306 (2.1) |
| No One Eligible in HH | 218 (2.5) | 14 (4.9) | 1 (0.7) | 71 (11.7) | 11 (0.4) | 6 (0.4) |  | 321 (2.2) |
| Dead | 80 (0.9) | 7 (2.4) | 1 (0.7) | 2 (0.3) | 2 (0.1) | 29 (1.9) |  | 121 (0.8) |
| TOTAL | 8828 (59.5) | 286 (1.9) | 136 (0.9) | 608 (4.1) | 2691 (18.1) | 1534 (10.3) | 762 (5.1) | 14845 (100.0) |

Table 18f: Wave Seven Individual Outcomes by Wave Six Response Status

| Wave Seven Response Status | Wave Six Response Status |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Full Interview | Proxy Interview | Telephone Interview | Refusal | Child Under 16 years | Refusal/ Non-contact Household | New Entrant | TOTAL |
| Full Interview | 8440 (92.6) | 35 (0.4) | 29 (0.3) | 43 (0.5) | 136 (1.5) | 65 (0.7) | 370 (4.1) | 9118 (64.2) |
| Proxy Interview | 38 (17.0) | 158 (70.9) | 1 (0.4) | 10 (4.5) | 2 (0.9) |  | 14 (6.3) | 223 (1.6) |
| Telephone Interview | 27 (84.4) |  | 3 (9.4) | 1 (3.1) |  | 1 (3.1) |  | 32 (0.2) |
| Within HH Refusal | 23 (4.8) | 20 (4.1) | 1 (0.2) | 354 (73.4) | 2 (0.4) | 5 (1.0) | 77 (16.0) | 482 (3.4) |
| Other Non-Interview | 22 (56.4) | 4 (10.3) |  | 6 (15.4) |  | 1 (2.6) | 6 (15.4) | 39 (0.3) |
| Child Under 16 |  |  |  |  | 2440 (91.8) | 10 (0.4) | 208 (7.8) | 2658 (18.7) |
| Refusal Household | 107 (27.3) | 6 (1.5) | 13 (3.3) | 47 (12.0) | 48 (12.2) | 162 (41.3) | 9 (2.3) | 392 (2.8) |
| Non-contact Household | 86 (23.9) | 10 (2.8) | 5 (1.4) | 19 (5.3) | 28 (7.8) | 212 (58.9) |  | 360 (2.5) |
| Out of Scope | 39 (10.6) |  |  | 5 (1.4) | 11 (3.0) | 312 (85.0) |  | 367 (2.6) |
| No One Eligible in HH | 280 (68.5) | 7 (1.7) |  | 79 (19.3) | 43 (10.5) |  |  | 409 (2.9) |
| Dead | 77 (62.6) | 9 (7.3) |  | 6 (4.9) |  | 31 (25.2) |  | 123 (0.9) |
| TOTAL | 9139 (64.3) | 249 (1.8) | 52 (0.4) | 570 (4.0) | 2710 (19.1) | 799 (5.6) | 684 (4.8) | 14203 (100) |

Table 18g: Wave Eight Individual Outcomes by Wave Seven Response Status

| Wave Eight Response Status | Wave Seven Response Status |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Full Interview | Proxy Interview | Telephone Interview | Refusal | Child Under 16 years | Refusal/ Non-contact Household | New Entrant | TOTAL |
| Full Interview | 8363 (93.5) | 35 (0.4) | 10 (0.1) | 30 (0.3) | 125 (1.4) | 67 (0.7) | 310 (3.5) | 8940 (62.8) |
| Proxy Interview | 48 (22.2) | 137 (63.4) |  | 13 (6.0) | 1 (0.5) | 3 (1.4) | 14 (6.5) | 216 (1.5) |
| Telephone Interview | 43 (72.9) | 1 (1.7) | 6 (10.2) | 1 (1.7) |  | 8 (13.6) |  | 59 (0.4) |
| Within HH Refusal | 48 (9.4) | 18 (3.5) |  | 354 (69.3) | 5 (1.0) | 18 (3.5) | 68 (13.3) | 511 (3.6) |
| Other Non-Interview | 26 (50.0) | 1 (1.9) |  | 8 (15.4) | 1 (1.9) | 2 (3.8) | 14 (26.9) | 52 (0.4) |
| Child Under 16 |  |  |  |  | 2449 (91.3) | 19 (0.7) | 215 (8.0) | 2683 (18.9) |
| Refusal Household | 127 (29.7) | 10 (2.3) | 12 (2.8) | 25 (5.8) | 40 (9.3) | 204 (47.7) | 10 (2.3) | 428 (3.0) |
| Non-contact Household | 76 (17.1) | 3 (0.7) | 3 (0.7) | 16 (3.6) | 17 (3.8) | 329 (74.1) |  | 444 (3.1) |
| Out of Scope | 17 (4.4) | 2 (0.5) |  | 2 (0.5) | 2 (0.5) | 360 (94.0) |  | 383 (2.7) |
| No One Eligible in HH | 279 (72.5) | 8 (2.1) |  | 65 (16.9) | 18 (4.7) | 15 (3.9) |  | 385 (2.7) |
| Dead | 91 (72.2) | 8 (6.3) | 1 (0.8) | 5 (4.0) |  | 21 (16.7) |  | 126 (0.9) |
| TOTAL | 9118 (64.1) | 223 (1.6) | 32 (0.2) | 519 (3.6) | 2658 (18.7) | 1046 (7.4) | 631 (4.4) | 14227 (100) |

Table 18h: Wave Nine Individual Outcomes by Wave Eight Response Status

| Wave Nine Response Status | Wave Eight Response Status |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Full Interview | Proxy Interview | Telephone Interview | Refusal | Child Under 16 years | Refusal/ Non-contact Household | New Entrant | TOTAL |
| Full Interview | 8255 (93.6) | 25 (0.3) | 24 (0.3) | 45 (0.5) | 141 (1.6) | 69 (0.8) | 261 (3.0) | 8820 (61.8) |
| Proxy Interview | 44 (21.2) | 130 (62.5) |  | 16 (7.7) | 2 (1.0) | 3 (1.4) | 13 (6.3) | 208 (1.5) |
| Telephone Interview | 52 (71.2) |  | 7 (9.6) | 5 (6.8) |  | 6 (8.2) | 3 (4.1) | 73 (0.5) |
| Within HH Refusal | 45 (8.6) | 15 (2.9) | 1 (0.2) | 343 (65.6) | 13 (2.5) | 11 (2.1) | 95 (18.2) | 523 (3.7) |
| Other Non-Interview | 25 (29.1) | 2 (2.3) |  | 14 (16.3) | 2 (2.3) | 3 (3.5) | 40 (46.5) | 86 (0.6) |
| Child Under 16 |  |  |  |  | 2400 (91.4) | 12 (0.5) | 213 (8.1) | 2625 (18.4) |
| Refusal Household | 143 (26.5) | 13 (2.4) | 22 (4.1) | 41 (7.6) | 63 (11.7) | 247 (45.8) | 10 (1.9) | 539 (3.8) |
| Non-contact Household | 66 (11.8) | 11 (2.0) | 4 (0.7) | 25 (4.5) | 21 (3.8) | 430 (77.2) |  | 557 (3.9) |
| Out of Scope | 41 (9.3) | 3 (0.7) | 1 (0.2) | 4 (0.9) | 11 (2.5) | 383 (86.5) |  | 443 (3.1) |
| No One Eligible in HH | 195 (62.5) | 13 (4.2) |  | 64 (20.5) | 30 (9.6) | 10 (3.2) |  | 312 (2.2) |
| Dead | 74 (83.1) | 4 (4.5) |  | 6 (6.7) |  | 5 (5.6) |  | 89 (0.6) |
| TOTAL | 8940 (62.6) | 216 (1.5) | 59 (0.4) | 563 (3.9) | 2683 (18.8) | 1179 (8.3) | 635 (4.4) | 14275 (100.0) |

Table 18i: Wave Ten Individual Outcomes by Wave Nine Response Status

| Wave Ten Response Status | Wave Nine Response Status |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Full Interview | Proxy Interview | Telephone Interview | Refusal | Child Under 16 years | Refusal/ <br> Non-contact <br> Household | New Entrant | TOTAL |
| Full Interview | 8117 (93.3) | 26 (0.3) | 25 (0.3) | 64 (0.7) | 131 (1.5) | 90 (1.0) | 248 (2.9) | 8701 (60.6) |
| Proxy Interview | 45 (22.3) | 126 (62.4) |  | 20 (9.9) | 1 (0.5) | 2 (1.0) | 8 (4.0) | 202 (1.4) |
| Telephone Interview | 62 (60.2) | 1 (1.0) | 19 (18.4) | 1 (1.0) |  | 19 (18.4) | 1 (1.0) | 103 (0.7) |
| Within HH Refusal | 44 (7.9) | 21 (3.8) | 7 (1.3) | 349 (62.8) | 9 (1.6) | 24 (4.3) | 102 (18.3) | 556 (3.9) |
| Other Non-Interview | 24 (37.5) | 3 (4.7) | 2 (3.1) | 14 (21.9) | 1 (1.6) | 2 (3.1) | 18 (28.1) | 64 (0.4) |
| Child Under 16 |  |  |  |  | 2368 (90.1) | 45 (1.7) | 215 (8.2) | 2628 (18.3) |
| Refusal Household | 151 (29.7) | 8 (1.6) | 17 (3.3) | 42 (8.3) | 48 (9.4) | 240 (47.2) | 3 (0.6) | 509 (3.5) |
| Non-contact Household | 75 (11.4) | 6 (0.9) | 3 (0.5) | 25 (3.8) | 30 (4.5) | 521 (78.9) |  | 660 (4.6) |
| Out of Scope | 55 (10.7) | 1 (0.2) |  | 7 (1.4) | 17 (3.3) | 436 (84.5) |  | 516 (3.6) |
| No One Eligible in HH | 172 (57.9) | 7 (2.4) |  | 83 (27.9) | 19 (6.4) | 16 (5.4) |  | 297 (2.1) |
| Dead | 75 (64.1) | 9 (7.7) |  | 2 (1.7) | 1 (0.9) | 30 (25.6) |  | 117 (0.8) |
| TOTAL | 8820 (61.5) | 208 (1.4) | 73 (0.5) | 607 (4.2) | 2625 (18.3) | 1425 (9.9) | 595 (4.1) | 14353 (100.0) |

Table 18j: Wave Eleven Individual Outcomes by Wave Ten Response Status

| Wave Eleven Response Status | Wave Ten Response Status |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Full Interview | Proxy Interview | Telephone Interview | Refusal | Child Under 16 years | Refusal/ Non-contact Household | New Entrant | TOTAL |
| Full Interview | 7978 (92.9) | 35 (0.4) | 23 (0.3) | 51 (0.6) | 129 (1.5) | 112 (1.3) | 262 (3.1) | 8590 (59.2) |
| Proxy Interview | 39 (21.4) | 111 61.0) |  | 15 (8.2) | 5 (2.8) | 2 (1.1) | 10 (5.5) | 182 (1.3) |
| Telephone Interview | 88 (53.7) | 2 (1.2) | 35 (21.3) | 7 (4.3) |  | 32 (19.5) |  | 164 (1.1) |
| Within HH Refusal | 54 (8.8) | 26 (4.2) | 8 (1.3) | 375 (60.9) | 9 (1.5) | 33 (5.4) | 111 (18.0) | 616 (2.3) |
| Other Non-Interview | 27 (37.0) | 1 (1.4) | 3 (4.1) | 16 (21.9) | 1 (1.4) | 7 (9.6) | 18 (24.7) | 73 (0.5) |
| Child Under 16 |  |  |  |  | 2360 (90.5) | 36 (1.4) | 213 (8.2) | 2609 (18.0) |
| Refusal Household | 176 (26.9) | 9 (1.4) | 27 (4.1) | 46 (7.0) | 58 (8.9) | 338 (51.6) | 1 (0.2) | 655 (4.5) |
| Non-contact Household | 67 (9.8) | 2 (0.3) | 5 (0.7) | 28 (4.1) | 31 (4.5) | 553 (80.6) |  | 686 (4.7) |
| Out of Scope | 37 (6.8) | 3 (0.6) |  | 1 (0.2) | 6 (1.1) | 498 (91.4) |  | 545 (3.8) |
| No One Eligible in HH | 170 (57.8) | 8 (2.7) | 1 (0.3) | 75 (25.5) | 28 (9.5) | 12 (4.1) |  | 294 (2.0) |
| Dead | 65 (73.9) | 5 (5.7) |  | 3 (3.4) | 1 (1.1) | 14 (15.9) |  | 88 (0.6) |
| TOTAL | 8701 (60.0) | 202 (1.4) | 102 (0.7) | 617 (4.3) | 2628 (18.1) | 1637 (11.3) | 615 (4.2) | 14502 (100) |

Table 18k: Wave Twelve Individual Outcomes by Wave Eleven Response Status

| Wave Twelve Response Status | Wave Eleven Response Status |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Full Interview | Proxy Interview | Telephone Interview | Refusal | Child Under 16 years | Refusal/ Non-contact Household | New Entrant | TOTAL |
| Full Interview | 7849 (93.6) | 31 (0.4) | 41 (0.5) | 48 (0.6) | 130 (1.6) | 88 (1.0) | 196 (2.3) | 8383 (59.4) |
| Proxy Interview | 58 (29.7) | 93 (47.7) | 2 (1.0) | 24 (12.3) | 2 (1.0) | 5 (2.6) | 11 (5.6) | 195 (1.4) |
| Telephone Interview | 127 (52.9) | 5 (2.1) | 68 (28.3) | 15 (6.3) | 3 (1.2) | 16 (6.7) | 6 (2.5) | 240 (1.7) |
| Within HH Refusal | 71 (11.5) | 16 (2.6) | 8 (1.3) | 398 (64.4) | 12 (1.9) | 30 (4.9) | 83 (13.4) | 618 (4.4) |
| Other Non-Interview | 27 (26.0) | 10 (9.6) | 3 (2.9) | 33 (31.7) | 1 (1.0) | 3 (2.9) | 27 (26.0) | 104 (0.7) |
| Child Under 16 |  |  |  |  | 2370 (91.4) | 38 (1.5) | 186 (7.2) | 2594 (18.4) |
| Refusal Household | 136 (21.3) | 6 (0.9) | 30 (4.7) | 49 (7.7) | 38 (6.0) | 380 (59.5) |  | 639 (4.5) |
| Non-contact Household | 75 (19.3) | 4 (1.0) | 9 (2.3) | 28 (7.2) | 23 (5.9) | 249 (64.2) |  | 388 (2.7) |
| Out of Scope | 26 (4.4) | 1 (0.2) | 1 (0.2) | 8 (1.4) | 9 (1.5) | 540 (92.3) |  | 585 (4.1) |
| No One Eligible in HH | 161 (57.3) | 4 (1.4) |  | 80 (28.5) | 21 (7.5) | 15 (5.3) |  | 281 (2.0) |
| Dead | 60 (69.0) | 12 (13.8) | 2 (2.3) | 6 (6.9) |  | 7 (8.0) |  | 87 (0.6) |
| TOTAL | 8590 (60.9) | 182 (1.3) | 164 (1.2) | 689 (4.9) | 2609 (18.5) | 1371 (9.7) | 509 (3.6) | 14114 (100) |

Table 18I: Wave Thirteen Individual Outcomes by Wave Twelve Response Status

| Wave Thirteen Response Status | Wave Twelve Response Status |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Full Interview | Proxy Interview | Telephone Interview | Refusal | Child Under 16 years | Refusal/ <br> Non-contact <br> Household | New Entrant | TOTAL |
| Full Interview | 7694 (93.1) | 34 (0.4) | 60 (0.7) | 55 (0.7) | 154 (1.9) | 65 (0.8) | 202 (2.4) | 8264 (59.0) |
| Proxy Interview | 43 (20.2) | 106 (49.8) |  | 40 (18.8) | 3 (1.4) | 2 (0.9) | 19 (8.9) | 213 (1.5) |
| Telephone Interview | 103 (46.0) | 5 (2.2) | 59 (26.3) | 22 (9.8) | 3 (1.3) | 30 (13.4) | 2 (0.9) | 224 (1.6) |
| Within HH Refusal | 53 (9.4) | 20 (3.5) | 15 (2.7) | 388 (68.8) | 4 (0.7) | 12 (2.1) | 72 (12.8) | 564 (4.0) |
| Other Non-Interview | 29 (30.9) | 3 (3.2) | 3 (3.2) | 27 (28.7) | 4 (4.3) |  | 28 (29.8) | 94 (0.7) |
| Child Under 16 |  |  |  |  | 2299 (91.4) | 24 (1.0) | 192 (7.6) | 2515 (17.9) |
| Refusal Household | 148 (20.7) | 7 (1.0) | 81 (11.3) | 84 (11.7) | 74 (10.3) | 322 (45.0) |  | 716 (5.1) |
| Non-contact Household | 60 (13.6) | 6 (1.4) | 12 (2.7) | 18 (4.1) | 20 (4.5) | 326 (73.8) |  | 442 (3.2) |
| Out of Scope | 45 (7.0) | 1 (0.2) | 3 (0.5) | 5 (0.8) | 9 (1.4) | 579 (90.2) |  | 642 (4.6) |
| No One Eligible in HH | 140 (55.6) | 6 (2.4) | 3 (1.2) | 76 (30.2) | 24 (9.5) | 3 (1.2) |  | 252 (1.8) |
| Dead | 68 (75.6) | 7 (7.8) | 2 (2.2) | 7 (7.8) |  | 6 (6.7) |  | 90 (0.6) |
| TOTAL | 8383 (59.8) | 195 (1.4) | 238 (1.7) | 722 (5.2) | 2594 (18.5) | 1369 (9.8) | 515 (3.7) | 14016 (100.0) |

Table 18m: Wave Fourteen Individual Outcomes by Wave Thirteen Response Status

| Wave Fourteen Response Status | Wave Thirteen Response Status |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Full Interview | Proxy Interview | Telephone Interview | Refusal | Child Under 16 years | Refusal/ Non-contact Household | New Entrant | TOTAL |
| Full Interview | 7547 (93.4) | 38 (0.5) | 35 (0.4) | 61 (0.8) | 142 (1.8) | 71 (0.9) | 186 (2.3) | 8080 (100.0) |
| Proxy Interview | 45 (24.2) | 103 (55.4) | 3 (1.6) | 12 (6.5) | 3 (1.6) | 3 (1.6) | 17 (9.1) | 186 (100.0) |
| Telephone Interview | 161 (45.6) | 5 (1.4) | 94 (26.6) | 24 (6.8) | 2 (0.6) | 62 (17.6) | 5 (1.4) | 353 (100.0) |
| Within HH Refusal | 50 (8.7) | 31 (5.4) | 12 (2.1) | 367 (63.6) | 5 (0.9) | 26 (4.5) | 86 (14.9) | 577 (100.0) |
| Other Non-Interview | 45 (35.7) | 7 (5.6) | 1 (0.8) | 31 (24.6) | 2 (1.6) | 8 (6.3) | 32 (25.4) | 126 (100.0) |
| Child Under 16 |  |  |  |  | 2263 (91.2) | 20 (0.8) | 198 (8.0) | 2481 (100.0) |
| Refusal Household | 107 (17.4) | 5 (0.8) | 58 (9.4) | 74 (12.1) | 54 (8.8) | 316 (51.5) |  | 614 (100.0) |
| Non-contact Household | 44 (8.9) | 4 (0.8) | 12 (2.4) | 8 (1.6) | 17 (3.5) | 407 (82.7) |  | 492 (100.0) |
| Out of Scope | 34 (5.0) | 3 (0.4) |  | 7 (1.0) | 6 (0.9) | 628 (92.6) |  | 678 (100.0) |
| No One Eligible in HH | 158 (58.7) | 9 (3.3) | 4 (1.5) | 66 (24.5) | 19 (7.1) | 13 (4.8) |  | 269 (100.0) |
| Dead | 73 (39.9) | 8 (4.4) | 2 (1.1) | 8 (4.4) | 2 (1.1) | 90 (49.2) |  | 183 (100.0) |
| TOTAL | 8264 (58.9) | 213 (1.5) | 221 (1.6) | 658 (4.7) | 2515 (17.9) | 1644 (11.7) | 524 (3.7) | 14039 (100.0) |

Table 18n: Wave Fifteen Individual Outcomes by Wave Fourteen Response Status

| Wave Fifteen Response Status | Wave Fourteen Response Status |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Full Interview | Proxy Interview | Telephone Interview | Refusal | Child Under 16 years | Refusal/ <br> Non-contact <br> Household | New Entrant | TOTAL |
| Full Interview | 7437 (93.0) | 30 (0.4) | 35 (0.4) | 79 (1.0) | 141 (1.8) | 49 (0.6) | 223 (2.8) | 7994 (100) |
| Proxy Interview | 33 (20.4) | 103 (63.6) | 2 (1.2) | 14 (8.6) | 1 (0.6) | 1 (0.6) | 8 (4.9) | 162 (100) |
| Telephone Interview | 97 (25.4) | 2 (0.5) | 221 (57.9) | 24 (6.3) | 11 (2.9) | 24 (6.3) | 3 (0.8) | 382 (100) |
| Within HH Refusal | 58 (9.3) | 20 (3.2) | 11 (1.8) | 389 (62.2) | 10 (1.6) | 24 (3.8) | 113 (18.1) | 625 (100) |
| Other Non-Interview | 28 (27.5) | 5 (4.9) | 6 (5.9) | 43 (42.2) | 3 (2.9) | 7 (6.9) | 10 (9.8) | 102 (100) |
| Child Under 16 |  |  |  |  | 2215 (91.0) | 23 (0.9) | 197 (8.1) | 2435 (100) |
| Refusal Household | 127 (21.8) | 3 (0.5) | 45 (7.7) | 52 (8.9) | 44 (7.5) | 312 (53.5) |  | 583 (100) |
| Non-contact Household | 62 (10.2) | 2 (0.3) | 23 (3.8) | 25 (4.1) | 20 (3.3) | 475 (78.3) |  | 607 (100) |
| Out of Scope | 35 (4.9) | 4 (0.6) | 4 (0.6) | 3 (0.4) | 6 (0.8) | 667 (92.8) |  | 719 (100) |
| No One Eligible in HH | 137 (55.0) | 7 (2.8) | 1 (0.4) | 69 (27.7) | 25 (10.0) | 10 (4.0) |  | 249 (100) |
| Dead | 63 (67.7) | 10 (10.8) | 3 (3.2) | 5 (5.4) | 2 (2.2) | 10 (10.8) |  | 93 (100) |
| TOTAL | 8077 (57.9) | 186 (1.3) | 351 (2.5) | 703 (5.0) | 2478 (17.8) | 1602 (11.5) | 554 (4.0) | 13951 (100) |

Table 180: Wave Sixteen Individual Outcomes by Wave Fifteen Response Status

| Wave Sixteen Response Status | Wave Fifteen Response Status |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Full Interview | Proxy Interview | Telephone Interview | Refusal | Child Under 16 years | Refusal/ <br> Non-contact <br> Household | New Entrant | TOTAL |
| Full Interview | 7451 (93.8) | 18 (0.2) | 47 (0.6) | 50 (0.6) | 124 (1.6) | 53 (0.7) | 203 (2.6) | 7946 (100) |
| Proxy Interview | 29 (18.5) | 98 (62.4) | 0 (0.0) | 18 (11.5) | 1 (0.6) | 1 (0.6) | 10 (6.4) | 157 (100) |
| Telephone Interview | 80 (21.0) | 1 (0.3) | 243 (63.8) | 14 (3.7) | 5 (1.3) | 34 (8.9) | 4 (1.0) | 381 (100) |
| Within HH Refusal | 41 (6.3) | 19 (2.9) | 17 (2.6) | 449 (69.1) | 8 (1.2) | 12 (1.8) | 104 (16.0) | 650 (100) |
| Other Non-Interview | 21 (18.8) | 6 (5.4) | 5 (4.5) | 35 (31.3) | 6 (5.4) | 9 (8.0) | 30 (26.8) | 112 (100) |
| Child Under 16 |  |  |  |  | 2166 (91.6) | 25 (1.1) | 174 (7.4) | 2365 (100) |
| Refusal Household | 98 (17.2) | 9 (1.6) | 39 (6.8) | 43 (7.5) | 52 (9.1) | 329 (57.7) |  | 570 (100) |
| Non-contact Household | 41 (5.9) | 2 (0.3) | 21 (3.0) | 23 (3.3) | 40 (5.8) | 563 (81.6) |  | 690 (100) |
| Out of Scope | 27 (3.6) |  | 2 (0.3) | 5 (0.7) | 7 (0.9) | 715 (94.6) |  | 756 (100) |
| No One Eligible in HH | 139 (54.5) | 4 (1.6) | 3 (1.2) | 80 (31.4) | 24 (9.4) | 5 (2.0) |  | 255 (100) |
| Dead | 67 (57.3) | 5 (4.3) | 2 (1.7) | 8 (6.8) |  | 35 (29.9) |  | 117 (100) |
| TOTAL | 7994 (57.1) | 162 (1.2) | 379 (2.7) | 725 (5.2) | 2433 (17.4) | 1781 (12.7) | 525 (3.8) | 13999 (100) |

Table 18p: Wave Seventeen Individual Outcomes by Wave Sixteen Response Status

| Wave Seventeen Response Status | Wave Sixteen Response Status |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Full Interview | Proxy Interview | Telephone Interview | Refusal | Child Under 16 years | Refusal/ Non-contact Household | New Entrant | TOTAL |
| Full Interview | 7301 (94.0) | 19 (0.2) | 42 (0.5) | 48 (0.6) | 167 (2.2) | 41 (0.5) | 148 (1.9) | 7766 (100) |
| Proxy Interview | 32 (22.2) | 90 (62.5) | 1 (0.7) | 12 (8.3) | 3 (2.1) | 1 (0.7) | 5 (3.5) | 144 (100) |
| Telephone Interview | 105 (25.5) | 2 (0.5) | 261 (63.3) | 15 (3.6) | 3 (0.7) | 22 (5.3) | 4 (1.0) | 412 (100) |
| Within HH Refusal | 63 (9.5) | 21 (3.2) | 6 (0.9) | 457 (69.2) | 14 (2.1) | 16 (2.4) | 83 (12.6) | 660 (100) |
| Other Non-Interview | 22 (21.4) | 3 (2.9) | 3 (2.9) | 48 (46.6) |  | 1 (1.0) | 26 (25.2) | 103 (100) |
| Child Under 16 |  |  |  |  | 2087 (91.2) | 13 (0.6) | 189 (8.3) | 2289 (100) |
| Refusal Household | 142 (22.5) | 9 (1.4) | 37 (5.9) | 63 (10.0) | 47 (7.5) | 332 (52.7) |  | 630 (100) |
| Non-contact Household | 45 (6.1) | 3 (0.4) | 25 (3.4) | 24 (3.3) | 20 (2.7) | 619 (84.1) |  | 736 (100) |
| Out of Scope | 36 (4.5) |  | 1 (0.1) | 5 (0.6) | 2 (0.3) | 752 (94.5) |  | 796 (100) |
| No One Eligible in HH | 144 (54.1) | 5 (1.9) | 1 (0.4) | 83 (31.2) | 19 (7.1) | 14 (5.3) |  | 266 (100) |
| Dead | 55 (74.3) | 5 (6.8) | 2 (2.7) | 6 (8.1) | 1 (1.4) | 5 (6.8) |  | 74 (100) |
| TOTAL | 7945 (57.3) | 157 (1.1) | 379 (2.7) | 761 (5.5) | 2363 (17.0) | 1816 (13.1) | 455 (3.3) | 13876 (100) |

Table 18q Wave Eighteen Individual Outcomes by Wave Seventeen Response Status

|  | Wave Seventeen Response Status |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wave eighteen response status | Full interview | Proxy interview | Telephone interview | Refusal | Child under 16 | Refusal/noncont HH | New entrant | Total |
| Full interview | 7124 (95.0) | 19 (0.3) | 31 (0.4) | 45 (0.6) | 102 (1.4) | 45 (0.6) | 134 (1.8) | 7500 (100) |
| Proxy interview | 26 (19.1) | 88 (64.7) | 1 (0.7) | 11 (8.1) | 1 (0.7) | 4 (2.9) | 5 (3.7) | 136 (100) |
| Telephone interview | 101(23.3) | 0 (0.0) | 294 (67.7) | 11 (2.5) | 5 (1.2) | 22 (5.1) | 1 (0.2) | 434 (100) |
| Refusal | 71 (9.9) | 15 (2.1) | 11 (1.5) | 494 (69.0) | 12 (1.7) | 18 (2.5) | 95 (13.3) | 716 (100) |
| Other non-interview | 45 (34.4) | 3 (2.3) | 2 (1.5) | 41 (31.3) | 4 (3.1) | 1 (0.8) | 35 (26.7) | 131 (100) |
| Child under 16 |  |  |  |  | 2074 (91.2) | 21 (0.9) | 178 (7.8) | 2273 (100) |
| Refusal/non-cont HH | 126 (21.9) | 8 (1.4) | 51 (8.9) | 59 (10.2) | 48 (8.3) | 284 (49.3) | 0 (0.0) | 576 (100) |
| Non-cont/NC HH | 48 (6.2) | 4 (0.5) | 13 (1.7) | 20 (2.6) | 10 (1.3) | 684 (87.8) | 0 (0.0) | 779 (100) |
| Out of scope/NC HH | 31 (3.7) | 0 (0.0) | 3 (0.4) | 6 (0.7) | 7 (0.8) | 795 (94.4) | 0 (0.0) | 842 (100) |
| No one elig in HH | 118 (46.3) | 2 (0.8) | 1 (0.4) | 89 (34.9) | 26 (10.2) | 19 (7.5) | 0 (0.0) | 255 (100) |
| Dead | 65 (89.0) | 5 (6.8) | 1 (1.4) | 1 (1.4) | 0 (0.0) | 1 (1.4) | 0 (0.0) | 73 (100) |
| Total | 7755 (56.5) | 144 (1.0) | 408 (3.0) | 777 (5.7) | 2289 (16.7) | 1894 (13.8) | 448 (3.3) | 13715 (100) |

Table 19

Household Response Outcomes

|  | Wave Two | Wave Three | Wave Four | Wave Five | Wave Six | Wave Seven | Wave Eight | Wave Nine | Wave Ten |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total Households Issued and Identified in Field | 5986 | 6534 | 6558 | 6553 | 6487 | 6531 | 6179 | 6216 | 6333 |
| All Sample Members deceased or out of scope | 83 (1.4\%) | 134 (2.1\%) | 195 (3.0\%) | 232 (3.5\%) | 264 (4.1\%) | 301 (4.6\%) | 301 (4.9\%) | 297 (4.8\%) | 393 (6.2\%) |
| No Eligible members |  | 176 (2.7\%) | 207 (3.2\%) | 241 (3.7\%) | 215 (3.3\%) | 255 (3.9\%) | 253 (4.1\%) | 205 (3.3\%) | 208 (3.3\%) |
| All Sample members returned to Previous Wave Household | 22 (0.4\%) | 90 (1.4\%) | 57 (0.9\%) | 43 (0.7\%) | 23 (0.4\%) | 40 (0.6\%) | 34 (0.6\%) | 42 (0.7\%) | 44 (0.7\%) |
| Effective Eligible Households | 5881 (100\%) | 6134 (100\%) | 6099 (100\%) | 6037 (100\%) | 5985 (100\%) | 5935 (100\%) | 5591 (100\%) | 5672 (100\%) | 5688 (100\%) |
| Previous wave adamant refusals |  | 173 (2.8\%) | 220 (3.6\%) | 157 (2.6\%) | 130 (2.2\%) | 455 (7.7\%) | 41 (0.7\%) | 40 (0.7\%) | 56 (1.0\%) |
| Effective Eligible Households Issued to Field | 5881 (100\%) | 5961 (100\%) | 5879 (100\%) | 5880 (100\%) | 5855 (100\%) | 5480 (100\%) | 5500 (100\%) | 5632 (100\%) | 5632 (100\%) |
| Household not found | 216 (3.7\%) | 348 (5.8\%) | 408 (6.9\%) | 503 (8.6\%) | 479 (8.2\%) | 247 (4.5\%) | 313 (5.6\%) | 372 (6.6\%) | 440 (7.8\%) |
| Household refusal | 438 (7.4\%) | 385 (6.5\%) | 346 (5.9\%) | 343 (5.8\%) | 310 (5.3\%) | 206 (3.8\%) | 230 (4.1\%) | 276 (4.9\%) | 276 (4.9\%) |
| Complete Household Interview | 4556 (77.5\%) | 4354 (73.1\%) | 4378 (74.5\%) | 4259 (72.4\%) | 4372 (74.7\%) | 4384 (80.0\%) | 4328 (78.0\%) | 4273 (75.9\%) | 4194 (74.5\%) |
| Complete Household Coverage (inc. proxies) | 334 (5.7\%) | 279 (4.7\%) | 273 (4.6\%) | 257 (4.4\%) | 222 (3.8\%) | 201 (3.7\%) | 197 (3.2\%) | 188 (3.3\%) | 188 (3.3\%) |
| Partial Household Coverage | 331 (5.6\%) | 378 (6.3\%) | 384 (6.5\%) | 419 (7.1\%) | 429 (7.3\%) | 415 (7.6\%) | 432 (7.8\%) | 465 (8.2\%) | 455 (8.1\%) |
| Telephone Interview only |  | 212 (3.6\% | 88 (1.5\%) | 98 (1.7\%) | 40 (0.7\%) | 25 (0.5\%) | 47 (0.8\%) | 45 (0.8\%) | 74 (1.3\%) |
| Proxy at Previous Address | 6 (0.1\%) | 5 (0.1\%) | 2 (0.0\%) | 1 (0.0\%) | 3 (0.1\%) | 2 (0.0\%) | 3 (0.1\%) | 3 (0.1\%) | 5 (0.1\%) |
| All Respondent Households | 5227 (88.9\%) | 5228 (87.7\%) | 5125 (87.2\%) | 5034 (85.6\%) | 5066 (86.5\%) | 5027 (91.7\%) | 5007 (90.2\%) | 4974 (88.3\%) | 4916 (87.3\%) |

## Table 19 (continued)

Household Response Outcomes

|  | Wave Eleven | Wave Twelve | Wave Thirteen | Wave Fourteen | Wave Fifteen | Wave Sixteen | Wave Seventeen | Wave Eighteen |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total Households Issued and Identified in Field | 6353 | 6437 | 6256 | 6278 | 6224 | 6237 | 6288 | 6267 |
| All Sample Members deceased or out of scope | 387 (6.1\%) | 395 (6.1\%) | 443 (7.1\%) | 534 (8.5\%) | 481 (7.7\%) | 539 (8.6\%) | 534 (8.5\%) | 574 (9.2\%) |
| No Eligible members | 197 (3.1\%) | 187 (2.9\%) | 184 (2.9\%) | 194 (3.1\%) | 184 (3.0\%) | 179 (2.9\%) | 195 (3.1\%) | 173 (2.8) |
| All Sample members returned to Previous Wave Household | 48 (0.8\%) | 57 (0.9\%) | 40 (0.6\%) | 48 (0.8\%) | 43 (0.7\%) | 33 (0.5\%) | 37 (0.6\%) | 37 (0.6\%) |
| Effective Eligible Households | 5721 (100\%) | 5798 (100\%) | 5589 (100\%) | 5502 (100\%) | 5516 (100\%) | 5486 (100\%) | 5522 (100\%) | 5483 (100\%) |
| Previous wave adamant refusals | 25 (0.4\%) | 315 (5.4\%) | 125 (2.2\%) | 87 (1.6\%) | 101 (1.8\%) | 63 (1.1\%) | 107 (1.9\%) | 129 (2.4\%) |
| Effective Eligible Households Issued to Field | 5696 (100\%) | 5483 (100\%) | 5464 (100\%) | 5415 (100\%) | 5415 (100\%) | 5423 (100\%) | 5415 (100\%) | 5354 (100\%) |
| Household not found | 467 (8.2\%) | 257 (4.7\%) | 293 (5.4\%) | 328 (6.1\%) | 396 (7.3\%) | 429 (7.9\%) | 468 (8.6\%) | 540 (10.1\%) |
| Household refusal | 339 (6\%) | 373 (6.8\%) | 406 (7.4\%) | 327 (6.0\%) | 321 (5.9\%) | 320 (5.9\%) | 350 (6.5\%) | 305 (5.7\%) |
| Complete Household Interview | 4104 (72.1\%) | 3987 (72.7\%) | 3951 (72.3\%) | 3877 (71.6\%) | 3803 (70.2\%) | 3761 (69.4\%) | 3673 (67.8\%) | 3550 (66.3\%) |
| Complete Household Coverage (inc. proxies) | 160 (2.8\%) | 171 (3.1\%) | 188 (3.4\%) | 159 (2.9\%) | 142 (2.6\%) | 132 (2.4\%) | 126 (2.3\%) | 119 (2.2\%) |
| Partial Household Coverage | 503 (8.8\%) | 527 (9.6\%) | 485 (8.9\%) | 489 (9.0\%) | 501 (9.3\%) | 512 (9.4\%) | 511 (9.4\%) | 528 (9.9\%) |
| Telephone Interview only | 117 (2.1\%) | 166 (3.0\%) | 139 (2.5\%) | 226 (4.2\%) | 247 (4.6\%) | 262 (4.8\%) | 284 (5.2\%) | 310 (5.8\%) |
| Proxy at Previous Address | 3 (0.1\%) | 2 (0.0\%) | 2 (0.0\%) | 9 (0.2\%) | 5 (0.1\%) | 7 (0.1\%) | 3 (0.1\%) | 2 (0\%) |
| All Respondent Households | 4887 (85.8\%) | 4853 (88.5\%) | 4765 (87.2\%) | 4760 (87.9\%) | 4698 (86.8\%) | 4674 (86.2\%) | 4597 (84.9\%) | 4509 (84.2\%) |

## Table 20

Outcomes for Original Sample Members with Full Interview at Wave One

|  | Wave Two | Wave Three | Wave Four | Wave Five | Wave Six | Wave Seven | Wave Eight | Wave Nine | Wave Ten |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Full Interview Respondent | 8568 (86.4\%) | 7839 (79.1\%) | 7577 (76.4\%) | 7183 (72.5\%) | 7132 (72.0\%) | 6903 (69.6\%) | 6651(67.1\%) | 6396 (64.5\%) | 6143 (62.0\%) |
| Proxy Interview Respondent | 150 (1.5\%) | 138 (1.4\%) | 128 (1.3\%) | 116 (1.2\%) | 104 (1.0\%) | 96 (1.0\%) | 95 (1.0\%) | 85 (0.9\%) | 77 (0.8\%) |
| Telephone Interview Respondent |  | 237 (2.4\%) | 104 (1.0\%) | 113 (1.1\%) | 42 (0.4\%) | 30 (0.3\%) | 47 (0.5\%) | 47 (0.5\%) | 82 (0.8\%) |
| Within-household Refusal | 112 (1.1\%) | 234 (2.4\%) | 224 (2.3\%) | 200 (2.0\%) | 166 (1.7\%) | 152 (1.5\%) | 159 (1.6\%) | 135 (1.6\%) | 149 (1.5\%) |
| Other Non-interview in respondent household | 12 (0.1\%) | 37 (0.4\%) | 18 (0.2\%) | 29 (0.3\%) | 17 (0.2\%) | 10 (0.1\%) | 13 (0.2\%) | 19 (0.2\%) | 14 (0.1\%) |
| Died | 81 (0.8\%) | 194 (2.0\%) | 290 (2.9\%) | 387 (3.9\%) | 489 (4.9\%) | 596 (6.0\%) | 695 (7.0\%) | 771 (7.8\%) | 877 (8.8\%) |
| Out-of-scope | 64 (0.6\%) | 93 (0.9\%) | 140 (1.4\%) | 173 (1.7\%) | 198 (2.0\%) | 237 (2.4\%) | 246 (2.5\%) | 269 (2.7\%) | 312 (3.1\%) |
| In non-contact household | 267 (2.7\%) | 343 (3.5\%) | 395 (4.0\%) | 478 (4.8\%) | 427 (4.3\%) | 191 (1.9\%) | 235 (2.4\%) | 286 (2.9\%) | 326 (3.3\%) |
| In refusal household | 620 (6.2\%) | 488 (4.9\%) | 382 (3.9\%) | 355 (3.6\%) | 274 (2.8\%) | 154 (1.6\%) | 153 (1.5\%) | 206 (2.1\%) | 197 (2.0\%) |
| In other non-interviewed household | 38 (0.4\%) | 66 (0.7\%) | 85 (0.9\%) | 100 (1.0\%) | 112 (1.1\%) | 85 (0.9\%) | 112 (1.1\%) | 129 (1.3\%) | 117 (1.2\%) |
| In household not issued due to previous wave refusal |  | 243 (2.5\%) | 569 (5.7\%) | 778 (7.8\%) | 951 (9.6\%) | 1164 (14.7\%) | 1212 (12.2\%) | 1235 (12.7\%) | 1324 (13.4\%) |
| In household not issued due to longterm non-contact |  |  |  |  |  | 294 (3.0\%) | 294 (3.0\%) | 294 (3.0\%) | 294 (3.0\%) |

## Table 20

Outcomes for Original Sample Members with Full Interview at Wave One

|  | Wave Eleven | Wave Twelve | Wave Thirteen | Wave Fourteen | Wave Fifteen | Wave Sixteen | Wave Seventeen | Wave Eighteen |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Full Interview Respondent | 5914 (59.7\%) | 5694 (57.4\%) | 5481 (55.3\%) | 5212 (52.6\%) | 4994 (50.4\%) | 4835 (48.8\%) | 4622 (46.6\%) | 4411 (44.5\%) |
| Proxy Interview Respondent | 68 (0.7\%) | 67 (0.7\%) | 6 (0.6\%) | 58 (0.6\%) | 40 (0.4\%) | 38 (0.4\%) | 34 (0.3\%) | 36 (0.4\%) |
| Telephone Interview Respondent | 131 (1.3\%) | 161 (1.6\%) | 133 (1.3\%) | 234 (2.4\%) | 241 (2.4\%) | 242 (2.4\%) | 263 (2.7\%) | 270 (2.7\%) |
| Within-household Refusal | 160 (1.6\%) | 166 (1.7\%) | 149 (1.5\%) | 154 (1.6\%) | 149 (1.5\%) | 146 (1.5\%) | 157 (1.6\%) | 155 (1.6\%) |
| Other Non-interview in respondent household | 20 (0.2\%) | 19 (0.2\%) | 14 (0.1\%) | 28 (0.3\%) | 21 (0.2\%) | 21 (0.2\%) | 11 (0.1\%) | 27 (0.3\%) |
| Died | 951 (9.6\%) | 1021 (10.3\%) | 1098 (11.1\%) | 1258 (12.7\%) | 1338 (13.5\%) | 1443 (14.6\%) | 1507 (15.2\%) | 1570 (15.8\%) |
| Out-of-scope | 320 (3.2\%) | 340 (3.4\%) | 370 (3.7\%) | 373 (3.8\%) | 399 (4.0\%) | 416 (4.2\%) | 439 (4.4\%) | 464 (4.7\%) |
| In non-contact household | 310 (3.1\%) | 135 (1.4\%) | 157 (1.6\%) | 169 (1.7\%) | 190 (1.9\%) | 208 (2.1\%) | 212 (2.1\%) | 223 (2.2\%) |
| In refusal household | 234 (2.4\%) | 245 (2.5\%) | 231 (2.3\%) | 176 (1.8\%) | 187 (1.9\%) | 166 (1.7\%) | 166 (1.7\%) | 143 (1.4\%) |
| In other non-interviewed household | 156 (1.6\%) | 146 (1.5\%) | 163 (1.6\%) | 117 (1.2\%) | 135 (1.4\%) | 127 (1.3\%) | 140 (1.4\%) | 156 (1.6\%) |
| In household not issued due to previous wave refusal | 1356 (13.7\%) | 1400 (14.1\%) | 1535 (15.5\%) | 1615 (16.3\%) | 1702 (17.2\%) | 1754 (17.7\%) | 1846 (18.6\%) | 1942 (19.6\%) |
| In household not issued due to longterm non-contact | 292 (9.6\%) | 518 (5.7\%) | 518 (5.2\%) | 518 (5.2\%) | 516 (5.2\%) | 516 (5.2\%) | 515 (5.2\%) | 515 (5.2\%) |

Household outcomes and response rates for the first wave of the extension samples in Scotland and Wales are shown in Table 21. These rates are somewhat below expectation. However they are not wholly out of line with other current surveys. For example the Scottish Household Survey, under the auspices of the Scottish Executive had a partial coverage response rate of 64.7\%. A comparison of survey estimates with the 1999 Labour Force Survey suggest that while there is some underrepresentation of older age groups, on indicators such as employment status, housing tenure and socio-economic group, differences are relatively small. A full technical report is in preparation, and will be available from the ISER.

Table 21
Household Outcomes and response rates for the 1999/2000 extension samples in Scotland and Wales

|  | Scotland | Wales |
| :---: | :---: | :---: |
| Addresses Issued | 2475 | 2475 |
| Vacant/Non-residential/Foreign | 302 | 295 |
| Multi-Households Addition to Sample | 226 | 11 |
| Effective Sample Size | 2399 | 2191 |
| Refusal to Field Agency/Research Centre | 28 (1\%) | 33 (1\%) |
| Household Refusal to Interviewer | 668 (28\%) | 580 (26\%) |
| Household Non-contact | 189 (8\%) | 91 (4\%) |
| Language/Age/Infirmity Problems | 55 (2\%) | 59 (3\%) |
| Complete Household Interview | 1241 (52\%) | 1152 (53\%) |
| Complete Household Coverage (inc. proxies) | 1276 (53\%) | 1186 (54\%) |
| Partial Household Coverage | 1459 (61\%) | 1428 (65\%) |

## V. Weighting, Imputation and Sampling Errors

## V.1. Weighting Adjustments in the BHPS Wave One

There are separate weights for each wave of data. The calculation of these weights is discussed in the sections below. In general, there are separate weights for respondent individuals, for all enumerated individuals and for households. The appropriate weight to use will depend on the level of the analysis. It should be noted that proxy and telephone respondents have zero respondent weights, but positive enumerated individual weights. There are cross-sectional weights for use with single wave analyses for each wave. At Wave One the household weight is in the variable AHHWGHT on records AHHSAMP and AHHRESP, the individual respondent weight is AXRWGHT on record AINDRESP, and the enumerated individual weight is AXEWGHT on records AINDALL and AINDRESP. At Wave Two and beyond the equivalent household weight is wXHWGHT, and equivalent individual weights wXRWGHT and wXEWGHT.

However these weights should not be used for longitudinal analyses. The appropriate weights for such analyses are the longitudinal weight wLRWGHT for respondent individuals, and wLEWGHT for all enumerated individuals. These variables are on records wINDSAMP, wINDALL and wINDRESP. The weights from the last wave of any longitudinal sequence should be used. Note that only cases who have responded at each wave up to and including the latest wave will have positive longitudinal weights at that wave.

This section details the weighting adjustments applied to the BHPS Wave One data. The weighting adjustments were of the following form:
(1) Weights to adjust for unequal selection probabilities of delivery points (design weights);
(2) Weights to adjust for non-response at the household level;
(3) Weights to adjust for non-response of individuals within responding households;
(4) Re-scaling of final weights to the raw sample size (Household $n=5511$, Individuals interviewed $\mathrm{n}=9912$ ). Weights were derived in the above order with all calculations being based on data weighted by the product of all previously derived weights so that the weighting adjustments were made contingent on the already derived weights. The final weights to be applied for analysis purposes are the product of these weights.

The following discussion details the derivation of each of the above weights, their combination to obtain final weights for each type of analysis and information on their use. The interested reader is referred to Elliot (1991) for an introductory discussion of weighting adjustments for sample surveys.

## V.1.1. Weighting for Unequal Selection Probabilities

The first weights are applied in order to adjust for differential representation in the sample due to the two-stage stratified systematic sample design. The sample selection mechanism was designed to be approximately an equal probability selection mechanism (epsem design). However, some deviation from a truly epsem design occurred, due mainly to the method of selection of households within addresses in Scotland and to a lesser degree in England and Wales. This necessitates the use of weights to adjust
the sample back to an epsem design. These weights are made proportional to the inverse of the probability of selection for a given sampled unit and their derivation is detailed below.

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Considering firstly the probability of selection of a given household under the sampling scheme applied, this can be defined as follows:

The probability of household $\boldsymbol{\gamma}$ in delivery point $\boldsymbol{\beta}$ (approximately equivalent to an address) in PSU $\boldsymbol{\alpha}$ being selected for the sample is:

$$
p(\alpha \beta \gamma)=P(\alpha) \cdot P(\beta \mid \alpha) \cdot P(\gamma \mid \alpha \beta)
$$

That is the product of the probability of selection of PSU $\boldsymbol{\alpha}$ multiplied by the probability of selection of delivery point $\boldsymbol{\beta}$ conditional on the selection of PSU $\boldsymbol{\alpha}$ multiplied by the probability of selection delivery point $\boldsymbol{Y}$ conditional on the previous two selections.

These components are defined as follows:
(a) The probability of selecting a given PSU at the first stage of selection is defined as:
$P(\alpha)=\frac{250 M_{\alpha}}{\sum M_{\alpha}}$
The term $M_{\alpha}$ is an estimate of the size of PSU $\boldsymbol{\alpha}$ and is defined as the number of delivery points on the PAF (at the time of area selection) for a PSU in England and Wales and the sum of the Multiple Occupancy Indicators (MOI) for a PSU in Scotland. Since sampling was with replacement and 250 PSUs were selected, each PSU had 250 chances of being selected. Therefore the term is multiplied by 250 with the denominator summation being over all PSUs.
(b) The probability of selecting a given delivery point within a given PSU, conditional on that PSU being selected at the first stage of selection, is given as:
$P(\beta \mid \alpha)=\left\{\begin{aligned} \frac{33}{M_{\alpha}} & \text { in England and Wales } \\ \frac{33 N_{\alpha \beta}}{M_{\alpha}} & \text { in Scotland }\end{aligned}\right.$
The selection of delivery points was made on the most up-to-date version of the PAF available. However, since the first stage of selection took place using an older PAF, in order to keep the sample approximately epsem, the systematic selection procedure applied was based on the number of delivery points in this older version of the PAF. For PSUs in England and Wales approximately 33 delivery points were selected from the total with equal selection probabilities and for PSUs in Scotland, again, approximately 33 addresses were selected with selection being proportional to the value of the MOI ( $N_{\alpha \beta}$, an estimate of the number of households at an address) on the new PAF.
(c) The probability of selecting a given household within a given delivery point, conditional on the selection of that delivery point and that area in the previous stages of selection, is defined as:
$P(\gamma \mid \alpha \beta)=\left\{\begin{array}{c}1 \text { if } n_{\alpha \beta} \leq 3 \text { Where } n_{\alpha \beta} \text { is the number of } \\ \frac{3}{n_{\alpha \beta}} \text { if } n_{\alpha \beta}>3 \text { households found at delivery point } \alpha \beta\end{array}\right.$
Where up to three households were found at a delivery point, all households were selected. Where more than three households were found, three household were selected randomly from all those present with a selection procedure based on a Kish Grid.

The overall selection probabilities are therefore the product of the above components with the full probabilities being defined as:
$P(\alpha \beta \gamma)= \begin{cases}\frac{250 M_{\alpha}}{\sum M_{\alpha}} \cdot \frac{33}{M_{\alpha}} & \text { if } n_{\alpha \beta} \leq 3 \\ \frac{250 M_{\alpha}}{\sum M_{\alpha}} \cdot \frac{33}{M_{\alpha}} \cdot \frac{3}{n_{\alpha \beta}} \text { if } n_{\alpha \beta}>3\end{cases}$

In England and Wales, and
$P(\alpha \beta \gamma)= \begin{cases}\frac{250 M_{\alpha}}{\sum M_{\alpha}} \cdot \frac{33 N_{\alpha \beta}}{M_{\alpha}} & \text { if } n_{\alpha \beta} \leq 3 \\ \frac{250 M_{\alpha}}{\sum M_{\alpha}} \cdot \frac{33 N_{\alpha \beta}}{M_{\alpha}} \cdot \frac{3}{n_{\alpha \beta}} \text { if } n_{\alpha \beta}>3\end{cases}$

## in Scotland.

In order to obtain design weights for all addresses, a number of assumptions were necessary since at certain delivery points no information on the total number of households at selected delivery point was available. This was due to interviewer error in completing the field documents. The rules applied to these situations were as follows: (1) If the number of households at a selected delivery point was missing from all households where interviews were attempted, then the total number of households at that delivery point equals the number of households where interviews were attempted; (2) If the number of households at a selected delivery was available for only some households where an interview was attempted, then this number is applied to all households where interviews were attempted at that delivery point.

The weights to compensate for unequal selection probabilities are taken as proportional to the inverse of the selection probabilities which, excluding common terms are given as:

$$
\omega_{\alpha \beta \gamma}=\left\{\begin{array}{cc}
1 & \text { if } n_{\alpha \beta} \leq 3 \\
\frac{n_{\alpha \beta}}{3} & \text { if } n_{\alpha \beta}>3
\end{array}\right.
$$

in England and Wales, and

$$
\omega_{\alpha \beta \gamma}=\left\{\begin{array}{cl}
\frac{1}{N_{\alpha \beta}} & \text { if } n_{\alpha \beta} \leq 3 \\
\frac{n_{\alpha \beta}}{3 N_{\alpha \beta}} & \text { if } n_{\alpha \beta}>3
\end{array}\right.
$$

in Scotland.
This formula was used to derive the design weights for all households in the BHPS sample.

## Weighting for Household Non-Response

Weights were applied to the responding households in order to compensate for non-responding households. These weights were applied so that valid inferences can be made to the survey population. Although assumptions are involved in the definition of these weights these are explicitly defined and as plausible as possible given the limited information available on non-responding households. It should be noted that if non-response weights are not applied to the sample, then this is equivalent to assuming that means, proportions and relationships between variables in the responding sample are identical to those that would be found in the non-responding sample, generally a stronger assumption than those used in the definition of non-response weights. All the weighting adjustments described below were based on data weighted by previously derived weights so that subsequent adjustments do not replicate previous weights.

The weights were obtained by defining weighting classes based on information available for both responding and non-responding households. The classes were therefore defined on the basis of region, PSU characteristics, and type of household dwelling. The respondents in each class are weighted so that they compensate for the non-respondents in that class. The main assumption of this type of weighting is that the means etc. of respondents and non-respondents are the same for a given weighting class.

Household non-response of a given household can be categorised into the following classes for the purposes of the non-response weighting applied to the BHPS:
(i) Non-response at the households level where type of dwelling is unknown.
(ii) Non-response at the household level where type of dwelling is known.

The non-response adjustment for category (i) non-response was carried out by defining all households as members of weighting classes using a cross-classification of region and the socio-economic group stratifier (defined as high, medium or low percentage of individuals in PSU who were classified in SEG 1-5 and 13). Within each of these classes, the responding households were weighted up by a factor that made the total number of households for a given class equal to the total number of responding and non-responding households in that class.

For households in category (ii), the weighting classes were further subdivided by type of accommodation which was collected for both responding and non-responding households. The accommodation types
being defined as (1) Detached; (2) Semi-detached (3) Terraced (4) Flats and other types of accommodation. In 137 of the responding cases, no information was available on accommodation type so a hot-deck imputation procedure was used in order to efficiently use these households in the weighting adjustments. In order to obtain optimal weighting class size (30-45 responding households), given the initial definition of weighting classes detailed above, some weighting classes were combined together while others were split by a second stratifier - that of percentage population over pensionable age. As described above, within each of these classes the responding households were weighted up by a factor that made the total number of households for a given class equal to the total number of responding and non-responding households for that weighting class.

## V.1.2. Individual Level Non-Response Weights

In a small number of cases responding households contained individuals who failed to give a full interview. In order to allow for valid inferences where the individual is the unit of analysis, non-response weights were derived in order to adjust for this within-household non-response. A model based adjustment approach was used, in which a logit model was fitted to the binary response defined as (1) Individual full interview obtained (2) Individual interview not obtained, or only proxy interview. The best fitting model contained the effects for region, housing tenure, an affluence measure, number of eligible individuals in household, marital status, employment status, age, sex and their interaction. These weights were trimmed back to a maximum of 1.75 in order to avoid excessive variance inflation due to these weights. The weights were then defined as the inverse of the predicted propensity or probability to respond for all responding individuals. Since a complete data set was required in order to obtain fitted probabilities for all responding individuals, a small amount of hot-deck item imputation was carried out on the data file.

## V.1.3. Final Wave One Weights

The following are the final weights derived for Wave One.
Household Weight (AHHWGHT), for use with household-based analysis, was calculated as the product of the design and household non-response weights which was then truncated, poststratified and rescaled to the number of households in the sample.

Enumerated Individual Weight (AXEWGHT), for use when the unit of analysis is individual enumerated within the household, was calculated as the product of the design and household non-response weights which was then truncated, post-stratified and rescaled to the number of enumerated individuals in the sample.

Individual Respondent Weight (AXRWGHT), for use when the unit of analysis is the individual with full interview, was calculated as the product of the design, household non-response and individual non-response weights which was then truncated, poststratified and re-scaled to the number of interviewed individuals in the sample.

The procedures used for truncation, post-stratification and re-scaling are detailed below:

## V.1.3.1. Truncation

To ensure that variance inflation due to weighting was minimised and to reduce the potential of high values for weights derived on the basis of the Wave One weights, the Wave One household, enumerated respondent and individual respondent weights were truncated so that no weight was greater than 2.50. The effective sample size and the percentage increase in the variance of estimates was used to assess the bias and variance inflation trade-off associated with using this cut-off for each of the three weights concerned.

## V.1.3.2. Post-stratification

Post-stratification is a method of stratification which is carried out after the sample data have been collected rather than at the time of sample selection which makes it possible to use a much wider range of variables for stratification. This process adjusts marginal distributions of the sample data to be the same as the known distribution in the population. Since the 1991 Census was carried out at approximately the same time as the first wave of the BHPS, Census data were used as the bench mark distributions. The application of post-stratification weights can adjust for under coverage of the frame, although this is not a serious problem in the PAF (Butcher 1988, Wilson \& Elliot 1987), and can give more robust and precise estimators (Holt and Smith 1979, Little 1993). Post-stratification was carried out so that the marginal distributions for household tenure, household size and number of cars were corrected to the population marginals at the household and enumerated individual level. A further poststratification to the population age by sex marginal table was carried out at the enumerated individual level. The same variables were used to adjust at the interviewed adults level (i.e. the population aged 16 or over were post-stratified by tenure, household size, number of cars, age and sex). Note that stratification at the enumerated individual level results in differing weights for individuals within the same household.

## V.1.3.3. Re-scaling

After the process of truncation and post-stratification the final weights were re-scaled to that they summed to the achieved sample sizes for each group, this ensure that the weighted total sample sizes will be the same as that for unweighted data.

An index that gives an approximate measure of the increase in variance of sample means and proportions caused by the variability of the weights (Lepkowski, Kalton, Kasprzyk, 1989) can be defined as:

$$
I=\frac{n \sum w_{i}^{2}}{\left(\sum_{w_{i}}\right)^{2}} \text { where } w_{i} \text { is the weight for case } i .
$$

An associated measure is termed the effective sample size which gives the size of an equal probability sample which would produce the same precision as the BHPS design given weighting for the design, non-response and post-stratification. Both of these measures are given in subsequent tables summarising the weights applied to BHPS data. Tables 23,24 and 25 give summary information regarding the weights for analysis of Wave One of the BHPS.

## V.2. Longitudinal and Cross-sectional Weights after Wave One

There are separate weights for each wave of data. The calculation of these weights is discussed in the sections below. In general, there are separate weights for respondent individuals, for all enumerated individuals and for households. The appropriate weight to use will depend on the level of the analysis. It should be noted that proxy and telephone respondents have zero respondent weights, but positive enumerated individual weights. There are cross-sectional weights for use with single wave analyses for each wave. At Wave One the household weight is in the variable AHHWGHT on records AHHSAMP and AHHRESP, the individual respondent weight is AXRWGHT on record AINDRESP, and the enumerated individual weight is AXEWGHT on records AINDALL and AINDRESP. At Wave Two and beyond the equivalent household weight is wXHWGHT, and equivalent individual weights wXRWGHT and wXEWGHT.

However these weights should not be used for longitudinal analyses. The appropriate weights for such analyses are the longitudinal weight wLRWGHT for respondent individuals, and wLEWGHT for all enumerated individuals. These variables are on records wINDSAMP, wINDALL and wINDRESP. The weights from the last wave of any longitudinal sequence should be used. Note that only cases who have responded at each wave up to and including the latest
wave will have positive longitudinal weights at that wave. (See also Section V. 1 for a discussion of Weighting Adjustments for Wave One.)

Two types of weights are derived for each wave after Wave One: Longitudinal and Cross-Sectional Weights. The longitudinal weights, for those interviewed at all waves up to and including the current wave ${ }^{1}$ (wLRWGHT) and for those enumerated in respondent households in all waves up to and including the current wave (wLEWGHT), allow for the analysis of change between sequences of waves. by adjusting for sample loss between the two waves. The cross-sectional weights, for those enumerated at each wave (wXEWGHT) and for those giving a full interview (wXRWGHT), allow for the use of data in cross-sectional analysis by including new entrants and adjusting for within household nonresponse. The weight names above relate to the original BHPS sample. Sections V.2.4, V.2.5 and V.2.6 below discuss equivalent weights for use with the newer extension samples to BHPS. Table 25 provides an overview of the selection of weights for analysis.

## V.2.1. Weights for Longitudinal Respondents

For the purposes of panel analyses, only cases which responded at all waves are generally of interest. The longitudinal respondent weights (wLRWGHT) selects out cases who gave a full interview at all waves in the BHPS files. At each wave these cases are re-weighted to take account of previous wave respondents lost through refusal at the current wave or through some other form of sample attrition. Thus the longitudinal weight at any wave will be the product of the sequence of attrition weights accounting for losses between each adjacent pair of waves up to that point, as well as the initial respondent weight at wave one. It should be noted that for these purpose response also includes the deceased, people who have moved into institutions or otherwise gone out-of-scope. These fail to give an interview not through non-response but due to a terminating event which results in their leaving the population of interest.

Due to varying amount of information available for non-respondents, the longitudinal respondent weights were calculated in two stages. First, all respondents at both waves including those with "terminal events" were weighted to adjust for the attrition of cases whose final status was indeterminate, in that it was not known whether these cases were still eligible for interview or had left the population of interest. These included people who had moved from their previous wave address and were subsequently not traced for interview, as well as refusal households where the interviewer was unable to determine who was still resident and eligible. The second adjustment weighted up the cases interviewed at both waves to take account of those who refused an interview, were proxied or were unable to give an interview at Wave Two. (Those with terminating events were not included since all non-respondents in this group were known to be ineligible.)

[^4]| Table 22 | AHHWGHT - Household Weight |  |  |  |  |  |
| :--- | :---: | :--- | :--- | :--- | :--- | :--- |
| Mean: | 1.000 | Standard Deviation: | .219 |  |  |  |
| Minimum | .000 | Maximum: |  | 2.500 |  |  |
| $\mathrm{~N}:$ | 5511 |  |  |  |  |  |
| Percentile | Value | Percentile | Value |  | Percentile | Value |
| 10 | .817 | 20 | .874 |  | .915 |  |
| 40 | .950 | 50 | .992 | 60 | 1.024 |  |
| 70 | 1.065 | 80 | 1.121 | 90 | 1.202 |  |
| Effective Sample Size: |  | 5260 |  |  |  |  |
| Percentage Variance Inflation due to weights: |  |  | 4.78 |  |  |  |

Table 23 AXEWGHT - Enumerated Individual Weight

| Mean: | 1.000 | Standard Deviation: |  |  |  |  |  | .221 |  |  |
| :--- | :---: | :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: |
| Minimum | .000 | Maximum: |  | 2.498 |  |  |  |  |  |  |
| N: | 13840 |  |  |  | Percentile | Value |  |  |  |  |
| Percentile | Value | Percentile | Value |  | 30 | .900 |  |  |  |  |
| 10 | .785 | 20 | .853 |  | 60 | 1.029 |  |  |  |  |
| 40 | .943 | 50 | .985 |  | 90 | 1.246 |  |  |  |  |
| 70 | 1.080 | 80 | 1.145 |  |  |  |  |  |  |  |

Percentage Variance Inflation due to weights: 4.88

Table 24 AXRWGHT - Enumerated Adult Weight

| Mean: | 1.000 | Standard Deviation: |  |  |  |  |  | .251 |  |  |
| :--- | :---: | :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: |
| Minimum | .202 | Maximum: |  | 2.499 |  |  |  |  |  |  |
| $\mathrm{~N}:$ | 9912 |  |  |  |  |  |  |  |  |  |
| Percentile | Value | Percentile | Value |  | 30 | Value |  |  |  |  |
| 10 | .761 | 20 | .833 |  | 682 |  |  |  |  |  |
| 40 | .931 | 50 | .975 |  | 1.025 |  |  |  |  |  |
| 70 | 1.078 | 80 | 1.150 |  | 90 | 1.281 |  |  |  |  |
| Effective Sample Size: |  | 9326 |  |  |  |  |  |  |  |  |

Weighting was carried out using a weighting class method where respondents and non-respondents were classified by a number of variables thought to be informative of non-response or of critical interest in the analysis of BHPS data. The main assumption of this approach is that, within the final cells, the respondents and non-respondents constitute a random sample of the population sub-group defined by the cell variables. Since all cases (except new 16 year olds) were respondents who gave a full interview at the previous wave, there were a large number of variables available to define these classes. In order to make this process manageable, an automatic interaction detection programme (SPSS CHAID) was used to aid the splitting of respondents and non-respondents into groups defined by variables associated with non-response. This allowed for the definition of very specific weighting classes and for easy control over the size of the classes and their percentage of non-respondents. The inverse of the response ratio defines the weight to be applied to respondent cases within each class. Since some of the most informative variables for non-response had small numbers of missing values these variables were initially imputed using a hot-deck procedure. This method applies to the majority of the weighting factors discussed below.

Variables used in these adjustments included: Whether moved from the previous wave address; individual characteristics such as age, sex, employment status, income total and composition, race, level of organisational membership, educational qualifications, etc. and household characteristics such are region, tenure, number of cars and ownership of consumer durables. The initial attrition weight was defined as the product of the previous wave longitudinal respondent weight (before post-stratification) and the adjustment factors defined on the basis of the two weighting steps described above. After this, a post-stratification adjustment was added so that the Wave One characteristics of the surviving sample corresponded to population marginals for 1991, in terms of age, sex, housing tenure, numbers of cars and household size. Post stratification methods are described in more detail in the previous section.

In addition to respondents at both waves those previous wave children who reach the age of 16 and are interviewed receive longitudinal respondent weights. In order to adjust for this group, those children interviewed were given a weight defined as the minimum of the longitudinal respondent weight of their parents, or the minimum longitudinal respondent weight in the household if no parent weight was available. This rule was applied since this group were too small to model adequately for adjustment and since children rising to age sixteen and eligible for interview are likely to have more in common with other members of their household than with other children in this category. Minimum values were used since this was most likely to reflect the probability of a household response. After this adjustment, the whole group of respondent new 16 year olds was re-weighted back to the number of eligible 16 year olds.

From Wave Three onwards, a small number of respondents out of scope at previous waves return to the sample. These cases are treated for weighting purposes as if they had responded at the previous wave. Predictor variables are taken from the most recently available wave.

## V.2.2. Weights for Longitudinal Enumerated Individuals

Weights for individuals enumerated at each wave were derived using the same two stage method as used for longitudinal respondents with the weighting classes being primarily based on household and head of household characteristics. This weight (wLEWGHT) adjusts the individuals enumerated at each wave (including those experiencing terminating events) for the cases lost through attrition. Longitudinal weights for children and for proxy and telephone respondents as well as within household nonrespondents are provided by this weight. New births to the sample are given the mean value of their parents' weights (so that children with two sample parents generally receive a higher weight than those with only one sample parent).

There is no longitudinal household weight since households are not definable as longitudinal entities.

## V.2.3. Cross-Sectional Weights

For some research purposes, it is desirable to analyse each wave of the BHPS as a cross-section. In order to make this possible, cross-sectional weights have been derived that allow for the inclusion of new entrants who, by definition, do not have a Wave One or longitudinal weight. Assumptions are
necessary in order to include these individuals since their initial inclusion and response probability are unknown. There are a number of approaches available and we employed a standard technique called the 'fair shares approach' (Ernst 1989, Lavallée \& Hunter 1992, Rendtel 1991). Basically, this approach shares the Wave One weights of all enumerated cases, after adjustment for attrition, to all other enumerated members of their later wave household. The sharing of weights was applied so that all members of each household have a weight equal to the sum of the weights of all the Wave One enumerated individuals, adjusted for non-response, divided by the number of members of the population at Wave One (i.e. including new entrants who were in that population, but excluding new births since Wave One).

The first stage of this derivation was to weight the enumerated individuals present at Wave One to adjust for attrition up to the latest wave ${ }^{2}$. This used a similar weighting class method to that defined above for longitudinal respondents. The weighting classes were defined using head of household, household and individual characteristics (available from the enumeration grid). Once these attrition factors were calculated, weights were defined for original sample members based on the Wave One weights (after post-stratification). These were used to define the fair share weights for all eligible enumerated individuals, including new entrants, as described above, giving the final cross-sectional enumerated weight (wXEWGHT). Consequent to this weight, a cross-sectional respondent weight (wXRWGHT) was calculated by adjusting all interviewed adults at the wave for those who refused, were proxied or were unable to give an interview. This weight adjusts for within-household non-response for cross-sectional non-respondents. Again a weighting class method was employed using similar variables to that defining the cross-sectional enumerated classes, except that the adjustment depended only on current wave characteristics.

A cross-sectional household weight (wXHWGHT) is available. This is set equal to the cross-sectional enumerated individual weight (wXEWGHT) subject to rescaling back to the total number of households.

As discussed in the previous section, all weights are trimmed to a maximum value of 2.5 , and rescaled so that the weighted sample is equal to the total number of respondent individuals. A number of distribution statistics for weights at each wave are given in Table 26. This includes statistics for percentage variance inflation due to weights, and the consequent effective sample size.

## V.2.4 Weights including the ECHP sub-sample

It is most important to note that the combined original and ECHP sub-sample over-represent lower income households and individuals. Thus estimates to the whole GB or UK population must use weights in order to correct for this.

The standard BHPS weights are based on sample probabilities, estimated response probabilities at Wave One, and probabilities of attrition since Wave One, using weight sharing within households to provide cross-sectional weights for new entrants. These methods clearly will not directly allow ECHP sub-sample members to be weighted, and these members are zero-weighted using the standard weight variables. However new cross-sectional weights are available in the data set to permit analyses which include the sub-sample. These variables are called wXEWGHTE and wXRWGHTE, equivalent to the standard cross-sectional enumerated and respondent weights.

These weights are based on combining BHPS weights with weights derived for the ECHP subsample. This section describes briefly the methods of construction. The enumerated weight is constructed first. The ECHP sub-sample weight starts from the ECHP Wave Three cross-sectional weight for all household members in respondent households, and adjusts this for non-response between ECHP Wave Three and the first wave of entry to BHPS (equivalent to ECHP Wave Four). A weight share calculation within the sub-sample households then gives new entrants a weight.

The cross-sectional respondent weight was then calculated from the enumerated weight using the
2. For this weight, but not for the longitudinal weights, Wave One non-contact and other households interviewed at Wave Two but not Wave One are given a token Wave One weight based the weights of other households in their PSU, so that they can be included in future wave cross-sectional weighting. This also leads to a very small adjustment in the base Wave One weight used for all other cases.
same algorithm as for the standard weights.

## V.2.5 Weights for the Extension Samples in Scotland and Wales

The new extension samples in Scotland and Wales mean that there are substantial differences in selection probabilities within the whole BHPS. In the unweighted sample there are around 2.5 times as many enumerated individuals in Scotland as would be expected from population distribution, and around 4 times as many in Wales. As a result UK or GB analyses must be weighted if biases are not to arise.

There is a new set of cross-sectional weights included at Wave Nine to allow the incorporation of the extension samples in Scotland and Wales. Weights are available at the household level, the enumerated individual level, and the respondent individual level. There are two sets of these weights:
a) weights to allow the analysis of the whole UK (or GB), incorporating the new samples, and also including the ECHP sub-sample (IXHWTSW1, IXEWTSW1, IXRWTSW1);
b) weights to permit the analysis of Scotland or Wales on their own, including both the new samples, and existing cases from the original BHPS and the ECHP sub-sample.

Weights were first computed for enumerated individuals. Non-response weights for the new samples were computed, based on inverse response probabilities at primary sampling unit level. These cases were combined with cases from the existing samples, using normal cross-sectional weights (IXEWGHTE), with weights scaled in proportion to the unweighted number in each sub-sample. In Scotland and Wales these combined weights were post-stratified to Labour Force Survey 1999 estimates of age and sex groupings, housing tenure and household size.

Respondent weights were calculated on the basis of these enumerated individual weights and a model of within-household non-response. Household weights are calculated as the enumerated individual weight of the household reference person within each household.

The difference between the two sets of weights identified above is simply one of rescaling to different sample size totals. The first set (IXEWTSW1 etc.) are scaled so as ensure that the Scotland and Wales samples contain the expected proportion of the UK population. They thus tend to have very low weights. In the second set (IXEWTSW2 etc.), weights are rescaled so that the sum of weights in England, Scotland, Wales and Northern Ireland is equal to the number of weighted cases in each of these areas. In Scotland and Wales, where there are members of both the original sample and the boost samples, both sets of weights have been scaled so that the mean weights for these two groups have been equalised.

With some statistical software, e.g. STATA, computations correctly adjust to the number of cases in the analysis, so that there will be no difference between results at the sub-UK level using the different types of weight. However other software, e.g. SPSS, performs statistical significance calculations on the basis of the weighted number of cases, and hence will tend to produce higher standard errors of estimates for Scotland, Wales and Northern Ireland on the basis of the first set of weights than the second. It should be remembered that most standard statistical software does not correctly adjust for the variance inflation effects produced by weighting. There are a number of exceptions, including the STATA svy procedures.

From Wave 11 onwards, the cross-sectional weights for use with these samples are renamed to wXRWTUK1, wXRWTUK2, wXEWTUK1 and wXEWTUK2.

Weight statistics for these new weights are shown in Table 26. It should be noted in particular that the distribution of the first set of weights is such as to a substantial effect in inflating variance and reduces effective sample size by around 60\%.

The cross-sectional weights for the second wave of the extension samples incorporate the households which were converted at the second wave (i.e. the wave nine non-contact and 'soft' refusal households). This was done by adjusting the Wave Nine PSU non-response factors to take account of the fact that more households responded at wave 10 . These factors were used as the
base weights for the Wave Ten entrant household members, and were adjusted for non-response between Wave Nine and Wave Ten for the Wave Nine entrant households.

New longitudinal weights which incorporate the extension samples were introduced from Wave Ten. They follow the same structure as the cross-sectional weights, i.e. wLEWTSW1 and wLRWTSW1 scaled to include the whole sample, and wLEWTSW2 and wLRWTSW2 including only the Scottish and Welsh components. These weights are computed in the same way as longitudinal weights for the original sample. However, original and permanent members of the initial sample who were present at Wave Nine were eligible for a positive weight regardless of their response status between Wave One and Wave Nine. (By contrast the standard longitudinal weights give OSM cases who were nonrespondent between Wave One and Wave Nine, and all PSMs a zero weight).

## V.2.6. Weights for the Northern Ireland Sample

The new sample in Northern Ireland is also selected with much higher probability than that in England. In the unweighted sample there are around 7 times as many enumerated individuals in Northern Ireland as would be expected from the UK population distribution. As a result UK analyses must be weighted if biases are not to arise. In addition it is necessary to adjust for non-response in the first wave, even where Northern Ireland analysis only is required.

Northern Ireland weights are included with the weight variables described in the section above (KXEWTUK1, KXRWTUK2 etc) Weights are available at the household level, the enumerated individual level, and the respondent individual level. There are two sets of these weights: a) weights to allow the analysis of the whole UK, incorporating all the samples, and also including the ECHP subsample (KXHWTUK1, KXEWTUK1, KXRWTUK1); b) weights to permit the analysis of Northern Ireland on its own. Note that these weights do not incorporate the small Northern Ireland component of the ECHP sub-sample, included at previous waves.

The Northern Ireland sample is a simple random sample design without any clustering. So unlike other parts of the BHPS primary sampling unit level non response was not used in the construction of non-response weights. Instead, response rates for postcode areas (sometimes grouped where sample numbers were small) were computed, and inverse response probabilities used in the computation of weights. In addition to this, these initial weights were post-stratified to 2001 Population Census estimates of age and sex groupings, housing tenure and household size.

Respondent weights were calculated on the basis of these enumerated individual weights and a model of within-household non-response. Household weights are calculated as the enumerated individual weight of the household reference person within each household.

The difference between the two sets of weights identified above is simply one of rescaling to different sample size totals. The first set (KXEWTUK1 etc.) are scale so as ensure that the Northern Ireland sample contains the expected proportion of the UK population. They thus tend to have very low weights. In the second set (KXEWTUK2 etc.), weights are rescaled so that the sum of weights in England, Scotland, Wales and Northern Ireland is equal to the number of weighted cases in each of these areas.

New longitudinal weights which incorporate the extension samples were introduced from Wave 12. They follow the same structure as the cross-sectional weights, i.e. wLEWTUK1 and wLRWTUK1 scaled for UK estimates, and wLEWTUK2 and wLRWTUK2 scaled for estimates at the England, Scotland, Wales or Northern Ireland levels. These weights are computed in the same way as longitudinal weights for the original sample. However, original and permanent members of the initial sample who were present at Wave 11 were eligible for a positive weight regardless of their response status between Wave One and Wave Nine, and members of Scotland and Wales extension samples who were present at Wave 11 were also eligible regardless of their previous response status. (By contrast the standard longitudinal weights give OSM cases who were non-respondent between Wave One and Wave 11, and all PSMs a zero weight).

Weight statistics for these new weights are shown in Table 26. It should be noted in particular that the distribution of the first set of weights is such as to a substantial effect in inflating variance and reduces effective sample size by around 60\%.

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## Table 25

Guide to the selection of BHPS weights for analysis

| Longitudinal analysis of | Longitudinal analysis of <br> individual respondent <br> all individual original |
| :--- | :--- |
| original sample members | sample members, <br> including children |

Cross-sectional analysis of individual respondents, including emporary sample members
wXRWGHT from wave to be analysed
wXRWGHTE from wave to be analysed
wXRWTSW1 from wave to be analysed (wXRWTUK1 from wave 11 onwards )
wXRWTUK1 from wave to be analysed

Cross-sectional analysis of all individuals, including children, and including TSMs

## GB or UK level analysis

Original BHPS sample

Original BHPS sample + ECHP sub-sample (waves 7 to 11)

Original BHPS sample + Scotland and Wales extension samples (wave 9 onwards)

Original BHPS sample + Scotland, Wales and Northern Ireland extension samples: (wave 11 onwards)
wLRWGHT from latest wave in longitudinal sequence

Weight not available
wLRWTSW1 from latest wave in longitudinal sequence
wLRWTUK1 from latest wave in longitudinal sequence
wLEWGHT from lates wave in longitudinal sequence

Weight not available
wLEWTSW1 from latest wave in longitudinal sequence
wLEWTUK1 from latest wave in longitudinal sequence

Analysis at England, Scotland,
Wales or Northern Ireland level

Original BHPS sample + Scotland and Wales extension samples

Original BHPS sample + Scotland, Wales and Northern Ireland extension samples: (wave 11 onwards)
wLRWTSW2 from latest wave in longitudinal sequence
wLRWTUK2 from latest wave in longitudinal sequence
wLEWTSW2 from latest wave in longitudinal sequence
wLEWTUK2 from latest wave in longitudinal sequence
wXRWTSW2 from wave to be analysed (wXRWTUK2 from wave 11 onwards )
wXRWTUK2 from wave
to be analysed
wXEWTSW2 from wave to be analysed (wXEWTUK2 from wave 11 onwards )
wXEWTUK2 from wave to be analysed

| Statistics for Longitudinal and Cross-sectional weights after Wave One |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N. gt 0 | Mean | Standard deviation | Minimum | 10th percentile | Median | 90th percentile | Maximum | \% variance inflation | Effective sample size |
| BLRWGHT | 8721 | 1.00 | 0.297 | 0.20 | 0.72 | 0.95 | 1.35 | 2.50 | 8.8 | 8016 |
| BLEWGHT | 12398 | 1.00 | 0.294 | 0.21 | 0.74 | 0.94 | 1.34 | 2.50 | 8.6 | 11416 |
| BXEWGHT | 13151 | 1.00 | 0.321 | 0.09 | 0.70 | 0.97 | 1.33 | 2.50 | 10.3 | 11923 |
| BXRWGHT | 9459 | 1.00 | 0.338 | 0.09 | 0.67 | 0.97 | 1.37 | 2.50 | 11.4 | 8488 |
| CLRWGHT | 7905 | 1.00 | 0.321 | 0.18 | 0.68 | 0.94 | 1.40 | 2.50 | 10.3 | 7166 |
| CLEWGHT | 11713 | 1.00 | 0.326 | 0.21 | 0.70 | 0.92 | 1.40 | 2.50 | 10.6 | 10586 |
| CXEWGHT | 13099 | 1.00 | 0.368 | 0.07 | 0.58 | 0.97 | 1.41 | 2.50 | 13.8 | 11538 |
| CXRWGHT | 9029 | 1.00 | 0.386 | 0.07 | 0.55 | 0.97 | 1.44 | 2.50 | 14.9 | 7858 |
| DLRWGHT | 7525 | 1.00 | 0.329 | 0.18 | 0.67 | 0.93 | 1.44 | 2.50 | 10.8 | 6791 |
| DLEWGHT | 11236 | 1.00 | 0.345 | 0.21 | 0.68 | 0.91 | 1.46 | 2.50 | 11.9 | 10039 |
| DXEWGHT | 12844 | 1.00 | 0.380 | 0.07 | 0.52 | 0.98 | 1.40 | 2.50 | 14.5 | 11220 |
| DXRWGHT | 9059 | 1.00 | 0.391 | 0.07 | 0.51 | 0.98 | 1.41 | 2.50 | 15.2 | 7860 |
| ELRWGHT | 7170 | 1.00 | 0.335 | 0.18 | 0.65 | 0.93 | 1.47 | 2.50 | 11.2 | 6446 |
| ELEWGHT | 10751 | 1.00 | 0.353 | 0.07 | 0.66 | 0.91 | 1.52 | 2.50 | 12.4 | 9562 |
| EXEWGHT | 12529 | 1.00 | 0.417 | 0.07 | 0.49 | 0.96 | 1.45 | 2.50 | 17.4 | 10676 |
| EXRWGHT | 8817 | 1.00 | 0.423 | 0.06 | 0.49 | 0.97 | 1.46 | 2.50 | 17.9 | 7479 |
| FLRWGHT | 7059 | 1.00 | 0.339 | 0.18 | 0.65 | 0.93 | 1.50 | 2.50 | 11.5 | 6332 |
| FLEWGHT | 10512 | 1.00 | 0.363 | 0.07 | 0.65 | 0.91 | 1.56 | 2.50 | 13.2 | 9288 |
| FXEWGHT | 12678 | 1.00 | 0.426 | 0.06 | 0.46 | 0.99 | 1.46 | 2.50 | 18.2 | 10729 |
| FXRWGHT | 9117 | 1.00 | 0.418 | 0.06 | 0.46 | 0.99 | 1.45 | 2.50 | 17.5 | 7759 |
| GLRWGHT | 6901 | 1.00 | 0.347 | 0.18 | 0.64 | 0.92 | 1.54 | 2.50 | 12.0 | 6161 |
| GLEWGHT | 10311 | 1.00 | 0.371 | 0.07 | 0.63 | 0.90 | 1.58 | 2.50 | 13.7 | 9065 |
| GXEWHGT | 12492 | 1.00 | 0.429 | 0.07 | 0.47 | 0.98 | 1.48 | 2.50 | 18.4 | 10553 |
| GXRWGHT | 9091 | 1.00 | 0.426 | 0.07 | 0.47 | 0.98 | 1.48 | 2.50 | 18.2 | 7694 |

Table 26 continued

| Statistics for Longitudinal and Cross-sectional weights after Wave One |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N. gt 0 | Mean | Standard deviation | Minimum | 10th percentile | Median | 90th percentile | Maximum | \% variance inflation | Effective sample size |
| GXEWGHTE | 14979 | 1.00 | 0.463 | 0.06 | 0.45 | 0.97 | 1.54 | 2.93 | 21.4 | 12338 |
| GXRWGHTE | 10795 | 1.00 | 0.461 | 0.05 | 0.45 | 0.97 | 1.55 | 3.29 | 21.2 | 8910 |
| HLRWGHT | 6719 | 1.00 | 0.348 | 0.18 | 0.63 | 0.92 | 1.55 | 2.50 | 12.1 | 5992 |
| HLEWGHT | 100111 | 1.00 | 0.379 | 0.07 | 0.62 | 0.90 | 1.60 | 2.50 | 14.4 | 8839 |
| HXEWHGT | 12360 | 1.00 | 0.411 | 0.09 | 0.49 | 0.98 | 1.47 | 2.50 | 16.9 | 10575 |
| HXRWGHT | 8894 | 1.00 | 0.403 | 0.08 | 0.49 | 0.98 | 1.46 | 2.50 | 16.3 | 7650 |
| HXEWGHTE | 14730 | 1.00 | 0.447 | 0.06 | 0.46 | 0.99 | 1.53 | 2.92 | 19.9 | 12281 |
| HXRWGHTE | 10498 | 1.00 | 0.441 | 0.06 | 0.47 | 0.99 | 1.54 | 3.77 | 19.2 | 8805 |
| ILRWGHT | 6533 | 1.00 | 0.354 | 0.17 | 0.61 | 0.91 | 1.59 | 2.50 | 12.5 | 5806 |
| ILEWGHT | 9863 | 1.00 | 0.388 | 0.07 | 0.61 | 0.89 | 1.65 | 2.50 | 15.0 | 8575 |
| IXEWHGT | 12208 | 1.00 | 0.430 | 0.10 | 0.46 | 0.98 | 1.52 | 2.50 | 18.5 | 10299 |
| IXRWGHT | 8756 | 1.00 | 0.419 | 0.10 | 0.47 | 0.98 | 1.51 | 2.50 | 17.6 | 7446 |
| IXEWGHTE | 14464 | 1.00 | 0.466 | 0.06 | 0.44 | 0.97 | 1.57 | 3.28 | 21.7 | 11884 |
| IXRWGHTE | 10287 | 1.00 | 0.462 | 0.06 | 0.45 | 0.98 | 1.56 | 4.60 | 21.1 | 8495 |
| IXEWTSW1 | 21418 | 1.00 | 0.778 | 0.03 | 0.22 | 0.80 | 2.11 | 4.55 | 59.8 | 13404 |
| IXRWTSW1 | 15124 | 1.00 | 0.780 | 0.03 | 0.22 | 0.81 | 2.05 | 6.93 | 60.4 | 9431 |
| IXEWTSW2 | 9064 | 1.00 | 0.398 | 0.08 | 0.63 | 0.93 | 1.48 | 2.50 | 15.8 | 7829 |
| IXRWTSW2 | 6299 | 1.00 | 0.410 | 0.07 | 0.60 | 0.93 | 1.53 | 2.50 | 16.7 | 5396 |
| JLEWGHT | 9322 | 1.00 | 0.407 | 0.10 | 0.63 | 0.90 | 1.51 | 2.50 | 16.6 | 7997 |
| JLRWGHT | 6304 | 1.00 | 0.366 | 0.20 | 0.66 | 0.92 | 1.44 | 2.50 | 13.4 | 5560 |
| JXEWGHT | 12111 | 1.00 | 0.456 | 0.09 | 0.46 | 0.97 | 1.52 | 2.50 | 20.8 | 10024 |
| JXRWGHT | 8626 | 1.00 | 0.451 | 0.09 | 0.47 | 0.96 | 1.53 | 2.50 | 20.3 | 7170 |
| JXEWGHTE | 14298 | 1.00 | 0.470 | 0.06 | 0.42 | 0.96 | 1.56 | 2.51 | 22.6 | 11664 |
| JXRWGHTE | 10116 | 1.00 | 0.465 | 0.06 | 0.43 | 0.98 | 1.58 | 2.51 | 21.6 | 8317 |
| JXEWTSW1 | 21235 | 1.00 | 0.783 | 0.03 | 0.22 | 0.77 | 2.16 | 2.85 | 61.3 | 13162 |
| JXRWTSW1 | 14889 | 1.00 | 0.752 | 0.03 | 0.21 | 0.79 | 2.15 | 2.53 | 56.5 | 9512 |

Table 26 continued

| Statistics for Longitudinal and Cross-sectional weights after Wave One |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N. gt 0 | Mean | Standard deviation | Minimum | 10th percentile | Median | 90th percentile | Maximum | \% variance inflation | Effective sample size |
| JXEWTSW2 | 21235 | 1.00 | 0.441 | 0.06 | 0.49 | 0.96 | 1.55 | 6.09 | 19.4 | 17786 |
| JXRWTSW2 | 14889 | 1.00 | 0.431 | 0.07 | 0.50 | 0.97 | 1.57 | 6.39 | 18.4 | 12571 |
| JLEWTSW1 | 18850 | 1.00 | 0.731 | 0.07 | 0.20 | 1.06 | 1.95 | 3.06 | 51.8 | 12419 |
| JLRWTSW1 | 13153 | 1.00 | 0.702 | 0.05 | 0.21 | 1.08 | 1.90 | 2.88 | 48.2 | 8873 |
| JLEWTSW2. | 17214 | 1.00 | 0.409 | 0.17 | 0.66 | 0.92 | 1.45 | 11.58 | 16.6 | 14761 |
| JLRWTSW2 | 12054 | 1.00 | 0.399 | 0.12 | 0.66 | 0.93 | 1.43 | 8.25 | 15.9 | 10402 |
| KLEWGHT | 9077 | 1.00 | 0.421 | 0.10 | 0.62 | 0.89 | 1.53 | 2.50 | 17.7 | 7710 |
| KLRWGHT | 6042 | 1.00 | 0.369 | 0.20 | 0.66 | 0.91 | 1.46 | 2.50 | 13.6 | 5320 |
| KXEWGHT | 12082 | 1.00 | 0.444 | 0.10 | 0.46 | 1.00 | 1.48 | 2.50 | 19.7 | 10091 |
| KXRWGHT | 8518 | 1.00 | 0.439 | 0.09 | 0.47 | 0.99 | 1.48 | 2.50 | 19.3 | 7140 |
| KXEWGHTE | 14202 | 1.00 | 0.470 | 0.06 | 0.42 | 0.98 | 1.56 | 2.52 | 22.0 | 11638 |
| KXRWGHTE | 9964 | 1.00 | 0.460 | 0.06 | 0.43 | 0.99 | 1.56 | 2.51 | 21.1 | 8228 |
| KXEWTUK1 | 26120 | 1.00 | 1.000 | 0.02 | 0.09 | 0.53 | 2.54 | 4.18 | 99.9 | 13064 |
| KXRWTUK1 | 17825 | 1.00 | 0.958 | 0.02 | 0.09 | 0.56 | 2.46 | 4.11 | 91.8 | 9292 |
| KXEWTUK2 | 26120 | 1.00 | 0.868 | 0.03 | 0.47 | 0.86 | 1.55 | 16.90 | 74.8 | 14942 |
| KXRWTUK2 | 17825 | 1.00 | 0.830 | 0.03 | 0.47 | 0.87 | 1.54 | 16.00 | 68.4 | 10583 |
| KLEWTSW1 | 17978 | 1.00 | 0.728 | 0.06 | 0.20 | 1.06 | 1.97 | 3.75 | 51.2 | 11887 |
| KLRWTSW1 | 12372 | 1.00 | 0.693 | 0.05 | 0.21 | 1.08 | 1.87 | 2.95 | 47.0 | 8419 |
| KLEWTSW2 | 16470 | 1.00 | 0.464 | 0.16 | 0.64 | 0.91 | 1.48 | 14.56 | 21.4 | 13569 |
| KLRWTSW2 | 11359 | 1.00 | 0.442 | 0.12 | 0.64 | 0.92 | 1.46 | 11.33 | 19.4 | 9511 |

Table 26 continued

| Statistics for Longitudinal and Cross-sectional weights after Wave One |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N. gt 0 | Mean | Standard deviation | Minimum | 10th percentile | Median | 90th percentile | Maximum | \% variance inflation | Effective sample size |
| LLEWGHT | 8901 | 1.00 | 0.428 | 0.10 | 0.61 | 0.89 | 1.55 | 2.50 | 18.3 | 7522 |
| LLRWGHT | 5812 | 1.00 | 0.375 | 0.20 | 0.66 | 0.91 | 1.46 | 2.50 | 14.0 | 5097 |
| LXEWGHT | 11936 | 1.00 | 0.445 | 0.13 | 0.46 | 0.98 | 1.51 | 2.50 | 19.8 | 9963 |
| LXRWGHT | 8295 | 1.00 | 0.437 | 0.12 | 0.47 | 0.97 | 1.52 | 2.50 | 19.1 | 6966 |
| LXEWTUK1 | 22984 | 1.00 | 0.915 | 0.04 | 0.23 | 0.54 | 2.54 | 4.21 | 76.1 | 13054 |
| LXRWTUK1 | 15508 | 1.00 | 0.906 | 0.02 | 0.14 | 0.57 | 2.44 | 3.94 | 80.1 | 8612 |
| LXEWTUK2 | 22984 | 1.00 | 0.419 | 0.09 | 0.57 | 0.97 | 1.62 | 14.01 | 16.8 | 19671 |
| LXRWTUK2 | 15508 | 1.00 | 0.429 | 0.08 | 0.56 | 0.96 | 1.64 | 13.12 | 17.9 | 13157 |
| LLEWTSW1 | 15528 | 1.00 | 0.721 | 0.07 | 0.19 | 1.06 | 1.94 | 2.90 | 51.3 | 10261 |
| LLRWTSW1 | 10449 | 1.00 | 0.687 | 0.06 | 0.21 | 1.07 | 1.85 | 3.15 | 46.7 | 7121 |
| LLEWTSW2 | 15528 | 1.00 | 0.472 | 0.18 | 0.63 | 0.90 | 1.51 | 10.79 | 21.9 | 12738 |
| LLRWTSW2 | 10449 | 1.00 | 0.454 | 0.14 | 0.64 | 0.91 | 1.46 | 11.99 | 20.3 | 8686 |
| LLEWTUK1 | 20994 | 1.00 | 0.901 | 0.07 | 0.13 | 0.50 | 2.27 | 3.78 | 80.5 | 11630 |
| LLRWTUK1 | 13995 | 1.00 | 0.861 | 0.07 | 0.13 | 0.55 | 2.18 | 2.90 | 73.7 | 8058 |
| LLEWTUK2 | 20994 | 1.00 | 0.384 | 0.20 | 0.67 | 0.94 | 1.45 | 12.92 | 14.6 | 18327 |
| LLRWTUK2 | 13995 | 1.00 | 0.372 | 0.17 | 0.67 | 0.94 | 1.45 | 9.01 | 13.6 | 12316 |
| MLEWGHT | 8639 | 1.00 | 0.442 | 0.10 | 0.60 | 0.88 | 1.57 | 2.50 | 19.5 | 7229 |
| MLRWGHT | 5624 | 1.00 | 0.381 | 0.22 | 0.65 | 0.91 | 1.47 | 2.50 | 14.5 | 4912 |
| MXEWGHT | 11657 | 1.00 | 0.427 | 0.12 | 0.49 | 0.98 | 1.50 | 2.50 | 18.3 | 9857 |
| MXRWGHT | 8162 | 1.00 | 0.421 | 0.11 | 0.49 | 0.98 | 1.50 | 2.50 | 17.8 | 6931 |
| MXEWTUK1 | 22163 | 1.00 | 0.945 | 0.03 | 0.14 | 0.55 | 2.46 | 3.85 | 81.7 | 12196 |
| MXRWTUK1 | 15141 | 1.00 | 0.912 | 0.03 | 0.13 | 0.61 | 2.37 | 5.05 | 76.8 | 8563 |
| MXEWTUK2 | 22163 | 1.00 | 0.442 | 0.08 | 0.55 | 0.96 | 1.54 | 9.44 | 19.4 | 18566 |
| MXRWTUK2 | 15141 | 1.00 | 0.456 | 0.08 | 0.55 | 0.95 | 1.54 | 16.24 | 20.7 | 12545 |
| MLEWTSW1 | 14876 | 1.00 | 0.729 | 0.07 | 0.19 | 1.05 | 1.95 | 2.91 | 52.5 | 9756 |

Table 26 continued

| Statistics for Longitudinal and Cross-sectional weights after Wave One |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N. gt 0 | Mean | Standard deviation | Minimum | 10th percentile | Median | 90th percentile | Maximum | \% variance inflation | Effective sample size |
| MLRWTSW1 | 9940 | 1.00 | 0.685 | 0.06 | 0.21 | 1.07 | 1.85 | 3.01 | 46.5 | 6786 |
| MLEWTSW2 | 14876 | 1.00 | 0.508 | 0.18 | 0.61 | 0.89 | 1.52 | 10.38 | 25.7 | 11832 |
| MLRWTSW2 | 9940 | 1.00 | 0.452 | 0.15 | 0.63 | 0.90 | 1.47 | 7.25 | 20.4 | 8256 |
| MLEWTUK1 | 19723 | 1.00 | 0.918 | 0.07 | 0.14 | 0.53 | 2.30 | 3.84 | 78.8 | 11033 |
| MLRWTUK1 | 13111 | 1.00 | 0.873 | 0.07 | 0.13 | 0.60 | 2.23 | 2.98 | 71.8 | 7632 |
| MLEWTUK2 | 19723 | 1.00 | 0.432 | 0.20 | 0.64 | 0.92 | 1.49 | 12.67 | 18.6 | 16632 |
| MLRWTUK2 | 13111 | 1.00 | 0.421 | 0.16 | 0.66 | 0.93 | 1.45 | 9.97 | 17.6 | 11145 |
| NLEWGHT | 8639 | 1.00 | 0.448 | 0.08 | 0.59 | 0.88 | 1.59 | 2.50 | 20.1 | 7075 |
| NLRWGHT | 5624 | 1.00 | 0.386 | 0.21 | 0.64 | 0.91 | 1.48 | 2.50 | 14.9 | 4736 |
| NXEWGHT | 11657 | 1.00 | 0.442 | 0.14 | 0.48 | 0.98 | 1.50 | 2.50 | 19.6 | 9669 |
| NXRWGHT | 8162 | 1.00 | 0.433 | 0.13 | 0.48 | 0.97 | 1.51 | 2.50 | 18.7 | 6711 |
| NXEWTUK1 | 22163 | 1.00 | 0.952 | 0.03 | 0.15 | 0.57 | 2.61 | 3.04 | 81.5 | 11945 |
| NXRWTUK1 | 15141 | 1.00 | 0.890 | 0.02 | 0.13 | 0.63 | 2.41 | 3.80 | 75.9 | 8268 |
| NXEWTUK2 | 22163 | 1.00 | 0.451 | 0.09 | 0.53 | 0.94 | 1.59 | 8.38 | 20.1 | 18046 |
| NXRWTUK2 | 15141 | 1.00 | 0.458 | 0.08 | 0.54 | 0.93 | 1.63 | 7.59 | 20.8 | 12035 |
| NLEWTSW1 | 14876 | 1.00 | 0.726 | 0.06 | 0.19 | 1.04 | 1.95 | 2.91 | 52.0 | 9481 |
| NLRWTSW1 | 9940 | 1.00 | 0.677 | 0.06 | 0.21 | 1.06 | 1.85 | 3.33 | 45.2 | 6476 |
| NLEWTSW2 | 14876 | 1.00 | 0.511 | 0.16 | 0.59 | 0.88 | 1.55 | 10.46 | 26.0 | 11441 |
| NLRWTSW2 | 9940 | 1.00 | 0.457 | 0.15 | 0.62 | 0.90 | 1.50 | 7.78 | 20.8 | 7786 |
| NLEWTUK1 | 19723 | 1.00 | 0.878 | 0.06 | 0.14 | 0.55 | 2.23 | 4.16 | 76.4 | 10702 |
| NLRWTUK1 | 13111 | 1.00 | 0.836 | 0.07 | 0.13 | 0.66 | 2.15 | 3.69 | 69.0 | 7263 |
| NLEWTUK2 | 19723 | 1.00 | 0.437 | 0.20 | 0.63 | 0.92 | 1.52 | 14.32 | 19.0 | 15871 |
| NLRWTUK2 | 13111 | 1.00 | 0.437 | 0.17 | 0.64 | 0.92 | 1.47 | 9.68 | 19.0 | 10318 |

Table 26 continued

| Statistics for Longitudinal and Cross-sectional weights after Wave One |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N. gt 0 | Mean | Standard deviation | Minimum | 10th percentile | Median | 90th percentile | Maximum | \% variance inflation | Effective sample size |
| OLEWGHT | 8320 | 1.00 | 0.459 | 0.08 | 0.58 | 0.88 | 1.63 | 2.50 | 21.1 | 6873 |
| OLRWGHT | 5275 | 1.00 | 0.398 | 0.21 | 0.63 | 0.90 | 1.50 | 2.50 | 15.8 | 4555 |
| OXEWGHT | 11426 | 1.00 | 0.457 | 0.11 | 0.48 | 0.97 | 1.55 | 2.50 | 20.9 | 9451 |
| OXRWGHT | 7873 | 1.00 | 0.445 | 0.14 | 0.48 | 0.97 | 1.54 | 2.50 | 19.8 | 6569 |
| OXEWTUK1 | 21241 | 1.00 | 0.949 | 0.03 | 0.15 | 0.59 | 2.61 | 3.98 | 81.2 | 11721 |
| OXRWTUK1 | 14387 | 1.00 | 0.896 | 0.03 | 0.13 | 0.63 | 2.43 | 5.46 | 77.5 | 8107 |
| OXEWTUK2 | 21241 | 1.00 | 0.457 | 0.06 | 0.51 | 0.96 | 1.58 | 11.26 | 20.6 | 17607 |
| OXRWTUK2 | 14387 | 1.00 | 0.483 | 0.07 | 0.52 | 0.95 | 1.57 | 18.29 | 23.1 | 11687 |
| OLEWTSW1 | 13948 | 1.00 | 0.724 | 0.06 | 0.19 | 1.02 | 1.95 | 2.91 | 52.1 | 9168 |
| OLRWTSW1 | 9024 | 1.00 | 0.672 | 0.08 | 0.22 | 1.05 | 1.84 | 3.50 | 44.8 | 6231 |
| OLEWTSW2 | 13948 | 1.00 | 0.495 | 0.16 | 0.59 | 0.88 | 1.57 | 10.89 | 24.4 | 11213 |
| OLRWTSW2 | 9024 | 1.00 | 0.456 | 0.18 | 0.62 | 0.90 | 1.50 | 8.04 | 20.7 | 7477 |
| OLEWTUK1 | 18190 | 1.00 | 0.872 | 0.06 | 0.14 | 0.56 | 2.22 | 4.43 | 75.9 | 10339 |
| OLRWTUK1 | 11765 | 1.00 | 0.830 | 0.07 | 0.13 | 0.68 | 2.13 | 2.91 | 68.5 | 6981 |
| OLEWTUK2 | 18190 | 1.00 | 0.437 | 0.19 | 0.62 | 0.92 | 1.54 | 15.23 | 19.0 | 15283 |
| OLRWTUK2 | 11765 | 1.00 | 0.426 | 0.16 | 0.65 | 0.92 | 1.48 | 9.74 | 18.0 | 9967 |
| PLEWGHT | 8121 | 1.00 | 0.465 | 0.08 | 0.58 | 0.87 | 1.63 | 2.50 | 21.7 | 6675.3 |
| PLRWGHT | 5139 | 1.00 | 0.402 | 0.20 | 0.62 | 0.90 | 1.50 | 2.50 | 16.1 | 4424.7 |
| PXEWGHT | 11307 | 1.00 | 0.483 | 0.13 | 0.52 | 1.05 | 1.67 | 2.50 | 20.3 | 9402.5 |
| PXRWGHT | 7804 | 1.00 | 0.444 | 0.11 | 0.48 | 0.97 | 1.54 | 2.50 | 19.7 | 6518.8 |
| PXEWTUK1 | 20897 | 1.00 | 0.945 | 0.04 | 0.23 | 0.65 | 2.75 | 5.42 | 70.6 | 12245.7 |
| PXRWTUK1 | 14148 | 1.00 | 0.893 | 0.03 | 0.15 | 0.64 | 2.42 | 5.38 | 77.1 | 7986.7 |
| PXEWTUK2 | 20897 | 1.00 | 0.480 | 0.05 | 0.53 | 1.04 | 1.62 | 19.04 | 20.1 | 17402.1 |
| PXRWTUK2 | 14148 | 1.00 | 0.508 | 0.04 | 0.51 | 0.96 | 1.58 | 20.08 | 24.9 | 11326.1 |

Table 26 continued

| Statistics for Longitudinal and Cross-sectional weights after Wave One |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N. gt 0 | Mean | Standard deviation | Minimum | 10th percentile | Median | 90th percentile | Maximum | \% variance inflation | Effective sample size |
| PLEWTSW1 | 13520 | 1.00 | 0.718 | 0.06 | 0.20 | 1.01 | 1.95 | 2.92 | 51.2 | 8939.2 |
| PLRWTSW1 | 8738 | 1.00 | 0.670 | 0.08 | 0.22 | 1.04 | 1.84 | 3.49 | 44.7 | 6039.4 |
| PLEWTSW2 | 13520 | 1.00 | 0.504 | 0.15 | 0.57 | 0.86 | 1.56 | 11.21 | 26.0 | 10732.2 |
| PLRWTSW2 | 8738 | 1.00 | 0.457 | 0.18 | 0.61 | 0.88 | 1.49 | 7.95 | 21.5 | 7190.8 |
| PLEWTUK1 | 17557 | 1.00 | 0.860 | 0.06 | 0.14 | 0.61 | 2.21 | 4.96 | 73.7 | 10107.0 |
| PLRWTUK1 | 11346 | 1.00 | 0.822 | 0.07 | 0.14 | 0.70 | 2.13 | 3.15 | 67.3 | 6781.2 |
| PLEWTUK2 | 17557 | 1.00 | 0.456 | 0.11 | 0.60 | 0.91 | 1.54 | 16.27 | 20.9 | 14521.4 |
| PLRWTUK2 | 11346 | 1.00 | 0.426 | 0.08 | 0.64 | 0.90 | 1.48 | 10.44 | 18.4 | 9585.8 |
| RLEWGH | 7744 | 1.00 | 0.482 | 0.10 | 0.56 | 0.87 | 1.66 | 2.50 | 23.2 | 6284.1 |
| RLRWGHT | 4683 | 2.00 | 0.405 | 0.19 | 0.62 | 0.90 | 1.51 | 2.50 | 16.4 | 4022.3 |
| RXEWGHT | 10820 | 3.00 | 0.494 | 0.11 | 0.54 | 1.07 | 1.73 | 2.50 | 20.2 | 9003.1 |
| RXRWGHT | 7813 | 4.00 | 0.489 | 0.14 | 0.58 | 1.10 | 1.78 | 2.50 | 18.4 | 6597.6 |
| RXEWTUK1 | 19641 | 5.00 | 0.977 | 0.03 | 0.17 | 0.70 | 2.80 | 5.39 | 76.1 | 11150.9 |
| RXRWTUK1 | 14176 | 6.00 | 0.959 | 0.03 | 0.17 | 0.73 | 2.73 | 5.27 | 73.5 | 8171.1 |
| RXEWTUK2 | 19641 | 7.00 | 0.512 | 0.06 | 0.51 | 1.04 | 1.62 | 18.10 | 22.1 | 16083.8 |
| RXRWTUK2 | 14176 | 8.00 | 0.534 | 0.07 | 0.54 | 1.03 | 1.64 | 17.81 | 23.8 | 11446.1 |
| RLEWTSW1 | 12729 | 9.00 | 0.722 | 0.06 | 0.20 | 1.00 | 1.97 | 3.55 | 51.6 | 8398.1 |
| RLRWTSW1 | 7941 | 10.00 | 0.671 | 0.08 | 0.22 | 1.02 | 1.85 | 3.44 | 44.9 | 5479.0 |
| RLEWTSW2 | 12729 | 11.00 | 0.539 | 0.16 | 0.56 | 0.85 | 1.58 | 12.77 | 30.0 | 9792.4 |
| RLRWTSW2 | 7941 | 12.00 | 0.466 | 0.18 | 0.60 | 0.87 | 1.50 | 7.64 | 22.5 | 6483.9 |
| RLEWTUK1 | 16084 | 13.00 | 0.848 | 0.06 | 0.14 | 0.66 | 2.20 | 4.97 | 71.7 | 9368.4 |
| RLRWTUK1 | 10229 | 14.00 | 0.821 | 0.07 | 0.14 | 0.75 | 2.13 | 3.65 | 67.1 | 6120.9 |
| RLEWTUK2 | 16084 | 15.00 | 0.464 | 0.15 | 0.59 | 0.89 | 1.54 | 16.03 | 22.0 | 13183.3 |
| RLRWTUK2 | 10229 | 16.00 | 0.457 | 0.17 | 0.63 | 0.89 | 1.50 | 10.78 | 21.3 | 8435.4 |

## V.3. Imputation Procedures Used in the BHPS

## V.3.1. Introduction

Missing data on a range of income and housing cost variables have been imputed in all waves of data. This section discusses the methods used to carry out these imputations, and indicates how imputed data should be used.

Item non-response, where a respondent has given a full interview but where certain items on the questionnaire are missing, is a particular problem in all social surveys. Imputation is one of a number of possible techniques which can be used to deal with this problem. It is likely to be preferable to the default with standard statistical packages, which is to delete cases with one or more missing values when carrying out modelling procedures. This amounts to a strong assumption that the valid cases are a random sample of all cases, which implies that individuals with item non-response can be adequately represented by cases with complete data. This assumption is applicable when dealing with small amounts of item non-response, although it can lead to a large decrease in the number of available cases for analysis. However, in other cases, this assumption could seriously bias results. For example, refusers on a question asking about their dividend income over the year are likely to be systematically different from those answering this question so that the analysis of complete cases cannot be capturing the true nature of the population. One method of adjustment in such cases is to estimate the true value for missing cases using an imputation technique. Imputation techniques use various models with defined assumptions to obtain a 'best' estimate of the missing values. BHPS data contain imputation for important money amount variables.

It is important to stress that the main aim of imputation is to reduce potential bias caused by the elimination of cases with missing data, rather than to increase precision of estimates by increasing the effective sample size. Note that the main problem with imputation as a method of dealing with item nonresponse is that methods for adjusting estimates of precision such as confidence interval etc. are not easily available so that analysis carried out on data containing imputed values where this fact is not taken into account will give an over-estimate of precision. Alternatives to imputation are to model the missing data process during the analysis but this often requires rather strong assumptions (Little and Rubin 1989) or to use some form of multiple imputation to estimate the variance effects of the imputation procedure (Rubin 1987). One practical problem with these techniques is that they are not in generally available in statistical software. One further alternative which users may want to adopt in very specialised cases is to re-weight data to take account of cases excluded from analysis because of missing data. The interested reader can consult the references given below for further information regarding all these procedures and the use of imputation in surveys.

Using imputed data: For the reasons given above it will almost always be preferable to use imputed data, rather than only complete cases, since biasses in results will be reduced. As described below the imputation methods have been designed to ensure that imputed values have the same error around the prediction model used as reported values, so that there should be no tendency to over-predict association (as there may be with simple imputation techniques such as mean substitution).

However for those users who wish to exclude imputed values, or to identify them, each variable subject to imputation has an associated imputation flag variable. These flags take three forms. For variables directly associated with a question, the imputation flag takes the missing value code of the original variable (e.g. Don't Know, Refused, etc.) if imputed, and 0 if not imputed, or -8 if the variable was inapplicable, including cases where the respondent was a proxy. This is to ensure that different missing value categories can still be distinguished. For individual level derived variables, as well as housing related derived variables, the imputation flag takes the value 1 if the variable was imputed, and 0 or -8 otherwise. For household income variables, the flag takes a value 0 if there was no imputation, 1 if some component of an individual household member's income was imputed, and 2 if the whole income of one or more household members was imputed (for example, a complete refusal to the interview or a Proxy respondent missing at BPRFITB).

Two main imputation techniques were used:

## V.3.2. Hot-deck Imputation

A standard Hot-Deck imputation routine is analogous to weighting using weighting classes. This method was applied by firstly dividing the sample into imputation classes found to be predictive of the variable to be imputed. Then, assuming that cases within each class comprise a random sub-sample of the population, a valid value of the variable taken from a non-missing case within a given imputation class was used to impute the value of a missing case in the same class. The validity of this procedure is dependent on how informative the imputation classification for predicting values of missing cases. It ensures also that the imputed value is a possible value for a respondent with the relevant characteristics, and also that some randomness is introduced into the assignment of an imputed value.

This method was used for certain categorical money variables such as Proxy's personal income (wPRFITB), banded income from Dividends and Investments, and a number of cases where regression methods appeared inappropriate (e.g. income from welfare benefits). In order to ensure that the imputation classes were as informative as possible, classes were defined using an automatic interaction detection programme (SPSS CHAID). This procedure allows a high degree of control over the definition and size of these classes and can handle a large number of classification variables.

At various points in both the derivation of weights and for imputation of money amount variables, there was a requirement to impute a small number of missing cases so that certain variables could be used in the definition of weighting classes or within model based imputation procedures. Similar hot-deck procedures were used for this imputation. Since the variables imputed were those with less than two percent of cases missing, these imputation are unlikely to seriously effect the derivation of weights or the more complex regression imputations. These minor imputations are not carried over to the public released data set.

## V.3.3. Regression Imputation

Money amount variables were imputed using a regression-based imputation technique. First, a regression model was fitted to all valid cases for the variable of interest using predictor variables which were non-missing (or had themselves been imputed) for both valid and missing cases of the variable to be imputed. Once a well fitting model was obtained, defined in terms of maximal adjusted R-squared, predicted values were defined for valid and missing cases using the model. These were then used to find the closest valid case in terms of the predicted value for each missing case. The missing case was then imputed with the real value of the closest valid case. This form of regression imputation is termed predictive mean matching. The advantage over imputing at the predicted value is both that a possible real value is imputed, and that a random error component is added so that the imputed values are not subject to less variance that reported values.

Having imputed a number of primary variables, a number of other income related variables were computed from these variables, with some additional small scale hot-deck imputation; for example, for the small number of cases where there was a complete refusal to the financial receipts section. Incomes were also imputed for refusers to the whole questionnaire, in order to construct a complete household income. However, no household income imputation was attempted for the six households where no individual interviews were completed, and thus no household income imputation was attempted with those households where the only interview was by telephone.

## V.3.4. Cross-wave Imputation

In a panel study, there are not only variables from the current wave available to use as predictors in an imputation process, but there may also be variables from the same respondent collected at a different wave. It is likely that the best predictor of a missing value for a variable at Wave One, is a value of the same variable at Wave Two. However in using this value in `cross-wave imputation' it is important to ensure that biasses in rates of change in values are not introduced. This is essentially achieved through the methods described above. So in making a cross-wave imputation we are essentially taking a value from a donor who is both similar to the recipient in current characteristics and in the value of the imputed variable at the other wave. The imputed value should therefore imply a rate of change drawn from a randomly selected similar case. This approach will avoid introducing spurious change for panel analysis, which would be likely to arise if only single wave imputation was used.

For the following imputed variables (and hence the other variables which are derived from them) a three-wave imputation strategy was adopted: wPAYGU, wJSPROF, wJSPAYG, wJ2PAY, wFIYRDI, wPRFITB (as well as related imputation for interview refusers), wHSVAL, wXPMG, wRENT. In some cases this used regression methods, and in others hot-deck methods as described above. However the model strategy was in each case essentially similar, and used either forward or backward imputation, or in the case of the middle wave, where valid data was available from both other waves this was used. An example is set out in Table 27, which shows the models run for Waves One, Two and Three for wPAYGU. The table also show the R-squared value and the number of cases involved at each step. For other variables the distinction according to whether the respondent was in the same job was not used or not relevant, so that the total number of models reduced to 10 . For some of these other variables model fit was somewhat less good, with R-square values in the range 0.5 to 0.75 for selfemployed income models, and 0.2 to 0.3 for pay in second job. This same three wave structure is moved forward with each new release, so that the latest three waves may be used in the imputation process.

## V.3.5. References

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## V.4. Sampling Errors

The precision of population estimates obtained from a survey are described by the standard errors of these estimates. These provide a measure for assessing the value of a given estimate and are used extensively in statistical tests and modelling. The total error of a survey estimate is the difference between the estimate and the 'true value', and consists of two components, a systematic error or bias and a random error. The systematic component arises from a number of sources such as deficiencies in the frame, question wording, interviewer effects and non-response. Substantial effort is placed in the design of a survey to reduce this form of error to a minimum. The random component consists of sampling error, due to the fact that a sample was taken rather than a census and to other random factors in the survey which might include for example variation in interviewer technique and difference between coders in how they categorise a particular set of circumstances (though these factors may have systematic effects). The standard error of a survey estimate measures the sampling error, but in

Table 27

| Cross-wave Imputation Models for Gross Usual Pay (A/B/CPAYGU) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Model <br> N . | To impute data missing at | Where | $N$ of cases imputed | Complete cases in model | Model <br> $\mathrm{R}^{* *}$ |
| 1 | Wave 1 | No data at other waves | 306 | 4619 | 0.7916 |
| 2 | Wave 2 | Pay for work in same job available at wave 1 | 187 | 2877 | 0.9203 |
| 3 | Wave 2 | Pay for work in different job available at wave 1 | 44 | 663 | 0.8392 |
| 4 | Wave 2 | No data at other waves (not recorded as working at wave 1) | 36 | 4688 | 0.8018 |
| 5 | Wave 3 | Pay for work in same job available at wave 2 | 201 | 2745 | 0.9221 |
| 6 | Wave 3 | Pay for work in different job available at wave 2 | 69 | 725 | 0.8378 |
| 7 | Wave 3 | Pay for work in different job available at wave 1 (not record working at wave 2 ) | 26 | 3338 | 0.8558 |
| 8 | Wave 2 | Pay for work in same job available at wave 3 | 56 | 2992 | 0.9215 |
| 9 | Wave 2 | Pay for work in different job available at wave 3 | 17 | 794 | 0.8596 |
| 10 | Wave 1 | Pay for work in same job available at wave 2 | 175 | 3018 | 0.9151 |
| 11 | Wave 1 | Pay for work in different job available at wave 2 | 50 | 707 | 0.8417 |
| 12 | Wave 1 | Pay for work in different job available at wave 3 (not record working at wave 2) | 14 | 3550 | 0.8597 |
| 13 | Wave 2 | Pay for work in same job available at both wave 1 and wave 3 | 46 | 2262 | 0.9379 |
| 14 | Wave 3 | No data at other waves - not recorded as working. | 56 | 4609 | 0.7877 |

estimating, other sources of random error may become conflated. This section will focus on how the sample design of a survey can affect these standard errors. For a more complete introduction, the reader is referred to Butcher and Elliot (n.d.).

Most practical survey designs like that for the BHPS involve two general strategies for efficiency and to minimise costs. First, the sample is selected from a stratified list where the stratification is designed to ensure that specified subgroups are adequately represented and therefore the precision of estimates will be increased over simple random selection. Second, selection also tends to be made in a number of stages where the initial stages involve the selection of geographically clustered units in order to reduce field costs by locating the sample in a defined area. For example, the BHPS initially selected postcode sectors which contain an average of 2,500 households. This procedure can inflate the standard error of an estimate if there is geographical clustering of population characteristics of interest. For example, estimates of tenure type have an inflated standard error (or a decrease in precision) when based on a clustered sample compared with estimates based on an equivalently sized simple random sample since housing tenure is highly geographically clustered. The effect of clustering on estimates of standard errors is dependent on how homogeneous the characteristic of interest is within primary sampling units and the degree to which it varies within primary sampling units.

We will only discuss the effect of a complex sample design on estimates of proportions but these results generalise to other estimates such as means and standard errors of regression coefficients. The effect that a multistage selection procedure has had on the standard errors of a proportion (p) is given by the design factor which is defined as:

$$
\text { deft }(p)=\frac{\text { estimated standard error of } p \text { with complex design }}{\text { estimated standard error of } p \text { with srs of the same size }}
$$

The design factor indicates the increase in the standard error of an estimate over and above the size of the standard error which would be obtained from a simple random sample (srs) as indicated in the following:

$$
\operatorname{se}(p)_{\text {complex }}=\operatorname{deft} \times \operatorname{se}(p)_{\text {srs }}
$$

In terms of the homogeneity of primary sampling units for given characteristics, the complex standard error can be expressed as follows:

$$
s e_{\text {complex }}=\sqrt{1+(\bar{b}-1) r o h} \times s e_{\text {srs }}
$$

roh, the rate of homogeneity, approximates the intra-cluster correlation ( $\boldsymbol{\rho}$ ), a measure of clustering of similar characteristics within primary sampling units, while $\bar{b} 7$ denotes the average number of elements per primary sampling unit. The above formula indicates how the larger the homogeneity of primary sampling units, the larger the complex sampling error will be compared to simple random sampling.

Confidence intervals for given point estimates can easily be obtained assuming that a normal approximation is valid, which is generally true for frequencies above 30. A 95\% confidence interval is then bounded by the points defined below where $p$ is the proportion:

$$
\left(p-1.96 \times\left(\operatorname{deft} \times \operatorname{se}(p)_{s r s}\right), p+1.96 \times\left(\operatorname{deft} \times \operatorname{se}(p)_{\text {srs }}\right)\right.
$$

The estimation of complex sampling errors and other related statistics is currently only available in specialised statistical packages. We used the package SUDAAN to calculate our estimates of complex standard errors and design factors. For a range of variables in the BHPS, the complex standard errors, DEFT's and $95 \%$ Confidence Intervals were calculated in order to give a general overview of the effect of sampling on the survey estimates. These are presented in Table 28 below. A more complete indication of the general effect of multistage sample selection on a wide range of variables similar to those included in the BHPS is available in Breeze (1990), which details results for the General Household Survey.

The majority of DEFT's lie in the range 1-1.3 indicating that there is a relatively small effect of the sample design on srs based tests. For example, the DEFT for the proportion of respondents who had an in-patient stay since 1.9 .90 is 1.05 , so that the complex standard error is almost exactly the same as the srs standard error. However, for variables that are in some way geographically clustered in line with the selection procedure, the effect on standard errors can be large. For example, the DEFT for local authority tenure is 1.57 indicating a high degree of clustering which is consistent with local authority property being in large estates. It should be noted that, even with attitudinal variables such as agreement to the statement "All Health Care Should Be Free", the effect of the sample selection method can be marked. In this case, the DEFT is 1.63 , indicating that the complex standard error is almost two thirds larger than the srs standard error. Care must therefore be taken in the analysis of variables which may have a strong association with area, since the use of srs techniques for the analysis of such variables can lead to misleading results due to the inappropriate estimation of precision. For a fuller discussion of the analysis of complex surveys and the problems associated with simple random sample assumptions being used as the basis for modelling and testing procedures, the reader is referred to the introductory text by Lee et al (1989) and the more comprehensive volume by Skinner et al (1989)

## V.4.1. Bibliography

Breeze, E. (1990) General Household Survey: Report on Sampling Error. OPCS Series G.H.S. no 18.
Butcher, B., Elliot, D. A Sampling Errors Manual, OPCS Paper NM13.
Lee, E. S., Forthofer, R.N., Lorimor, R.J. (1989) Analyzing Complex Survey Data: Quantitative Application in the Social Sciences No. 71, Sage Publications: Newbury Park.

Skinner, C.J., Holt, D., Smith, T.M.F. (1989) Analysis of Complex Surveys, Wiley: Chichester.

Table 28 Complex Standard Errors, DEFTs and 95\% Confidence Intervals for a Range of BHPS Variables

VARIABLE

Housing Tenure (ATENURE)
Owner Occupier
LA Rented
Private Rented
Car Available For Private Use
(ANCARS) (ANCARS)

| None | 31.09 | 1.36 | .85 | $29.42-32.75$ |
| :--- | :--- | :--- | :--- | :--- |
| 1 | 45.94 | 1.09 | .73 | $44.51-47.37$ |
| 2 | 19.43 | 1.26 | .67 | $18.12-20.75$ |

Household Type (AHHTYPE)
Single Non-Elderly

| 11.61 | 1.49 |
| :---: | :---: |
| 14.65 | 1.15 |
| 17.41 | 1.11 |
| 9.27 | 1.12 |
| 28.85 | 1.12 |

.61
. 55
.57
.44
. 67

Political Party Supported (AVOTE)
Conservative
Labour
Lib Dem/Lib/SDP

Current Employment Status (AHGEST)

| Working | 58.30 | 1.37 | .68 | $56.97-59.62$ |
| :--- | :--- | :--- | :--- | :---: |
| Unemployed | 6.31 | 1.26 | .31 | $5.70-6.91$ |
| Retired | 17.80 | 1.42 | .55 | $16.72-18.87$ |
| Family Care | 11.17 | 1.21 | .38 | $10.41-11.92$ |

Table 28 Complex Standard Errors, DEFTs and 95\% Confidence Intervals for a range of BHPS variables (contd.)
VARIABLE Proportion DEFT Complex se 95\% C.I.

| Receiving Unemployment Benefit <br> (AF131) | 2.58 | 1.25 | .20 | $2.19-2.96$ |
| :--- | :--- | :--- | :--- | :--- |
| Receiving Housing Benefit <br> (AF139) | 8.15 | 1.55 | .43 | $7.31-8.99$ |
| Highest Government Priority (AOPPOL4) |  |  |  |  |
| Living Standards |  |  | 50.54 | 1.39 |
| Protect Environment | 46.67 | 1.34 | .72 | $49.14-51.95$ |

School Leaving Age (ASCEND \& ASCHOOL)

| Less than or equal to 16 | 76.47 | 1.66 | . 71 | 75.09-77.86 |
| :---: | :---: | :---: | :---: | :---: |
| Goldthorpe Social Class (AJBGOLD) |  |  |  |  |
| Service class | 32.54 | 1.38 | . 84 | 30.89-34.19 |
| Routine Non-Manual | 13.75 | 1.18 | . 53 | 12.72-14.78 |
| Married Female Employed (Derived) | 56.26 | 1.11 | 1.01 | 54.29-58.23 |
| Employee Union Member (Derived) | 37.45 | 1.25 | . 84 | 35.81-39.10 |
| Current Job Spell Began Before 24.07 - 54.25 |  |  |  |  |
| 1.9.90 | 24.07 | 1.25 | . 54 | 23.01-25.12 |
| Health Limits Daily Activities (AHLLT) | 13.18 | 1.14 | . 39 | 12.42-13.94 |
| All Health Care Should Be Free (AOPHLA) |  |  |  |  |
| Agree | 46.74 | 1.63 | . 81 | 45.15-48.33 |
| Disagree | 10.20 | 1.06 | . 32 | 9.57-10.84 |
| Respondent Smokes (ASMOKER) | 29.87 | 1.37 | . 63 | 28.63-31.10 |
| Respondent Had In-Patient Stay Sinc 1.9.90 (AHOSP) | 11.50 | 1.05 | . 34 | 10.84-12.16 |

## VI. Data Dissemination

## VI.1. Release of BHPS Data

ISER is concerned to facilitate and promote the widest possible use of its data within the user community. It has therefore undertaken to deposit a copy of each wave of the BHPS data in the Data Archive only one year after the end of fieldwork. This early deposit is clearly in the interests of both the Centre and the user community. We would ask users to inform the Centre and/or the Archive of any errors or inconsistencies of which they become aware during their use of the data. As the data from each wave will be re-issued in a merged file with the next wave of data, communicating information to the Centre is particularly important so that errors and omissions can be rectified in the later releases.

## VI.2. Access to BHPS Data

All users of data have access to the data through the UK Data Service (https://www.ukdataservice.ac.uk). Data are supplied in formats suitable for use with a number of different statistical and analysis packages, including SPSS, Stata and SAS.

Users are required to sign licence agreements; the nature of this depending on the version of the data they order. The main BHPS data is released in two versions.

Most of the Wave 1 to 18 data has been released according to the conditions of the regular UKDS End User Licence (EUL): http://ukdataservice.ac.uk/get-data/how-to-access/conditions.aspx\#/tab-end-user-licence. The data are listed as SN 5151 - British Household Panel Survey: Waves 1-18, 19912009.

A version of the main wave 1 to 18 data including a number of more sensitive or disclosive variables is under Special Licence (SL). Researchers can apply for access to SL data through a UKDS application procedure, where they are required to justify their research objectives and explain why EUL data alone would be inadequate to reach those objectives; they are asked to report publications resulting from using the data. The conditions for using SL data are provided at http://ukdataservice.ac.uk/get-data/how-to-access/conditions/special-licence.aspx .
The SL data are listed as SN 8380 - British Household Panel Survey: Waves 1-18, 1991-2009: Special Licence Access.

## VI.3. Acknowledging the Source of Data

Users are also obliged to acknowledge both the Archive and the Institute for Social and Economic Research in any publications arising from analysis of the data, and to include a disclaimer statement. The proper forms of both are indicated below.
Any publication, whether printed, electronic or broadcast, based wholly or in part on the BHPS data collection provided by the UK Data Service must be accompanied by the correct citation and acknowledge the Institute for Social and Economic Research as the data provider and the UK Data Service as the data distributor. The acknowledgement, which gives credit to sponsors or distributors, is not a replacement for a proper citation. We recommend the following wording:
"The British Household Panel Survey is produced by the Institute for Social and Economic Research, University of Essex with the support of the Economic and Social Research Council. The research data are distributed by the UK Data Service."

The following elements should be included in the bibliographic citation when acknowledging the BHPS as a source:

University of Essex. Institute for Social and Economic Research. (2018). British Household Panel Survey: Waves 1-18, 1991-2009. [data collection]. 8th Edition. UK Data Service. SN: 5151, http://doi.org/10.5255/UKDA-SN-5151-2
(based on current archive citation)

## APPENDICES

## Appendix 1. Using BHPS Data

This section gives a very brief introduction to the use of BHPS data for research with some of the standard statisical software. In particular, it gives examples of linking data from different levels of analysis (e.g. individuals and households) using SPSS and STATA at a single wave in Section I. 1 and linking individuals across waves in Section I.2. These short discussions are, of course, no substitute for the User Manuals for the two packages, but they are intended to give some indication of possible ways of organising BHPS data for different types of analysis.

### 1.1. Linking Data from Different SPSS System Files and Stata Datasets at a Single Wave

The examples below all related to Wave One data, but, suitably modified, apply equally at later waves. Where analysis is concerned with only one level, then all the necessary data are likely to be found in a single SPSS system file or STATA dataset. The exception to this is where one file contains a subset of the units contained in another, as in the case of AINDRESP, which contains only respondent individuals.

### 1.1.1. Creating a File Containing One Record for Each Adult

In this first example, we want to create a file containing one record for each adult, whether respondent or not, with non-respondent adults having missing values for variables from the respondent file.

In SPSS this would be achieved by the following (it is assumed here and in following example that FILE HANDLES have been set up):

```
MATCH FILES FILE = AINDALL /FILE = AINDRESP /BY AHID APNO.
```

SELECT IF (AAGE GE 16).
and then any analysis commands ...
Again this would produce a very large file, and users might want to include a KEEP sub-command.

In STATA ...
use pid aivfio using aindall if aivfio~=7 // aivfio=7 are children under 16
sort pid
save alladults, replace
use aindresp
sort pid
merge pid using alladults
tab aivfio _merge

### 1.1.2. Distributing Household Level Information to the Individual Level

In this second example, household level information about housing costs is linked to individual level data about preferences for moving, and a file is output at the individual level.

In SPSS ...
MATCH FILES TABLE = AHHRESP / FILE = AINDRESP / BY AHID. /KEEP = AHID AXPHSN ATENURE AXPHSDF APNO ALKMOVE ALKMOVY ASEX AAGE AJBSTAT.

In STATA ...
use ahid axphsn atenure axphsdf using ahhresp
sort ahid
save hhinfo, replace
use ahid apno alkmove alkmovy asex aage ajbstat using aindresp
sort ahid
merge ahid using hhinfo
tab _merge

### 1.1.3. Summarising Individual Level Information at the Household Level

The following example takes the opposite approach - aggregating from individual level to create two new variables at the household level: the count of the number of household members in the age group 1824 ; and the number of students in the same age group. These are exported to a new file with information about total household size and tenure.

In SPSS we make use of the AGGREGATE command to count dummy variables over the household.

```
GET FILE = AINDALL.
COMPUTE STUDENT = 0.
COMPUTE A1824 = 0.
DO IF (AAGE GE 18 AND AAGE LE 24).
COMPUTE A1824 = 1.
IF (AHGEST EQ 5) STUDENT = 1.
END IF.
AGGREGATE OUTFILE = * /PRESORTED / BREAK = AHID
    /N1824 = SUM(A1824)
    /NSTUDENT = SUM(STUDENT).
MATCH FILES FILE = * /FILE = AHHRESP /BY AHID
    /KEEP = AHID AHHSIZE ATENURE N1824 NSTUDENT.
```

In STATA we make use of 'by group' operations [bysort ...: ] in combination with 'egen'
use ahid ahhsize atenure using ahhresp
sort ahid
save hhinfo, replace
use ahid aage ahgest using aindall
bysort ahid: egen n1824= sum(aage>=18 \& aage<=24)
bysort ahid: egen nstudent $=$ sum(ahgest==5)
bysort ahid: keep if _n==1 // keep only first observation for every household
sort ahid
merge ahid using hhinfo
tab _merge
The expression in brackets is a logical statement which evaluates to 1 if true for the observation and 0 otherwise. Egen in combination with sum() creates the total sum within the 'by group' and distributes this sum to all observations in the group.

### 1.1.4. Aggregating Income Information to the Individual Level

The following example uses the income information. It computes separate variables for the estimated amount of income received from Unemployment Benefit, Income Support and the two combined (payment codes 31, 32 and 33) in September 1991, and then saves this with the variable AJBSTATT, the employment status on 1st September 1991.

In SPSS we again use the AGGREGATE command:

```
GET FILE = AINCOME.
COMPUTE UB = 0.
COMPUTE IS = 0.
COMPUTE UI = 0.
IF (AFICODE EQ 31) UB = AFIM09T.
IF (AFICODE EQ 32) IS = AFIM09T.
IF (AFICODE EQ 33) UI = AFIM09T.
AGGREGATE OUTFILE = * / PRESORTED /BREAK = AHID APNO
    /UNBEN = SUM(UB)
    /INCSUP = SUM(IS)
    /UBIS = SUM(UI).
MATCH FILES FILE = * /IN = INC / FILE = AINDRESP / BY AHID APNO
    /KEEP = AHID APNO AJBSTATT UNBEN INCSUP UBIS.
DO IF (INC EQ 0).
COMPUTE UNBEN = 0.
COMPUTE INCSUP = 0.
COMPUTE UBIS = 0.
END IF.
```

(The last five lines of the SPSS example are intended to ensure that the values of the target variables for individuals who receive no payments of any type are set to ' 0 ' rather than having missing values assigned.)

Similar structures would be used to aggregate employment history information.

```
In STATA ...
use ahid apno ajbstatt using aindresp
sort ahid apno
save indinfo, replace
use ahid apno aficode afim09t using aincome
bysort ahid apno: egen unben = sum(afim09t * (aficode==31) * (afim09t>=0))
bysort ahid apno: egen incsup = sum(afim09t * (aficode==32) * (afim09t>=0))
bysort ahid apno: egen ubis = sum(afim09t * (aficode==33) * (afim09t>=0))
bysort ahid apno: keep if _n==1 // keep only first observation for every respondent
sort ahid apno
merge ahid apno using indinfo
tab _merge
inspect unben incsup ubis
mvencode unben incsup ubis, mv(0) override
```


### 1.1.5. Matching Individuals with a Household

The next example matches data from each female respondent who is married or living with a partner, with data from her spouse or partner. There may be missing data if her spouse was not interviewed. Note that variables are renamed, so that the second set of variables collected do not overwrite the first.

In SPSS (note that here the spouse number is renamed the person number for the purpose of the match file)

```
GET FILE = AINDRESP /RENAME = (APNO AHGSPN ASEX AIVFIO AJBSTAT
    AOPFAMA = WPNO APNO WSEX WIVFIO WJBSTAT WOPFAMA).
SELECT IF (APNO GT 0 AND WSEX EQ 2).
EXECUTE.
MATCH FILES FILE = * /IN = WIFE /FILE = AINDRESP /RENAME = (ASEX AIVFIO
    AJBSTAT AOPFAMA = HSEX HIVFIO HJBSTAT HOPFAMA) /BY AHID APNO.
```


## In STATA ...

use ahid apno ahgspn asex aivfio ajbstat aopfama using aindresp if ahgspn>0 \& asex==2
renpfix a w
rename whgspn apno
rename whid ahid
sort ahid apno
save wife, replace
use ahid apno ahgspn asex aivfio ajbstat aopfama using aindresp
renpfix a h
rename hhid ahid
rename hpno apno
sort ahid apno
merge ahid apno using wife
tab _merge
keep if _merge==3

An alternative, more Stata-ish method, is to create an identification number for each partnership within the household and to use this to create new variables containing the spouse's characteristics using 'explicit subscripting', where the number in square brackets indicates the position of the observation in the by group.
use ahid apno asex ahgspn aivfio ajbstat aopfama using aindresp
gen partnum = cond(apno<ahgspn, apno, ahgspn) if ahgspn>0
foreach w in asex aivfio ajbstat aopfama \{
bysort ahid partnum: gen spouse 'w' = cond(n==1, 'w'[2], 'w'[1]) if partnum~=.
\}
bysort ahid partnum: keep if asex==2 \& _N==2 // keep only women whose partners took part in the survey

The cond() function evaluates the first expression and if true returns the value of the second element in the brackets; if false it returns the value of the third element. In this case, the partnership identification number is set to equal the smaller of either apno or ahgspn. To create the spouse variables, the cond() function evaluates whether the observation is the first in the by group ( $n==1$ ). If true, the spouse variable is assigned the value of the variable in the second position in the by group; If not true, the spouse variable is assigned the value of the variable in the first position in the by group.

### 1.1.6. Using the AEGOALT Record

The following more complex retrieval (only shown In STATA) is intended to identify unmarried respondents to the full interview, who are living with their parents, together with information on the number of their siblings of each sex, the number of rooms in the house, the total household size and whether they would prefer to move.

## In STATA ..

use ahid ahsroom ahhsize using ahhresp
sort ahid
save hhinfo, replace
use ahid apno arel aosex using aegoalt
bysort ahid apno: egen npar = sum(arel==13)
bysort ahid apno: egen nbro $=\operatorname{sum}(($ arel==10 | arel==11 | arel==28) \& (aosex==1))
bysort ahid apno: egen nsis = sum((arel==10 | arel==11 | arel==28) \& (aosex==2))
bysort ahid apno: keep if _n==1
keep if npar>=1
sort ahid apno
save relatives, replace
use ahid apno asex aage amastat alkmove aivfio using aindresp if aivfio==1 \& amastat>=3
sort ahid apno
merge ahid apno using relatives
tab _merge
_merge==1: full respondents, but not single living with parents
_merge==2: single living with parents, not full respondents
_merge==3: full respondents and single living with parents
keep if _merge==3
drop _merge
sort ahid
merge ahid using hhinfo
tab _merge
keep if _merge==3

### 1.2. Linking Data from Different Waves

### 1.2.1. Matching Respondents at Wave One and Wave Two

Here we are only concerned with full respondents at both waves, but want to create a file containing all respondents.

In SPSS ...

```
GET FILE BINDRESP
    /KEEP PID BHLGHQ1 BJBSTAT BLRWGHT.
SORT CASES BY PID.
MATCH FILES FILE = */FILE = XWAVEID / by PID.
EXECUTE.
SORT CASES BY AHID APNO.
SELECT IF (AIVFIO = 1 AND BIVFIO =1).
EXECUTE.
MATCH FILES FILE = * /FILE = AINDRESP BY AHID APNO.
EXECUTE.
```

In STATA
WIDE file (Wave 2 variables added to Wave 1 file as separated columns):
foreach w in abs
use pid 'w'sex 'w'age 'w'hlghq1 'w'jbstat 'w'ivfio using 'w'indresp if 'w'ivfio==1
sort pid
save wave`w', replace
\}
merge pid using wavea
tab _merge
keep if _merge==3

LONG file (Wave 2 variables added to Wave 1 file as separate rows):
foreach w in abs
use pid 'w'sex 'w'age 'w'hlghq1 'w'jbstat 'w'ivfio using 'w'indresp if 'w'ivfio==1
renpfix 'w'
gen wave = index("ab","'w"')
sort pid
save wave ${ }^{w}$ ', replace
\}
append using wavea
bysort pid: keep if _N==2

### 1.2.2. Including Household Level Information

The above examples may be easily adapted to include information from the household level records. Note that most matches of household level information follow this pattern, and match via individual members, since there is no crosswave household identifier.

In SPSS:

```
MATCH FILES FILE = BINDRESP /TABLE = BHHRESP /BY = BHID
    /KEEP = PID BHLGHQ1 BJBSTAT BLRWGHT BFIHHMN BFIEQFCB BHHTYPE.
SORT CASES BY PID.
MATCH FILES FILE = * /FILE = XWAVEID /BY = PID.
SELECT IF (AIVFIO EQ 1 AND BIVFIO EQ 1).
SORT CASES BY AHID APNO.
MATCH FILES FILE = * /FILE = AINDRESP /BY AHID APNO.
MATCH FILES FILE = * /TABLE = AHHRESP /BY AHID.
EXECUTE.
```

In STATA
WIDE file (Wave 2 variables added to Wave 1 file as separated columns):
foreach w in abs
use 'w'hid 'w'fihhmn 'w'fieqfcb 'w'hhtype using 'w'hhresp
sort 'w'hid
save hhinfo`w', replace     use 'w'hid pid 'w'sex 'w'age 'w'hlghq1 'w'jbstat 'w'ivfio using 'w'indresp if 'w'ivfio==1     sort 'w'hid     merge 'w'hid using hhinfo`w'
tab _merge
keep if _merge==3
drop _merge
sort pid
save wave`w', replace     \} merge pid using wavea tab _merge keep if _merge==3 LONG file (Wave 2 variables added to Wave 1 file as separate rows): foreach w in a b \{     use 'w'hid 'w'fihhmn 'w'fieqfcb 'w'hhtype using 'w'hhresp     renpfix 'w'     sort hid     save hhinfo`w', replace
use 'w'hid pid 'w'sex 'w'age 'w'hlghq1 'w'jbstat 'w'ivfio using 'w'indresp if 'w'ivfio==1
gen wave = index("ab","'w"')
renpfix 'w'
sort hid
merge hid using hhinfo`w' tab _merge drop _merge save wave`w', replace
\}
append using wavea
bysort pid: keep if _N==2

### 1.2.3. Including information about Wave Two Non-respondents

Not all Wave One respondents were interviewed at Wave Two, and it is necessary to take this into account in making links. In the above examples only both wave respondents were included, but in the example below all Wave One respondents are included whatever their Wave Two status

```
In SPSS
GET FILE = AINDRESP /KEEP = PID ASMOKER AIVFIO.
SORT CASES BY PID.
SELECT IF (AIVFIO EQ 1).
MATCH FILES FILE = * /IN = SM /FILE = XWAVEID /BY = PID.
SELECT IF (SM EQ 1).
SORT CASES BY BHID BPNO.
MATCH FILES FILE = * /FILE = BINDRESP /BY = BHID BPNO.
SELECT IF (SM EQ 1).
RECODE BSMOKER (SYSMIS = -10).
```

In STATA
WIDE file:
foreach $w$ in $a b\{$
if "'w"'=="a" \{
use pid 'w'smoker 'w'ivfio using 'w'indresp if 'w'ivfio==1
\}
else \{
use pid 'w'smoker 'w'ivfio using 'w'indresp
\}
sort pid
save wave`w', replace         \} merge pid using wavea tab _merge drop if _merge==1 // new entrants at wave 2 drop _merge mvencode bsmoker, \(\operatorname{mv}(-10)\) LONG file: foreach w in abs     if "'w"'=="a" \{         use pid 'w'smoker 'w'ivfio using 'w'indresp if 'w'ivfio==1         \}     else \{             use pid 'w'smoker 'w'ivfio using 'w'indresp             \}     renpfix 'w'     gen wave = index("ab","'w"')     sort pid     save wave`w', replace
\}
append using wavea
bysort pid (wave): keep if $(\mathrm{N}==2) \mid(\mathrm{N}==1$ \& wave==1) // drop wave 2 new entrants

### 1.2.4. Matching a Subset of Cases

Here we are concerned with creating a file containing only a subset of cases defined on some substantive variables. This could be done as above, selecting cases out at the end, but it is likely to be more efficient to do it as follows:

In SPSS the structure is the same as in the previous example:

```
GET FILE = AINDRESP /KEEP = PID AJBSTAT ASEX AAGE AHLGHQ1 AREGION AIVFIO.
SELECT IF (AJBSTAT EQ 3 AND AIVFIO EQ 1).
SORT CASES BY PID.
MATCH FILES FILE = * /IN = UE /FILE = XWAVEID /BY = PID.
SELECT IF (UE EQ 1).
SORT CASES BY BHID BPNO.
MATCH FILES FILE = * /FILE = BINDRESP /BY = BHID BPNO.
SELECT IF (UE EQ 1).
RECODE BJBSTAT BHLGHQ1 BREGION (SYSMIS = -9).
```


## In STATA:

WIDE file:
foreach w in abs
if "'w"'=="a" \{
use pid 'w'jbstat 'w'sex 'w'age 'w'hlghq1 'w'region 'w'ivfio using 'w'indresp if 'w'ivfio==1 \&
'w'jbstat==3
\}
else \{
use pid 'w'jbstat 'w'sex 'w'age 'w'hlghq1 'w'region 'w'ivfio using 'w'indresp if 'w'ivfio==1
\}
sort pid
save wave`w', replace
\}
merge pid using wavea
drop if _merge==1
drop _merge
mvencode bjbstat bhlghq1 bregion, $\operatorname{mv}(-10)$

## LONG file:

foreach w in a b \{
if "'w"'=="a" \{
use pid 'w'jbstat 'w'sex 'w'age 'w'hlghq1 'w'region 'w'ivfio using 'w'indresp if 'w'ivfio==1 \& 'w'jbstat==3
\}
else \{
use pid 'w'jbstat 'w'sex 'w'age 'w'hlghq1 'w'region 'w'ivfio using 'w'indresp if 'w'ivfio==1
\}
renpfix 'w'
gen wave = index("ab","'w"')
sort pid
save wave`w', replace
\}
append using wavea
bysort pid (wave): keep if ( $\mathrm{N}==2$ ) | ( $\mathrm{N}==1$ \& wave==1)

### 1.2.5. Constructing a flat cross-wave file at the individual level

The techniques described above can be used to construct a flat file at the person level containing all information from each wave from record types wINDSAMP, wINDALL, wINDRESP, as well as household level information from wHHRESP. More substantial restructuring would be required to include the other record types. Such a flat file would contain around 4000 variables at Wave four, and therefore is not particularly efficient for use in statistical analysis, but it may be a useful way of holding the data, where the main analytical intention is person level panel analysis.
a) matching single wave records together - using the technique described in example 1.1.1 above to match data at the individual level from different files, and the technique shown in 1.1.2 to distribute household level information to the individual level. Thus for wave two, using SPSS:

```
GET FILE=BINDSAMP.SYS.
* NB - select out final location cases only
SELECT IF (BFINLOC EQ 1).
MATCH FILES FILE=* / FILE=BINDALL.SYS / FILE=BINDRESP.SYS
    /BY=BHID BPNO.
EXECUTE.
MATCH FILES FILE=* /TABLE=BHHRESP.SYS / BY=BHID.
* Now sort this so it can be matched later.
SORT CASES BY PID.
SAVE OUTFILE=WAVE2.SYS.
```

This is repeated for each wave separately. It would of course be possible to select at this point the subset of variables which are required for analysis.
b) Matching the waves. This requires that the files are sorted by PID. The cross-wave file XWAVEID should also be matched in, since it provides information about the status of indiviudals not record at a particular wave. Thus for the first four waves using SPSS:

MATCH FILES FILE=XWAVEID.SYS /FILE=WAVE1.SYS /FILE=WAVE2.SYS
/FILE=WAVE3.SYS /FILE=WAVE4.SYS /BY=PID.
SAVE OUTFILE=XWIND.SYS
c) In the file created above there will be system missing values, for example for wINDRESP variables for children, and adults who did not respond at a wave, and for all wave specific variables (except wHID wPNO wIVFIO wIVFHO, contained on XWAVEID) for individuals not part of the issued sample. Users may want to reset these. Note that there are a limited number of alphanumeric variables on the dataset, and if any of these are included, a single recode statement will not work.

### 1.2.6. Using the Lifetime History Data

At Wave Two and Wave Three a range of lifetime history information was collected, covering, marriages (BMARRIAG), cohabitation spells (BCOHABIT), children (BCHILDAD, BCHILDNT), lifetime employment status (BLIFEMST) and a lifetime job history (CLIFEJOB). These data are all structured as one record for each spell (or child), containing information about the date of the start of the spell (e.g. marriage date, child birth, date of taking job), the end date if any, and other information about the nature of the spell. Thus there is an indeterminate number of records for each respondent. These data have a variety of uses. For spell analysis techniques such as event history analysis the data may be usable in their current form, though it is likely that information from other record types must be matched in. Here we briefly outline two other possible uses: the construction of summary lifetime information, and the restructuring of the information into calendar format.

The construction of summary variables describing lifetime experience, for example, the number of unemployment or cohabitation spells, the number of months unemployed to date etc. use the aggregation techniques described in example 1.1.4 above. Thus to use SPSS to construct an individual level file giving the total number of employment and unemployment spells and the total number of months in each state:

```
GET FILE=BLIFEMST.SYS
COMPUTE NUNEM=0
COMPUTE LUNEM=0
COMPUTE NEMP=0
COMPUTE LEMP=0
* Create flag variables to indicate if length missing
* for relevant spell
COMPUTE EMFLAG=0
COMPUTE UMFLAG=0
DO IF (BLESHST GE 1 AND BLESHST LE 3)
COMPUTE NEMP=1
IF (BLESLEN GE 0) LEMP=BLESLEN
IF (BLESLEN LT 0) EMFLAG=1
ELSE IF (BLESHST EQ 4)
COMPUTE NUNEM=1
IF (BLESLEN GE 0) LUNEM=BLESLEN
IF (BLESLEN LT 0) UMFLAG=1
END IF
AGGREGATE OUTFILE = * / PRESORTED /BREAK=BHID BPNO
    /NUNEM LUNEM NEMP LEMP EMFLAG UMFLAG =
    SUM(NUNEM LUNEM NEMP LEMP EMFLAG UMFLAG)
```

For some research purposes calendar information is needed. This restructures the spell data so as to create a vector of variables at the respondent level, with each variable representing the status at a particular time point (e.g. month or year). A number of design issues have to be resolved. For example, where the time interval is longer than that for which the data was collected, then some provision must be made for coding multiple statuses. The following example does not deal with these issues, but simply constructs a monthly calendar of status from age 16 to age 60, derived from the BLIFEMST record.

In SPSS we could do this using the following methods. Note that the first step is to flatten all the separate BLIFEMST records into a single long record.

```
GET FILE=BINDRESP.SYS / KEEP=BHID BPNO BLEDENDM BLEDENDY BDOBM BDOBY
    BDOIM BDOIY
COMPUTE BDOBY=BDOBY-1900
MATCH FILES TABLE=* / FILE=BLIFEMST.SYS / BY=BHID BPNO
SELECT IF (BLEDENDY GE 0)
VECTOR AGEEND (38)
VECTOR AGESTT (38)
```

```
VECTOR STAT (38)
RECODE BLEDENDM BLESHSM BLESHEM (-1,-2,-9=6)(13=1)(14=4)(15=7)(16=10)
IF (BLESHEY EQ -8) BLESHEY=BDOIY
IF (BLESHEM EQ -8) BLESHEM=BDOIM
DO IF (BLESHSY GE 1)
E SE
. COMPUTE AGESTART=-999
END IF
DO IF (BLESHEY GE 1)
. COMPUTE AGEEND=(12*BLESHEY+BLESHEM)-(12*BDOBY+BDOBM)-192
ELSE
    COMPUTE AGEEND=-999
END IF
LOOP #I=1 TO 38
. DO IF (BLESHNO EQ #I)
. COMPUTE AGESTT(#I)=AGESTART
                                    COMPUTE AGEEND(#I)=AGEEND
                                    COMPUTE STAT(#I)=BLESHST
    END IF
END LOOP
AGGREGATE OUTFILE=* /PRESORTED / BREAK=BHID BPNO
    /AGESTT1 TO AGESTT38=MAX(AGESTT1 TO AGESTT38)
    /AGEEND1 TO AGEEND38=MAX(AGEEND1 TO AGEEND38)
    /STAT1 TO STAT38=MAX(STAT1 TO STAT38)
DESCRIPTIVES ALL
VECTOR MSTAT (528)
* PERIOD BEFORE SCHOOL LEAVING
DO IF (AGESTT1 GE 1)
    COMPUTE #AGE1=AGESTT1
    . IF (#AGE1 GT 528) #AGE1=528
. LOOP #J=1 T0 #AGE1
. COMPUTE MSTAT(#J)=8
END LOOP
END IF
VECTOR AGESTT=AGESTT1 TO AGESTT38
VECTOR AGEEND=AGEEND1 TO AGEEND38
VECTOR STAT=STAT1 TO STAT38
LOOP #K=1 TO 38
. DO IF (SYSMIS(STAT(#K)))
                    BREAK
. END IF
. DO IF (AGESTT(#K) GT -999 AND AGESTT(#K) LE 528 AND AGEEND(#K) GE
1).
                COMPUTE #AGEST=AGESTT(#K)
                IF (#AGEST LT 1) #AGEST=1
                COMPUTE #AGEEN=AGEEND(#K)
                IF (#AGEEN GT 528) #AGEEN=528
                DO IF (#AGEEN GE #AGEST)
                    LOOP #L=#AGEST TO #AGEEN
                                    COMPUTE MSTAT(#L)=STAT(#K)
                    END LOOP
                END IF
    END IF
END LOOP
EXECUTE
SAVE OUTFILE=LIFECAL.SYS
```

As indicated in section III above, the lifetime employment status history (BLIFEMST) and the lifetime job history (CLIFEJOB) were collected at separate waves, but relate to approximately the same time period. Some linkage can be achieved by using the variable CLJESFN, which should correspond to a value of BLESHNO for the same time period. However some histories have the value zero for this variable, indicating that the respondent was not able to link the job to the information from the previous wave which was fed forward. In addition, there are some discrepancies in dating even where an apparent match exists. The Research Centre intends to release as soon as possible, a special purpose combined file, also including information from the panel records.

## Appendix 2. Notes on Derived Variables

Below are notes pertaining to the nature and function of the derived variables which exist in the BHPS database. The exact means of derivation can be found in the procedure files contained within the SIR database. These files are named M1DV for Wave One derived variables, M2DV for Wave Two, M3DV for Wave Three and so on, and MXDV for the cross wave records. If you receive the data in a format other than SIR and would like to study these derivations, a printout of selected procedures can be supplied.

Derived variables are listed according to Record Types, and then alphabetically within these Records. Generic Variable Names are presented (that is, without the wave-specific initial letter). Users should therefore be aware that not all variables appear in all waves. Neither, it should be noted, do all Record Types appear at all waves. Refer to the Cross-Wave Continuity Index for wave occurrence of individual variables.

## Keys to conventions employed in descriptions below:

$w=$ initial letter of all Record and Variable Names, which replaces the wave-specific initial letter (e.g. A = Wave One, B = Wave Two, and so on)

Derived variables sometimes use data taken from earlier, and in some cases, later waves. This is indicated by:
$\mathrm{w}-1=$ indicates the year prior to the wave under investigation:
$w+1=$ indicates the year following the wave under investigation
LY $=$ indicates the period 12 months prior to the start of fieldwork (e.g. 1 September 1990 or 1 September 1990-31 August 1991 for Wave One)

TY $=$ indicates the present period, beginning at the 1 September on which fieldwork begins for a specific wave (e.g. 1 September 1991 for Wave One, 1 September 1992 for Wave Two, etc.)

Variable names are, in part, mnemonic. See Section III earlier in this Volume for a table listing some of the conventions employed.

### 2.1. RECORD TYPE wHHSAMP

Fieldwork household identifier. This is a string variable and should be treated accordingly in analysis.

[^5]wLADISTC $\quad$| The local authority districts are aggregated if their population falls below 120,000. This |
| :--- |
| aggregation is on the same basis as that for the Census Sample of Anonymised |
| Records individual sample, and the codes used are the same as those given in Marsh, |
| C. \& Teague, A. 'Samples of anonymised records from the 1991 Census', Population |
| Trends, 69, 17-26, 1992. |
| Internally computed from confidential information on Survey Database. |

wREGION $\quad$| Standard Region, distinguishing former Metropolitan Counties, and Inner and Outer |
| :--- |
| London. |
| Internally computed from confidential information on Survey Database. |

wSTRATA $\quad$| This indicator distinguishes separate stratification classes used in the sampling |
| :--- |
| procedure. (See Section on Sampling earlier in this manual) |

wXHWGHT | See section on Weighting earlier in this manual. for a description of the derivation of |
| :--- |
| weights. This weight should be used for any analysis at the household level. (cf |
| WXRWGHT on Record wINDRESP and wXEWGHT on Record wINDALL) |

### 2.2. RECORD TYPE wINDSAMP

wMOVEST Individual Mover Status. Indicates whether sample members have moved location since last Wave. Its is intended to enable measures of household composition change to be computed.
Uses wFINLOC wIVFIO PID wSAMPST wLVLOC on Record wINDSAMP. Uses wHHMOVE wIVFHO on Record wHHSAMP.

wSAMPST Sample Membership Status. This variable distinguishes between Original Sample members, new Permanent Sample members and Temporary Sample members. See Section on Sampling earlier in this manual for a discussion of these terms.<br>Uses wFINLOC wIVFIO PID on Record wINDSAMP. Uses MSTAT YOSM on Record XWLSTEN.<br>wLEWGHT Longitudinal Enumerated Individual Weight. See section on Weighting earlier in this manual.<br>wLRWGHT Longitudinal Respondent Weight. See section on Weighting earlier in this manual.

### 2.3. RECORD TYPE wINDALL

wAGE Internally computed from confidential information on Survey Database and date of interview variables wDOID wDOIM on Record wINDRESP. Includes imputed data. The imputation flag variable wAGEI (on Record Type wINDALL), as an individual level derived variables, takes the value 1 if the variable was imputed, and 0 or -8 otherwise. See section on Imputation earlier in this manual.
wAGE12 Two age variables are computed. The age at date of interview is used for most purposes internal to a wave, e.g. computation of household characteristics. The age at 1.12.9TY is intended to ensure consistency in cross-wave comparison. 1st December is also the criterion date for determining whether those close to 16 should be interviewed. Includes imputed data, see entry for wAGE. Internally computed from confidential information on Survey Database

## wAGEI

Imputation flag for wAGE and wAGE12 both in Record type wINDALL and Record type wINDRESP. See section on Imputation earlier in this manual for more details on imputation.

| wBUNO | This distinguishes the separate benefit unit to which an individual belongs. Benefit <br> units (see also wBUTYPE) are subsets of households, consisting of single individuals <br> or couples, and their dependent children, if any. The value of wBUNO is the person <br> number of the first member of that benefit unit in sequential order of person numbers. <br> wBUNO is missing if there are missing data on input variables, and the benefit unit |
| :--- | :--- |
| cannot be inferred. |  |
| Uses wPNO wHGSPN wHGFNO wHGMNO wHGRA wAGE wHGEST wDEPCHL <br> wHGR2R on Record wINDALL. Uses wHHSIZE on Record wHHRESP. Uses wREL |  |
| wOPNO on Record wEGOALT. |  |

### 2.4. RECORD TYPE wHHRESP

wAGECHY The age of the youngest child in the household (wAGECHY) is computed as the minimum age of children under 16. Households without children are coded as inapplicable. Households containing one or more children with missing ages are coded as missing.
Uses wAGE on Record wINDALL.

[^6]Table 29 McClements Equivalence Scales

|  | Before <br> housing <br> costs | After <br> housing <br> costs |
| :--- | :--- | :--- |
| Head | 0.61 | 0.55 |
| Spouse | 0.39 | 0.45 |
| Other second adult | 0.46 | 0.45 |
| Third adult | 0.42 | 0.45 |
| Further adult | 0.36 | 0.40 |
| Dependent child aged: |  | 0.07 |
| $0-1$ | 0.09 | 0.18 |
| $2-4$ | 0.18 | 0.21 |
| $5-7$ | 0.21 | 0.23 |
| $8-10$ | 0.23 | 0.26 |
| $11-12$ | 0.25 | 0.28 |
| $13-15$ | 0.27 | 0.38 |
| $16+$ | 0.36 |  |

[^7]
#### Abstract

wFIHHMI This sums the values of investment income in the month before interview for individuals in the household. Includes imputed data. The imputation flag variable wFIHHMII takes a value 0 if there was no imputation, 1 if some component of an individual $\mathrm{h} / \mathrm{hold}$ members income was imputed, and 2 if the whole income of one or more h/hold members was imputed. See section on Imputation earlier in this manual. Uses wIVFHO from Record wHHSAMP. Uses wFIMNI wIVFIO from Record wINDRESP. wFIHHMII Imputation flag. See notes above for variable wFIHHMI. wFIHHML This sums the values of labour income in the month before interview for individuals in the household. Includes imputed data. The imputation flag variable wFIHHMLI takes a value 0 if there was no imputation, 1 if some component of an individual $\mathrm{h} / \mathrm{hold}$ members income was imputed, and 2 if the whole income of one or more $\mathrm{h} / \mathrm{hold}$ members was imputed. See section on Imputation earlier in this manual. Uses wIVFHO from Record wHHSAMP. Uses wFIMNL wIVFIO from Record wINDRESP.


wFIHHMLI Imputation flag. See notes above for variable wFIHHML.
wFIHHMN This variable sums the values of total income in the month before interview for individuals in the household. Includes imputed data. The imputation flag variable WFIHHMNI takes a value 0 if there was no imputation, 1 if some component of an individual $\mathrm{h} / \mathrm{hold}$ members income was imputed, and 2 if the whole income of one or more $\mathrm{h} /$ hold members was imputed. See section on Imputation earlier in this manual. Uses wIVFHO on Record wHHSAMP. Uses wFIMN wIVFIO on Record wINDRESP.
wFIHHMNI Imputation flag. See notes above for variable wFIHHMN.
wFIHHMNL This sums the values of non-labour income in the month before interview for individuals in the household. Includes imputed data. The imputation flag variable wFIHMNLI takes a value 0 if there was no imputation, 1 if some component of an individual $\mathrm{h} / \mathrm{hold}$ members income was imputed, and 2 if the whole income of one or more $\mathrm{h} / \mathrm{hold}$ members was imputed. See section on Imputation earlier in this manual.
Uses wIVFHO from Record wHHSAMP. Uses wFIMNNL wIVFIO from Record wINDRESP.
wFIHHMP This sums the values of pension income in the month before interview for individuals in the household. Includes imputed data. The imputation flag variable wFIHHMPI takes a value 0 if there was no imputation, 1 if some component of an individual $\mathrm{h} / \mathrm{hold}$ members income was imputed, and 2 if the whole income of one or more $\mathrm{h} / \mathrm{hold}$ members was imputed. See section on Imputation earlier in this manual.
Uses wIVFHO from Record wHHSAMP. Uses wFIMNP wIVFIO from Record wINDRESP.
wFIHHMPI Imputation flag. See notes above for variable wFIHHMP.
wFIHHMT This sums the values of pension income in the month before interview for individuals in the household. Includes imputed data. The imputation flag variable wFIHHMTI takes a value 0 if there was no imputation, 1 if some component of an individual $h / h o l d$ members income was imputed, and 2 if the whole income of one or more $\mathrm{h} / \mathrm{hold}$ members was imputed. See section on Imputation earlier in this manual.
Uses wIVFHO from Record wHHSAMP. Uses wFIMNT wIVFIO from Record wINDRESP.
wFIHHMTI Imputation flag. See notes above for variable wFIHHMT.
wFIHHYB This variable sums the values of annual benefit income in the reference year, that is the twelve months prior to the start of the interview period (1st Sept.) for individuals in the household. Includes imputed data. The imputation flag variable wFIHHYBI takes a value 0 if there was no imputation, 1 if some component of an individual household members income was imputed, and 2 if the whole income of one or more household members was imputed. See section on Imputation earlier in this manual . Uses wIVFHO on Record wHHSAMP. Uses wFIYRB wIVFIO on Record wINDRESP.

## wFIHHYBI Imputation flag. See notes above for variable wFIHHYB.

wFIHHYI This variable sums the values of annual investment income in the reference year, that is the twelve months prior to the start of the interview period (1st Sept.) for individuals in the household. The imputation flag variable wFIHHYII takes a value 0 if there was no imputation, 1 if some component of an individual household members income was imputed, and 2 if the whole income of one or more household members was imputed. See section on Imputation earlier in this manual Uses wIVFHO on Record wHHSAMP. Uses wFIYRI wIVFIO on Record wINDRESP.
wFIHHYII Imputation flag. See notes above for variable wFIHHYI.
wFIHHYL This variable sums the values of annual labour income in the reference year, that is the twelve months prior to the start of the interview period (1st Sept.) for individuals in the household. Includes imputed data. The imputation flag variable wFIHHYLI takes a value 0 if there was no imputation, 1 if some component of an individual household members income was imputed, and 2 if the whole income of one or more household members was imputed. See section on Imputation earlier in this manual Uses wIVFHO on Record wHHSAMP. Uses wFIYRL wIVFIO on Record wINDRESP.
wFIHHYLI Imputation flag. See notes above for variable wFIHHYL.
wFIHHYNI Imputation flag. See notes above for variable wFIHHYNL.
wFIHHYNL This variable sums the values of annual non-labour income in the reference year, that is the twelve months prior to the start of the interview period (1st Sept.) for individuals in the household. Includes imputed data. The imputation flag variable WFIHHYNI takes a value 0 if there was no imputation, 1 if some component of an individual household members income was imputed, and 2 if the whole income of one or more household members was imputed. See section on Imputation earlier in this manual Uses wIVFHO on Record wHHSAMP. Uses wFIYRNL wIVFIO on Record wINDRESP.
wFIHHYP This variable sums the values of annual pension income in the reference year, that is the twelve months prior to the start of the interview period (1st Sept.) for individuals in the household. Includes imputed data. The imputation flag variable wFIHHYPI takes a value 0 if there was no imputation, 1 if some component of an individual household members income was imputed, and 2 if the whole income of one or more household members was imputed. See section on Imputation earlier in this manual Uses wIVFHO on Record wHHSAMP. Uses wFIYRP wIVFIO on Record wINDRESP.
wFIHHYPI Imputation flag. See notes above for variable wFIHHYP.
wFIHHYR This variable sums the values of annual total income in the reference year, that is the twelve months prior to the start of the interview period (1st Sept.) for individuals in the household. Includes imputed data. The imputation flag variable wFIHHYRI takes a value 0 if there was no imputation, 1 if some component of an individual $\mathrm{h} / \mathrm{hold}$ members income was imputed, and 2 if the whole income of one or more $\mathrm{h} / \mathrm{hold}$ members was imputed. See section on Imputation earlier in this manual.
Uses wIVFHO on Record wHHSAMP. Uses wFIYR wIVFIO on Record wINDRESP.
wFIHHYRI Imputation flag. See notes above for variable wFIHHYR.
wFIHHYT This variable sums the values of annual transfer income in the reference year, that is the twelve months prior to the start of the interview period (1st Sept.) for individuals in the household. The imputation flag variable wFIHHYTI takes a value 0 if there was no imputation, 1 if some component of an individual household members income was imputed, and 2 if the whole income of one or more household members was imputed. See section on Imputation earlier in this manual
Uses wIVFHO on Record wHHSAMP. Uses wFIYRT wIVFIO on Record wINDRESP.
wFIHHYTI Imputation flag. See notes above for variable wFIHHYT.
wFIHMNLI Imputation flag. See notes above for variable wFIHHMNL.
wHHDC Indicates those households for which there was no completed household level questionnaire.
wHHSIZE Calculated by summing the number of individuals per household.
wHHTYPE This classification, closely related to that used in GHS published data, relates to size of household, whether there is a married couple present, and whether there are dependent children. For the purposes of this classification, married and cohabiting couples are treated as equivalent, and dependent children include those up to the age of 18, if they are still in (non-advanced) full time education. The elderly are defined as those over pensionable age ( 60 for women and 65 for men). Couple and lone parent households may contain other individuals who were not family members.
Uses wHHSIZE wNKIDS wNCH1618 wNCOUPLE wNONEPAR on Record wHHRESP. Uses wAGE wHGSEX wMASTAT wHGSPN wHGFNO wHGMNO wDEPCHL on Record wINDALL.

## AHHWGHT See entry in Record type wHHSAMP

wHLGHQ1 This measure converts valid answers to questions wGHQA to $w G H Q L$ to a single scale by recoding so that the scale for individual variables runs from 0 to 3 instead of 1 to 4 , and then summing, giving a scale running from 0 (the least distressed) to 36 (the most distressed). See Cox, B.D et al, The Health and Lifestyle Survey. (London: Health Promotion Research Trust, 1987).
wHLGHQ2 This measure converts valid answers to questions wGHQA to wGHQL to a single scale by recoding 1 and 2 values on individual variables to 0 , and 3 and 4 values to 1 , and then summing, giving a scale running from 0 (the least distressed) to 12 (the most distressed). Reference as above.
wHSVALI Imputation flag for wHSVAL. See note for wMGNEWI.

## wLADISTC <br> See entry in Record type wHHSAMP

wMGNEWI Imputation flag for wMGNEW. For variables directly associated with a question, the imputation flag takes the missing value code of the original variable (e.g. Don't know, refuse, etc.) if imputed, and 0 if not imputed, or -8 if the variable was inapplicable. See section on Imputation earlier in this manual .
wNA75PL This variable is missing if any elderly person has a missing age. Uses wAGE on Record wINDALL.
wNCH02 This variable is missing if any child in the household has a missing age.
wNCH1215 This variable is missing if any child in the household has a missing age. Uses wAGE on Record wINDALL.
wNCH1618 This measures the number of dependent children in the household aged 16 and over. Dependent children are defined as those unmarried, aged under 19, and in school or non-advanced further education. The sum of this variable and wNKIDS gives the total number of dependent children in the household. This variable is missing if any person in the household has a missing age, or if a child in the age range has a missing employment status.
Uses wAGE wDEPCHL on Record wINDALL. Uses wAGE on Record wINDALL.
wNCH34 This variable is missing if any child in the household has a missing age.
Uses wAGE on Record wINDALL.
wNCH511 This variable is missing if any child in the household has a missing age. Uses wAGE on Record wINDALL.
wNCOUPLE Number of couples (married or cohabiting) in household. This is based on de facto marital status, and does not include couples where one partner is non-resident. Uses wMASTAT wHGSPN on Record wINDALL.
wNEMP Number of employed persons in household - derived from AHGEST at Wave One. Uses wHGEMP on Record wINDALL.
wNKIDS This is the total number of children in the household aged under 16. This total may differ from the total of $w N C H 02+w N C H 34+w N C H 511+w N C H 1215 ~ a s ~ i t ~ i n c l u d e s ~$ children whose age is missing. Uses wAGE on Record wINDALL.
wNONEPAR This counts the number of single parents with dependent children in the household, where a dependent child is defined as in wDEPCHL.
Uses wAGE wHGFNO wHGMNO wHGRA wRACH16 wHGSPN wDEPCHL on Record wINDALL.
wNPENS Number in household of pensionable age, i.e. 60 and over for women, and 65 and over for men.
Uses wAGE wHGSEX on Record wINDALL.
wNUE Number of unemployed persons in household - derived from wHGEST.
wNWAGE Number of women aged 16-59 and men aged 16-64.
Uses wAGE wHGSEX on Record wINDALL.
wNWED Includes married and cohabiting, based on status within household, rather than legal status.
Uses wMASTAT on Record wINDALL.
wPHONE This uses the telephone verification question to check the presence of a telephone in the household. A telephone is assumed to be present if a number was given, or was refused.
wREGION See entry in Record type wHHSAMP
wRENTGI Imputation flag for wRENTG. See note above for wMGNEWI.
wRENTI Imputation flag for wRENT. See note above for wMGNEWI.
wTENURE Uses wMGHAVE wRENTLL wRENTF wHSOWND on Record wHHRESP.
wXPFUEL Monthly fuel expenditure on oil, gas, electricity.
Uses wXPGAS wXPLEC wXPOIL on Record wHHRESP.

| wXPGAS | Monthly expenditure on gas, computed from wXPGASL or wXPGASLW, depending on <br> the means of payment. <br> Uses wHEATYP wGASUSE wGASWAY wXPGASL wXPGASW wXPGASLW on <br> Record wHHRESP. |
| :--- | :--- |
| wXPHSG $\quad$This measures gross monthly mortgage or rent costs. In the case of renters who <br> receive housing benefit, either partial or complete, this variable includes the rent before <br> the rebate. This variable is zero for houses rent free or owned outright. Includes <br> imputed data. For housing related derived variables the imputation flag wXPHSGI takes <br> the value 1 if the variable was imputed, and 0 or -8 otherwise. <br> Uses wHSOWND wRENTHB wRENTG wRENTGW wRENT wRENTW wMGHAVE <br> wXPMG on Record wHHRESP. |  |
| wXPHSGI $\quad$Imputation flag. See notes above for variable wXPHSG. |  |
| wXPHSN $\quad$This measures net monthly mortgage or rent costs. In the case of renters who receive <br> housing benefit, either partial or complete, this variable includes the rent after the <br> rebate. This variable is zero for houses rent free or owned outright. Includes imputed <br> data. For housing related derived variables the imputation flag (here AXPHSNI) takes <br> the value 1 if the variable was imputed, and 0 or -8 otherwise. <br> Uses wHSOWND wRENTHB wRENTG wRENTGW wRENT wRENTW wMGHAVE <br> wXPMG on Record wHHRESP. |  |
| wXPHSNIImputation flag. See notes above for variable wXPHSN. |  |
| wXPLEC $\quad$Monthly expenditure on electricity, computed from wXPLECL or wXPLECLW, <br> depending on the means of payment. |  |
| Uses wLECWAY wXPLECL wXPLECW wXPLECLW on Record wHHRESP. |  |

### 2.5. RECORD TYPE wINDRESP

wAGE Copied variable. See entry in wINDALL.
wAGE12 Copied variable. See entry in wINDALL.
wBUNO Copied variable. See entry in wINDALL.
wBUTYPE Copied variable. See entry in wINDALL.
wCJSTEN This measures the length of time in the current labour market spell, whether, employee, self employed or not employed in number of days. Where day is missing, this is assumed to be one. For years before 199LY, where month is missing, this is assumed to be July.
Uses wJBHAS wJBOFF wJBBGD wJBBGM wJBBGY wJBSEMP wJSBGD wJSBGM wJSBGY wCJSBGD wCJSBGM wCJSBGY wDOID wDOIM on Record wINDRESP
wCJSWK9 This variable measures the number of weeks in the current labour market spell which fell into the reference year (1.9.9LY-31.8.9TY). The measure is exact (i.e. number of days divided by seven).
Uses wJBHAS wJBOFF wJBSEMP wJBSTAT wJBBGD wJBBGM wJBBGY wJSBGD wJSBGM wJSBGY wCJSBGD wCJSBGM wCJSBGY wCJSBLY wJLYID wJTYID on Record wINDRESP.

## wEDGEN This variable measures the number of days in the year to 1.9.9TY spent in general

 training (i.e. training not related to a particular job). It is based on the variables wJBED, etc, and wEDNEW, etc. Codes at wJBED4-5 and wEDNEW3-4 are taken to indicate general training. Days associated with such training purposes are allocated to this variable. If specific purposes are also identified, then the days are partitioned between the two types.Uses wJBHAS wJBSEMP wJBED wJBED1 wJBED2 wJBED3 wJBED4 wJBED5 wJBEDD wEDNEW wEDNEW1 wEDNEW2 wEDNEW3 wEDNEW4 wEDNEWD on Record wINDRESP
wEDSPEC This variable measures the number of days in the year to 1.9.9TY spent in specific training (i.e. training related to a particular job). It is based on the variables wJBED, etc, and wEDNEW, etc. Codes at wJBED1-3 and wEDNEW1-2 are taken to indicate general training. Days associated with such training purposes are allocated to this variable. If specific purposes are also identified, then the days are partitioned between the two types.
Uses wJBHAS wJBSEMP wJBED wJBED1 wJBED2 wJBED3 wJBED4 wJBED5 wJBEDD wEDNEW wEDNEW1 wEDNEW2 wEDNEW3 wEDNEW4 wEDNEWD on Record wINDRESP.
wFIHHMNI Imputation flag for wFIHHMN taking the value 1 if the variable was imputed, and 0 or -8 otherwise. See section on Imputation earlier in this manual.
wFIMN $\quad$ This variable is the sum of wFIMNL (non-labour income), and labour income, taken from wPAYGU, wJSPROF, wJSPAYG as appropriate. Income from second jobs is also added if non- missing. For proxy cases estimated total personal income (APRFITB) is used, taking the mid point of each band ( $£ 3300 \mathrm{pcm}$ for the highest band). Includes imputed data. As this is an individual level derived variable, the imputation flag variable wFIMNTHI takes the value 1 if imputed, and 0 or -8 otherwise. Uses wFIMNL wPAYGU wJBSEMP wJSACCS wJSPROF wJSPAYG wJ2PAY wPRFITB on Record wINDRESP.
wFIMNB This variable totals all receipts from state benefits (including NI retirement pension), recieved in the month before interview. It is constructed by summing the amount received converted to a monthly basis, for all wINCOME Records where the wFICODE takes the values $1,5,6,16$ to 22 , or 31 to 41 , and where the amount is currently being received. Jointly received payments are treated as described in the documentation to wFIM09L on Record wINCOME. Includes imputed data. As this is an individual level derived variable, the imputation flag variable WFIMNBI takes the value 1 if imputed, and 0 or -8 otherwise.
Uses wNF1 on Record wINDRESP. Uses wFICODE wFRVAL wFRW wFRNOW wFRJT on Record wINDRESP.
wFIMNBI Imputation flag for wFIMNB taking the value 1 if the variable was imputed, and 0 or -8 otherwise. See section on Imputation earlier in this manual.
wFIMNI This variable totals the estimated income from savings and investments, and receipts from rented property, recieved in the month before interview. Income from investments is only collected as a banded variable, and the monthly value is estimated as follows: if $w$ FIYRDI $=2$, then income is $£ 5$, if $w F I Y R D I=3$ then income is $£ 50$, and if $w F I Y R D I=4$ then income is $£ 150$. Rent income calculated by summing the amount received, converted to a monthly basis, for all wINCOME Records where the wFICODE takes the values 55 or 56 , and where the amount is currently being received. Jointly received payments are treated as described in the documentation to wFIM09L on Record wINCOME. Includes imputed data. As this is an individual level derived variable, the imputation flag variable wFIMNII takes the value 1 if imputed, and 0 or -8 otherwise.
Uses wNF1 wFIYRDI on Record wINDRESP. Uses wFICODE wFRVAL wFRW wFRNOW wFRJT on Record wINDRESP.
wFIMNII Imputation flag for wFIMNI taking the value 1 if the variable was imputed, and 0 or -8 otherwise. See section on Imputation earlier in this manual.

| wFIMNL | Labour Income in month before interview. Includes imputed data. As this is an <br> individual level derived variable, the imputation flag variable wFIMNLI takes the value 1 <br> if imputed, and 0 or -8 otherwise. <br> Uses wJ2PAY wPAYGU wJBSEMP wJSACCS wJSPROF wJSPAYG wPRFITB <br> wIVFIO from Record wINDRESP |
| :--- | :--- |
| wFIMNLI | Imputation flag for wFIMNL taking the value 1 if the variable was imputed, and 0 or -8 <br> otherwise. See section on Imputation earlier in this manual. |
| wFIMNNL | This variable sums the values of wFIMNP wFIMNB wFIMNT and wFIMNI. Includes <br> imputed data. As this is an individual level derived variable, the imputation flag variable <br> wFIMNNLI takes the value 1 if imputed, and 0 |
|  | User -8 otherwise. |
| wFIMNP wFIMNB wFIMNT wFIMNI on Record wINDRESP. |  |

## wFIYRB This variable totals all receipts from state benefits (including NI retirement pensions),

 recieved in the months from 1st. September in the year prior to the interview until 31st August in the year in which interviewing begins. It is constructed by summing the estimated amounts received, (in the variables wFIM09L-wFIM08T), for all wINCOME records where wFICODE takes the values $1,5,6,16$ to 22 , or 31 to 41 . Jointly received payments are treated as described in the documentation to wFIM09L on record wINCOME. Includes imputed data. As this is an individual level derived variable, the imputation flag variable wFIYRBI takes the value 1 if imputed, and 0 or -8 otherwise.Uses wNF1 on Record wINDRESP. Uses wFICODE wFIM09L wFIM10L wFIM11L wFIM12L wFIM01T wFIM02T wFIM03T wFIM04T wFIM05T wFIM06T wFIM07T wFIM08T on Record wINCOME.
wFIYRBI Imputation flag for wFIYRB taking the value 1 if the variable was imputed, and 0 or -8 otherwise. See section on Imputation earlier in this manual.
wFIYRDII Imputation flag for wFIYRDI taking the missing value code of the original variable (e.g. Don't know, refuse, etc.) if imputed, and 0 if not imputed, or -8 if the variable was inapplicable.
wFIYRI This variable totals the estimated income from savings and investments, and all receipts from rent from property or boarders and lodgers, recieved in the months from September in the year prior to the interview until August in the year in which interviewing begins. Income from investments is only collected as a banded variable, and the annual value is estimated as follows: if wFIYRDI $=2$, then income is $£ 60$, if $w F I Y R D I=3$ then income is $£ 600$, and if wFIYRDI $=4$ then income is $£ 1800$. Rent income is constructed by summing the estimated amounts received, (in the variables wFIM090-wFIM081), for all wINCOME Records where wFICODE takes the values 55 or 56. Jointly received payments are treated as described in the documentation to wFIM090 on Record wINCOME. Includes imputed data. As this is an individual level derived variable, the imputation flag variable wFIYRII takes the value 1 if imputed, and 0 or -8 otherwise.
Uses wNF1 wFIYRDI on Record wINDRESP. Uses wFICODE wFIM09L wFIM10L wFIM11L wFIM12L wFIM01T wFIM02T wFIM03T wFIM04T wFIM05T wFIM06T wFIM07T wFIM08T on Record wINCOME.

## wFIYRII

wFIYRL This variable computes annual labour income in the reference year from September in the year prior to the interview until September in the year in which interviewing begins There are three basic components: 1) Pay from current job where this started before 1.9.9LY. This is calculated as the mean of monthly gross pay at 1.9.9TY (wPAYGTY) and monthly gross pay at 1.9.9LY (wPAYGLY), multiplied by 12. or 2) Pay from current job where this started after 1.9.9LY but before 1.9.9TY. This is calculated as the mean of monthly gross pay at 1.9.9TY (wPAYGTY) and gross monthly starting pay in current job (calculated here) multiplied by the number of elapsed weeks in current job in reference year (wCJSWK9) divided by 4.33. and/or 3) Pay from previous jobs, calculated as the sum over all jobs of monthly gross pay (wJHGPAY) times elapsed weeks in reference year (wJHSPW), divided by 4.33. Includes imputed data. As this is an individual level derived variable, the imputation flag variable wFIYRLI takes the value 1 if imputed, and 0 or -8 otherwise.
Uses wJBHAS wJBOFF wCJSBLY wCJSWK9 wJTYID wJLYID wNJBWKS wPAYGU wPAYGTY wPAYGLY wPAYS wPAYSW wPAYSG on Record wINDRESP. Uses wJHSTAT wJHGPAY wJHSPW on Record wJOBHIST
wFIYRLI Imputation flag for wFIYRL taking the value 1 if the variable was imputed, and 0 or -8 otherwise. See section on Imputation earlier in this manual.
wFIYRNL This variables is the sum of wFIYRP, wFIYRB, wFIYRT and wFIYRI. Includes imputed data. As this is an individual level derived variable, the imputation flag variable wFIYRNLI takes the value 1 if imputed, and 0 or -8 otherwise.
Uses wFIYRP wFIYRB wFIYRT wFIYRI on Record wINDRESP.
wFIYRNLI Imputation flag for wFIYRNL taking the value 1 if the variable was imputed, and 0 or -8 otherwise. See section on Imputation earlier in this manual.

| wFIYRP | This variable totals all receipts from non-state pension sources, received in the months from September 199LY to August 199TY. It is constructed by summing the estimated amounts received, (in the variables wFIM09L-wFIM08T), for all wINCOME Records where wFICODE takes the values 2,3 or 4 . Jointly received payments are treated as described in the documentation to WFIM09L on Record wINCOME. Includes imputed data. As this is an individual level derived variable, the imputation flag variable wFIYRPI takes the value 1 if imputed, and 0 or -8 otherwise. <br> Uses wNF1 on Record wINDRESP. Uses wFICODE wFIM09L wFIM10L wFIM11L wFIM12L wFIM01T wFIM02T wFIM03T wFIM04T wFIM05T wFIM06T wFIM07T wFIM08T on Record wINCOME. |
| :---: | :---: |

wFIYRPI Imputation flag for wFIYRP taking the value 1 if the variable was imputed, and 0 or -8 otherwise. See section on Imputation earlier in this manual.
wFIYRT This variable totals all receipts from other transfers (including education grants, sickness insurance, maintenance, foster allowance and payments from TU/Friendly societies, from absent family members), received in the months from September 199LY to August 199TY. It is constructed by summing the estimated amounts received, (in the variables wFIM09L-wFIM08T), for all wINCOME records where wFICODE takes the values $51,52,53,54,57,58,59$. Jointly received payments are treated as described in the documentation to WFIMO9L on Record wINCOME. Includes imputed data. As this is an individual level derived variable, the imputation flag variable wFIYRTI takes the value 1 if imputed, and 0 or -8 otherwise.
Uses wNF1 on Record wINDRESP. Uses wFICODE wFIM09L wFIM10L wFIM11L wFIM12L wFIM01T wFIM02T wFIM03T wFIM04T wFIM05T wFIM06T wFIM07T wFIM08T on Record wINCOME.
wFIYRTI Imputation flag for wFIYRT taking the value 1 if the variable was imputed, and 0 or -8 otherwise. See section on Imputation earlier in this manual.
wHHSIZE Copied variable. See entry in wHHRESP.
wHHTYPE Copied variable. See entry in wHHRESP.
wHOH $\quad$ Copied variable. See entry in wINDALL.
wINWGHT Individual Respondent Weight. See section on Weighting earlier in this manual for a description of the derivation of weights and discussion as to their use. This weight should be used for analysis which uses only individual respondents to the full questionnaire. Proxy subjects have a will have weight of zero on this variable. (The variable wXHWGHT should be used for analyses at the household level.
wJ2PAYI Imputation flag for wJ2PAY taking the missing value code of the original variable (e.g. Don't know, refuse, etc.) if imputed, and 0 if not imputed, or -8 if the variable was inapplicable.
wJBFT This measure is based on total hours, i.e. including both normal and overtime hours. It is computed for both employees and the self employed.
Uses wJBHAS wJBOFF wJBSEMP wJBHRS wJBOT wJSHRS on Record wINDRESP.
wJBGOLD Computed using the CAMCON facility in CASOC. See the Section on Data collection and Fieldwork in Volume A. See also Goldthorpe, JH and Hope, K (1974) The Social Grading of Occupations: A New Approach and Scale, Oxford: Clarendon Press.
Uses wJBSEMP wJBMNGR wJBSIZE wJSBOSS wJSSIZE wJBSOC wJBHAS wJBOFF on Record wINDRESP.
wJBRGSC Computed using the CAMCON facility in CASOC. This computes the Registrar General's Social Class for those currently employed based on the 3 digit Standard Occupational Classification (SOC), and employment status variables. The classification is described in Standard Occupational Classification, Volume 3: Social Classifications and Coding Methodology (London OPCS/HMSO 1991).
Uses wJBHAS wJBOFF wJBMNGR wJSBOSS wJBSOC on Record wINDRESP.
wJBSEG Computed using the CAMCON facility in CASOC. This computes the Socio-Economic Group for those currently employed, based on the 3 digit Standard Occupational Classification (SOC), and employment status variables. The classification is described in Standard Occupational Classification, Volume 3: Social Classifications and Coding Methodology. (London OPCS/HMSO 1991).
Uses wJBSEMP wJBMNGR wJBSIZE wJSBOSS wJSSIZE wJBSOC wJBHAS wJBOFF on Record wINDRESP
wJBSOCLY Computed using the CAMCON facility in CASOC. Uses wJLYID wJBHAS wJBOFF wJBSOC on Record wINDRESP. Uses wJHSOC on Record wJOBHIST. For complete SOC coding frame see Appendix.
wJBSTATL This is the equivalent to wJBSTAT, for 1.9.9LY. If wJLYID $=0$, wJBSTATL $=$ wJBSTAT; if wJLYID is greater than 0 , then wJBSTATL is based on wJHSTAT for the job history spell referenced.
Uses wJLYID wJBHAS wJBOFF wJBSTAT on Record wINDRESP. Uses wJSPNO wJHSTAT wJHSEMP on Record wJOBHIST.
wJBSTATT This is the equivalent to wJBSTAT, for 1.9.9TY. If wJTYID $=0, w J B S T A T T=$ wJBSTAT; if wJTYID is greater than 0 , then wJBSTATT is based on wJHSTAT for the job history spell referenced.
Uses wJTYID wJBHAS wJBOFF wJBSTAT on Record wINDRESP. Uses wJSPNO wJHSTAT on Record wJOBHIST.
wJLGOLD Computed using the CAMCON facility in CASOC. This computes the Goldthorpe social class classification for the previous job of those who have not held a job since 1.9.9LY. See note for wJBGOLD above.
Uses wJBHAD wJLSEMP wJLMNGR wJLSIZE wJLBOSS wJLSOC on Record wINDRESP
wJLID This variable provides a means of identifying the latest job (i.e. the current job or the most recent if not currently employed).
Uses wJBHAS wJBOFF wJBSTAT wCJSBLY wNJBS wJBHAD on Record wINDRESP. Uses wJSPNO wJHSTAT on Record wJOBHIST.
wJLRGSC Computed using the CAMCON facility in CASOC. This computes Registrar General's Social Class for the previous job of those who have not held a job since 1.9.9LY. See note for wJBRGSC above.
Uses wJBHAD wJLSEMP wJLMNGR wJLSIZE wJLBOSS wJLSOC on Record wINDRESP.
wJLSEG Computed using the CAMCON facility in CASOC. This computes the Socio-Economic Group for the last job for those without a job since 1.9.9LY. See note for wJBSEG above.
Uses wJBHAD wJLSEMP wJLMNGR wJLSIZE wJLBOSS wJLSOC on Record wINDRESP.

| wJLYID | This variable identifies the respondent's labour market spell for 1 September 199LY <br> (i.e. it identifies the current labour market spell if this started before 1.9.9LY, and the <br> relevant wJOBHIST Record if not). <br> Uses wJBSTAT wCJSBLY wCJSBGD wCJSBGM wCJSBGY wIVFIO on Record <br> wINDRESP. Uses wJSPNO on Record wJOBHIST. |
| :--- | :--- |
| wJSPAYG $\quad$This computes a monthly self-employed gross pay variable if a self-employed <br> respondent does not draw up profit and loss accounts. It is inapplicable for those who <br> are not self-employed, and the self employed who draw up accounts. (cf. wJSPROF) <br> Uses wJBSEMP wJSACCS wJSPAYL wJSPYBM wJSPYBY wJSPYEM wJSPYEY on <br> Record wINDRESP. |  |
| wJSPAYGI | Imputation flag for wJSPAYG taking the value 1 if the variable was imputed, and 0 or -8 <br> otherwise. See section on Imputation earlier in this manual. |
| wJSPROF | This computes a monthly self-employed profit variable for self-employed respondents |
| who draw up profit and loss accounts. It is inapplicable for those who are not self- |  |
| employed, and the self employed who do not draw up accounts. (cf. wJSPAYG) |  |


| wNJISP | This measures the number of separate economically inactive (i.e. not in employment or unemployed) spells in the reference year (1.9.9LY - 31.8.9TY). <br> Uses wJLYID wJBHAS wJBOFF wJBSTAT wCJSWK9 on Record wINDRESP. Uses wJSPNO wJHSTAT wJHSPW on Record wJOBHIST. |
| :---: | :---: |
| wNJIWKS | This variable measures the number of weeks of economically inactive (i.e. not in employment or unemployed) in the reference year (1.9.9LY - 31.8.9TY). The measure is exact (i.e. number of days divided by seven). <br> Uses wJBHAS wJBOFF wCJSBLY wCJSWK9 wJLYID wJBSTAT on Record wINDRESP. Uses wJSPNO wJHSTAT wJHSPW on Record wJOBHIST. |
| wNJUSP | This measures the number of separate unemployment spells in the reference year (1.9.9LY-31.8.9TY). <br> Uses wJLYID wJBHAS wJBOFF wJBSTAT wCJSWK9 on Record wINDRESP. Uses wJSPNO wJHSTAT wJHSPW on Record wJOBHIST. |
| wNJUWKS | This variable measures the number of weeks of unemployment in the reference year (1.9.9LY-31.8.9TY). The measure is exact (i.e. number of days divided by seven). Uses wJBHAS wJBOFF wCJSBLY wCJSWK9 wJLYID wJBSTAT on Record wINDRESP. Uses wJSPNO wJHSTAT wJHSPW on Record wJOBHIST. |
| wNORGA | Counts number of different types of organisation $R$ is active in, mentioned at question CORGA. <br> Uses wORGA wORGAA wORGAB wORGAC wORGAD wORGAE wORGAF wORGAG wORGAH wORGAI wORGAJ wORGAK wORGAL wORGAM wORGAO wORGAP wORGAQ on Record wINDRESP. |
| wNORGM | Counts number of different types of organisation R is member of, mentioned at question CORGM. <br> Uses wORGM wORGMA wORGMB wORGMC wORGMD wORGME wORGMF wORGMG wORGMH wORGMI wORGMJ wORGMK wORGML wORGMM wORGMO wORGMP wORGMQ on Record wINDRESP |
| wPAYG | This converts employees' last wage or salary payment before tax and other deductions in current main job (wPAYGL) to a monthly amount. If gross pay was missing, but net pay was present, then gross pay is estimated from net pay, on the basis of information about marital status, partner's activity, and pension scheme membership. Uses wPAYGW wPAYGL wPAYNW wPAYNL wPAYNW wSPJB wMLSTAT wSEX wJBPENM on Record wINDRESP. |
| wPAYGLI | Imputation flag for wPAYGLY taking the value 1 if the variable was imputed, and 0 or -8 otherwise. See section on Imputation earlier in this manual. |
| wPAYGLY | This measures the monthly gross payment of wage, salary or self-employment income received at 1.9.9LY. If current job spell started before this date, then for employees the answer to wPAYLY is used, converted from net to gross where necessary, and for the self-employed the current pay or profit. If the current job spell started after 1.9.9LY, then this variable is equal to the value of wJHGPAY for the job spell at this date. <br> Uses wJBPENM wMLSTAT wSEX wJBOFF wJBHAS wJBSEMP wJSACCS wJSPROF wJSPAYG wPAYLY wPAYLYW wPAYLYG wCJSBLY wSPJB wJLYID wPAYGU on Record wINDRESP. Uses wJHSTAT wJHGPAY on Record wJOBHIST. |
| wPAYGTI | Imputation flag for wPAYGTY taking the value 1 if the variable was imputed, and 0 or -8 otherwise. See section on Imputation earlier in this manual. |

wPAYGTY This measures the monthly gross payment of wage, salary or self-employment income received at 1.9.9TY. If current job spell started before this date, then for employees wPAYGU is used, and for the self-employed the current pay or profit. If the current job spell started after 1.9.9TY, then this variable is equal to the value of wJHGPAY for the job spell at this date.
Uses wJBHAS wJBOFF wJBSEMP wJSACCS wJSPROF wJSPAYG wJBPENM wMLSTAT wSEX wPAYGU wJTYID on Record wINDRESP. Uses wJHSTAT wJHGPAY on Record wJOBHIST.
wPAYGU This measures usual monthly wage or salary payment before tax and other deductions in current main job for employees. If the last gross payment was the usual, then this is used. If last gross pay was missing, but net pay was present, and this was usual, then gross pay is estimated from net pay, on the basis of information about marital status, partner's activity, and pension scheme membership. If last payment was not the usual, then if usual payment is given gross, this is used. Otherwise, if usual payment is given net, then this is converted as above.
Uses wJBPENM wPAYUSL wPAYG wPAYUG wPAYU wPAYUW wPAYN wMLSTAT wSEX wSPJB wJBSEMP on Record wINDRESP.
wPAYGUI Imputation flag for wPAYGU taking the value 1 if the variable was imputed, and 0 or -8 otherwise. See section on Imputation earlier in this manual.
wPAYN This converts employees' last wage or salary payment after tax and other deductions in current main job (wPAYNL) to a monthly amount. If net pay was missing, but gross pay was present, then net pay is estimated from gross pay, on the basis of information about marital status, partner's activity, and pension scheme membership.
Uses wPAYGW wPAYGL wPAYNW wPAYNL wPAYNW ASPJB wMLSTAT ASEX wJBPENM on Record wINDRESP.
wPAYNLI Imputation flag for wPAYNLY taking the value 1 if the variable was imputed, and 0 or -8 otherwise. See section on Imputation earlier in this manual.
wPAYNLY This measures the monthly net payment of wage, salary or self-employment income received at 1.9 .9 LY . If current job spell started before this date, then for employees the answer to wPAYLY is used, converted from gross to net where necessary, and for the self-employed the current pay or profit, converted to a net amount. If the current job spell started after 1.9.9LY, then this variable is equal to the value of wJHNPAY for the job spell at this date.
Uses wJBPENM wMLSTAT wSEX wJBOFF wJBHAS wJBSEMP wJSACCS wJSPRF wJSPRBM wJSPRBY wJSPREM wJSPAYL wJSPYBM wJSPYBY wJSPYEM wJSPYEY wPAYLY wPAYLYW wPAYLYG wCJSBLY wSPJB wJLYID wPAYNU on Record wINDRESP. Uses wJHSTAT wJHNPAY on Record wJOBHIST.
wPAYNTI Imputation flag for wPAYNTY taking the value 1 if the variable was imputed, and 0 or - 8 otherwise. See section on Imputation earlier in this manual.
wPAYNTY This measures the monthly net payment of wage, salary or self-employment income received at 1.9.9TY. If current job spell started before this date, then for employees wPAYNU is used, and for the self-employed the current pay or profit, converted to a net amount. If the current job spell started after 1.9.9TY, then this variable is equal to the value of wJHNPAY for the job spell at this date.
Uses wJBHAS wJBOFF wJBSEMP wJSACCS wJSPROF wJSPAYG wJBPENM wMLSTAT wSEX wPAYNU wJTYID on Record wINDRESP. Uses wJHSTAT wJHNPAY on Record wJOBHIST
wPAYNU This measures usual monthly wage or salary payment after tax and other deductions in current main job for employees. If the last net payment was the usual, then this is used. If last net pay was missing, but gross pay was present, and this was usual, then net pay is estimated from gross pay, on the basis of information about marital status, partner's activity, and pension scheme membership. If last payment was not the usual, then if usual payment is given net, this is used. Otherwise, if usual payment is given gross, then this is converted as above.
Uses wJBPENM wPAYUSL wPAYN wPAYG wPAYUG wPAYU wPAYUW wMLSTAT wSEX wSPJB wJBSEMP on Record wINDRESP.
wPAYNUI Imputation flag for wPAYNU taking the value 1 if the variable was imputed, and 0 or -8 otherwise. See section on Imputation earlier in this manual.
wPRFITBI Imputation flag for wPRFITB taking the missing value code of the original variable (e.g. Don't know, refuse, etc.) if imputed, and 0 if not imputed, or -8 if the variable was inapplicable.
wQFACHI The definition of categories in terms of the input variables wQFA to wQFN and wQFEDA to wQFEDS is as follows, with respondents allocated to the highest category into which they fall, or into category 7 if no academic qualifications:

1. Higher Degree is held (wQFM)
2. 1st Degree (wQFL)
3. Higher National Certificate/Diploma (wQFH) or teaching qualifications (wQFJ)
4. A Levels (wQFEDJ), Scottish Higher Grades (wQFEDO), Scottish School Leaving Certificate Higher Grade (wQFEDR), Scottish Certificate of Sixth Year Studies (wQFEDP), Higher School Certificate (wQFEDH), Ordinary National Certificate/Diploma, BEC/TEC/BTEC National/General Certificate or Diploma (wQFG) or City \& Guilds Certificate (Advanced/Final/Part II) (wQFE)
5. O Levels (pre 1975) (wQFEDF), O Level grades A-c (1975 or later) (wQFEDG), GCSE grades A-C (wQFEDE), CSE grade 1 (wQFEDC), Scottish O Grades (pass or bands A-C or 1-3) (wQFEDL), Scottish School Leaving Certificate Lower Grade (wQFEDQ), School Certificate or Matric (wQFEDJ), Scottish Standard Grade Level 1-3 (wQFEDN) or City \& Guilds Certificate (Craft/Intermediate/Ordinary/Part I) (wQFD)
6. CSE Grades 2-5 (wQFEDB), O Level grades D-E (wQFEDH), GCSE grades D-G (wQFEDD), Scottish SCE Ordinary Grade bands D-E or 4-5 (wQFEDK) or Scottish Standard Grade levels 4-7 (wQFEDM)

The data in this variable is up-dated each year to include the most recent qualifications of new entrants and existing panel members. The variable shows the current status of the respondent and there is no need for the user to add the recently acquired qualifications to the first, or any subsequent, iteration of this variable.

Uses
wOFA
wQFG
wQFM
wQFEDD
wQFEDJ
wQFEDP
wOFXB
wQFXH
WOFXN wOFEDX
wQFEDXE wQFEDXF

| wQFC | wQFD | wQFE | wQFF |
| :--- | :--- | :--- | :--- |
| wQFI | wQFJ | wQFK | wQFL |
| wQFED | wQFEDA | wQFEDB | wQFEDC |
| wQFEDF | wQFEDG | wQFEDH | wQFEDI |
| wQFEDL | wQFEDM | wQFEDN | wQFEDO |
| wQFEDR | wQFEDS | wQFEDHI | wQFXA |
| wQFXD | wQFXE | wQFXF | wQFXG |
| wQFXJ | wQFXK | wQFXL | wQFXM |
| wQFEDXA | wQFEDXB | wQFEDXC | wQFEDXD |
| WQFEDXG | wQFEDXH | wQFEDXI | wQFEDXJ |

on Record wINDRESP. Uses (w-1)QFACHI on Record (w-1)INDRESP.
wQFEDHI The definition of categories is that used by the GHS. The definition of categories in terms of the input variables wQFA to wQFN and wQFEDA to wQFEDS is as follows, with respondents allocated to the highest category into which they fall, or into category 12 if no qualifications, and category 13 if no qualifications and still at school:

1. University or CNAA Higher Degree (wQFM)
2. University or CNAA First Degree (wQFL)
3. Teaching Qualifications (wQFJ)
4. City \& Guilds Certificate (Full Technological/Part III) (wQFF), HNC, HND, BEC/TEC/BTEC Higher Certificate/Diploma (wQFH), University Diploma (wQFK), Any other technical, professional or higher qualifications (wQFN)
5. Nursing Qualifications (wQFI)
6. A Levels (wQFEDJ), Scottish Higher Grades (wQFEDO), Scottish School Leaving Certificate Higher Grade (wQFEDR), Scottish Certificate of Sixth Year Studies (wQFEDP), Higher School Certificate (wQFEDH), Ordinary National Certificate/Diploma, BEC/TEC/BTEC National/General Certificate or Diploma (wQFG) or City \& Guilds Certificate (Advanced/Final/Part II) (wQFE)
7. O Levels (pre 1975) (wQFEDF), O Level grades A-C (1975 or later) (wQFEDG), GCSE grades A-C (wQFEDE), CSE grade 1 (wQFEDC), Scottish O Grades (pass or bands A-C or 1-3) (wQFEDL), Scottish School Leaving Certificate Lower Grade (wQFEDQ), School Certificate or Matric (wQFEDA), Scottish Standard Grade Level 1-3 (wQFEDN) or City \& Guilds Certificate (Craft/Intermediate/Ordinary/Part I) (wQFD)
8. Clerical or Commercial Qualifications (wQFC)
9. CSE Grades 2-5 (wQFEDB), O Level grades D-E (wQFEDH), GCSE grades D-G (wQFEDD), Scottish SCE Ordinary Grade bands D-E or 4-5 (wQFEDK) or Scottish Standard Grade levels 4-7 (wQFEDM)
10. Recognised trade apprenticeship (wQFB)
11. Youth Training Certificate (wQFA) Any other qualifications (wQFEDS)

The data in this variable is up-dated each year to include the most recent qualifications of new entrants and existing panel members. The variable shows the current status of the respondent and there is no need for the user to add the recently acquired qualifications to the first iteration, or any subsequent, of this variable.

Uses

| wSCNOW | wFENOW | wSCHOOL | wSCEND | wQFHAS | wQFA |
| :--- | :--- | :--- | :--- | :--- | :--- |
| wQFB | wQFC | wQFD | wQFE | wQFF | wQFG |
| wQFH | wQFI | wQFJ | wQFK | wQFL | wQFM |
| wQFN | wQFED | wQFEDA | wQFEDB | wQFEDC | wQFEDD |
| wQFEDE | wQFEDF | wQFEDG | wQFEDH | wQFEDI | wQFEDJ |
| wQFEDK | wQFEDL | wQFEDM | wQFEDN | wQFEDO | wQFEDP |
| wQFEDQ | wQFEDR | wQFEDS | wQFX | wQFXA | wQFXB |
| wQFXC | wQFXD | wQFXE | wQFXF | wQFXG | wQFXH |
| wQFXI | wQFXJ | wQFXK | wQFXL | wQFXM | wQFXN |
| wQFEDX | wQFEDXA | wQFEDXB | wQFEDXC | wQFEDXD | wQFEDXE |
| wQFEDXF | wQFEDXG | wQFEDXH | wQFEDXI | wQFEDXJ | wQFEDXK | on Record wINDRESP. Uses (w-1)QFEDHI on Record (w-1)INDRESP.



The adoption of CASOC (Computer Aided Standard Occupational Classification) has meant that we no longer needed to use our own algorithms to compute the social class variables for Goldthorpe (GOLD), Registrar General's (RGSC), or Socio-Economic Group (SEG) which are generated as a by-product of SOC coding. An added bonus is that the Hope-Goldthorpe Scale (HGS), Cambridge Scale (CSSF and CSSM) and International Standard Classification of Occcupations (ISCO) coding are generated too. The following variables were derived via CASOC and the utilities within it.

## on Record wINDRESP

| wJBCSSF | wJBCSSM | wJBGOLD | wJBHGS | wJBISCO | wJBRGSC |
| :--- | :--- | :--- | :--- | :--- | :--- |
| wJBSEG | wJCECCSM | wJCECCSM | wJCEGOLD | wJCEHGS | wJCEISCO |
| wJCERGSC | wJCESEG | wJLCSSF | wJLCSSM | wJLGOLD | wJLHGS |
| wJLISCO | wJLRGSC | wJLSEG | wMACCSF | wMACCSM | wMAGOLD |
| wMAHGS | wMAISCO | wMARGSC | wMASEG | wPACCSF | wPACCSM |
| wPAGOLD | wPAHGS | wPAISCO | wPARGSC | wPASEG |  |

## on Record wJOBHIST

wJHCSSF wJHCSSM wJHGOLD wJHHGS wJHISCO wJHRGSC wJHSEG

## on Record wLIFEJOB

wLJCSSF wLJCSSM wLJGOLD wLJHGS wLJISCO wLJRGSC
wLRWGHT Longitudinal Respondent Weight. See section on Weighting earlier in this manual.
wLEWGHT Longitudinal Enumerated Individual Weight. See section on Weighting earlier in this manual.
wXRWGHT Cross-sectional Respondent Weight. See section on Weighting earlier in this manual.
wXEWGHT Cross-sectional Enumerated Individual Weight. See section on Weighting earlier in this manual.

### 2.6. RECORD TYPE wJOBHIST

wJHA9LY Whether job started after 1.9.9LY. This was a base variable at Wave One, but is computed at subsequent Waves.
Uses wJSPNO on Record wJOBHIST. Uses wJLYID on Record wINDRESP.
wJHENDD End date (day) of job history spell, computed as start date of following job spell. If spell number is 1 , end date is taken as start date of current spell.
Uses wJSPNO wJHBGD wJHBGM wJHBGY on Record wJOBHIST. Uses wCJSBGD wCJSBGM wCJSBGY on Record wiNDRESP.
wJHENDM End date (month) of job history spell, computed as start date of following job spell. If spell number is 1 , end date is taken as start date of current spell. Uses wJSPNO wJHBGD wJHBGM wJHBGY on Record wJOBHIST. Uses wCJSBGD wCJSBGM wCJSBGY on Record wINDRESP.
wJHENDY End date (year) of job history spell, computed as start date of following job spell. If spell number is 1 , end date is taken as start date of current spell.
Uses wJSPNO wJHBGD wJHBGM wJHBGY on Record wJOBHIST; wCJSBGD wCJSBGM wCJSBGY on Record wINDRESP.
wJHSEG See notes on CASOC variables in Section wINDRESP.
wJHGOLD See notes on CASOC variables in Section wINDRESP.

| wJHRGSC | See notes on CASOC variables in Section wINDRESP |
| :---: | :---: |
| wJHSPW | This measures the number of weeks of job history spell falling in the reference year: 1 |
|  | September 199LY-31 August 199TY. This variable is used in the calculation of annual measures of duration in states and annual incomes. It is not the total spell length. The measure is exact (i.e. number of days divided by seven). |
|  | Uses wJHBGD wJHBGM wJHBGY wJHENDD wJHENDM wJHENDY on Record wJOBHIST. |
| wJHGPAY | This measures gross monthly rate of wage, salary or self-employment income in the employment spell. It is based on the payment at the start date or at 1.9.LY, depending |
|  | on which is available, converted from net to gross where necessary, based on |
|  | information about sex, marital status, spouse's employment status and pension |
|  | membership. The start date is used to determine the appropriate tax and National Insurance regime. |
|  | Uses wSEX wMLSTAT wJBPENM wSPJB wCJSBLY on Record wINDRESP. Uses |
|  | wJHA9LY wJHPAYL wJHPYLw wJHPYLG wJHPAYS wJHPYSw wJHPYSG |
|  | wJHSPW wJHSTAT wJHBGD wJHBGM wJHBGY on Record wJOBHIST. |
| wJHNPAY | This measures net monthly rate of wage, salary or self-employment income in the |
|  | employment spell. It is based on the payment at the start date or at 1.9.LY, depending |
|  | on which is available, converted from gross to net where necessary, based on |
|  | information about sex, marital status, spouse's employment status and pension |
|  | membership. The start date is used to determine the appropriate tax and National |
|  | Insurance regime. |
|  | Uses wSEX wMLSTAT wJBPENM ASPJB wCJSBLY on Record wINDRESP. Uses |
|  | wJHA9LY wJHPAYL wJHPYLw wJHPYLG wJHPAYS wJHPYSW wJHPYSG |
|  | wJHSPW wJHSTAT wJHBGD wJHBGM wJHBGY on Record wJOBHIST. |

### 2.7. RECORD TYPE wINCOME

| wFIM01T | See variable wFIM09L |
| :--- | :--- |
| wFIM02T | See variable wFIM09L |
| wFIM03T | See variable wFIM09L |
| wFIM04T | See variable wFIM09L |
| wFIM05T | See variable wFIM09L |
| wFIM06T | See variable wFIM09L |
| wFIM07T | See variable wFIM09L |
| wFIM08T | See variable wFIM09L |

wFIM09L This variable calculates the estimated personal income from the income source referred to on the current record received in the month of September 199LY. In many cases the variable is simply the amount received converted to a monthly rate. However the following exceptions are made:

Where the income is jointly received, the amount is divided by two. (The data have been edited to ensure that as far as possible all references to joint receipt are consistently recursive. However where two joint recipients gave different amounts, these have been left. In this case, at the household level, the amount given will be the mean value.)

For state benefits received in April 1991 and after, it is assumed that the amount given as received is at the new rate, and amounts before this will be at a lower rate. These figures have been adjusted using percentage factors for the different benefits derived from Social Security Statistics 1991, (HMSO, 1992). For payments only received before April 1991, it is assumed that the amount given is at the appropriate earlier rate, and the figures are not adjusted.

Periods of receipt less than one week are treated as single one-off payments, unless the payment is income support, in which case it is treated as a weekly amount.
Uses wFICODE wFRALL wFR01 wFR02 wFR03 wFR04 wFR05 wFR06 wFR07 wFR08 wFR09 wFR10 wFR11 wFR12 wFR13 wFR14 wFR15 wFR16 wFRVAL wFRW wFRJT wFRJTPN on Record wINCOME. Uses wOPNO wREL on Record wEGOALT. Uses wDEPCHL on Record wINDALL
wFIM09T See variable wFIM09L
wFIM10L See variable wFIM09L
wFIM10T See variable wFIM09L
wFIM11L See variable wFIM09L
wFIM11T See variable wFIM09L
wFIM12L See variable wFIM09L
wFIM12T See variable wFIM09L
wFIM01N See variable wFIM09L
wFRJTVF Joint receipt verification flag. This variable is used in the computation of income measures from the financial receipts grids. There is some inconsistency between household members in their reporting of income receipts, and if they reported receipt, whether it was reported as sole or joint receipt. This variable is a recomputation of wFRJT. It takes the value 1 if the current payment is not matched to any other with complete information about payment amounts, 2 if it is matched to another, where either both have complete information or both are missing information, and 3 if the current record has missing information, but is matched to a record with complete information.
Uses wFRJT wFRJTPN on Record wINCOME.

### 2.8. RECORD TYPE wEGOALT

wBLWSTAT Alter's residence at Wave w-1. This variable indicates whether Alter was resident in the same household at Wave w-1. It is intended to enable measures of household composition change to be computed.
Uses wHID wPNO wOPNO wREL on Record wEGOALT. Uses PID wSAMPST wMOVEST on Record wINDALL. Uses wIVFHO on Record XWAVEID.

[^8]
#### Abstract

2.9. RECORD TYPE BLIFEMST

BLESHSM Month lifetime employment history status started. This variable is computed as the month the previous spell ended including date when respondent first left full-time education. Uses BLESHNO on Record BLIFEMST. Uses BLEDENDM on Record BINDRESP. BLESHSY Year lifetime employment history status started. This variable is computed as the year the previous spell ended including date when respondent first left full-time education. Uses BLESHNO on Record BLIFEMST. Uses BLEDENDY on Record BINDRESP.

BLESLEN Length of employment history spell (months). In the computation of this length, it is assumed that 'winter' corresponds to January, 'spring' to April, 'summer' to July and 'autumn' to October. Uses BLESHNO BLESHEM BLESHEY BLESHNE BLESHSM BLESHSY on Record BLIFEMST. Uses BDOIM on Record BINDRESP.


### 2.10. RECORD TYPE CLIFEJOB

CLJSEQ This is the index number of employment spells only. Compare with CLJESFN.
CLJSEG CASOC computes the Socio-Economic Group for jobs, based on the 3 digit Standard Occupational Classification (SOC), and employment status variables See the Section on Data Collection and Fieldwork, and Appendix III.

| CLJGOLD | CASOC computes the Goldthorpe social class classification for jobs, based on the 3 <br> digit Standard Occupational Classification (SOC), and employment status variables. to <br> Vol. A for details. See the Section on Data Collection and Fieldwork, and Appendix III. |
| :--- | :--- |
| CLJRGSC | CASOC computes Registrar General's Social Class for jobs based on the 3 digit <br> Standard occupational classification (SOC), and employment status variables. See the <br> Section on Data collection and Fieldwork, and Appendix in Volume A. |
| CLJISCO | This is a 'STRING' variable - an alphanumeric. Computed using CASOC. See the <br> Section on Data Collection and Fieldwork, and coding frame for ISCO in Appendix to <br> Vol. A. International Labour Office (1990) `International Standard Classification of <br> Occupations: ISCO 88. Geneva: International Labour Office. |
| CLJCSSM | Computed using CASOC. See the Section on Data Collection and Fieldwork Vol. A. <br> See also Prandy K (1990) 'The Revised Cambridge Scale of Occupations', Sociology <br> 24, pp 629-655. |
| CLJCSSF | Computed using CASOC. See the Section on Data Collection and Fieldwork Vol. A. <br> See also Prandy K (1990) Revised Cambridge Scale of Occupations', Sociology 24, pp <br> 629-655. |
| CLJHGS | Computed using CASOC. See the Section on Data Collection and Fieldwork Vol. A. <br> See also Goldthorpe, JH and Hope, K (1974) The Social Grading of Occupations: A |
| New Approach and Scale, Oxford: Clarendon Press. |  |

CLJENST Status type for last job history records - this makes it possible to determine whether information about other jobs is to be expected in any of the panel records, and what information should be expected on the current record.
Uses CHID CPNO CLJNREC CLJHAD on Record CINDRESP. Uses CHID CPNO CLJSEQ CLJSOC CLJOTHJ on Record CLIFEJOB.

### 2.11. RECORD TYPE BMARRIAG

BMRMSEQ Sequence number of most recent marriage. This variable indicates whether the most recent marriage, i.e. where BMARNO equals 4, is a first or subsequent marriage. Uses BMARNO on Record BMARRIAG. Uses BNMAR on Record BINDRESP.

## Appendix 3. Coding Frames

### 3.1. Interview outcomes

### 3.1.1. Final household interview outcome - wIVFHO

10 Every eligible member interviewed
11 Some interviews some proxies
12 Some interviewed or proxied some non-contacts / refusals
13
14
15
16
17
39
40
41
42
43
44
45
Household composition form and questionnaire only
Household composition form only
Proxy taken at original address
Telephone interview only
Youth interview only
Documents missing or unusable
Demolished or derelict
Used only for business purposes
Temporary accommodation only
Empty at first call
New building not yet completed
Institution with no private households
50 Address not found
51 Address occupied but no contact
60 Refusal to Research Centre
61 Refusal to interviewer
62 Language problems
63 No interview: Age, infirmity or disability
70 Moved to previous wave address
80 Institutionalised: Won't be followed
81 Moved out of scope
90 Whole household deceased
91 Only XXXs resident
92 Adamant refusal
93 Long-term untraced, withdrawn
96 Withdrawn before field

### 3.1.2. Individual interview outcome - wIVFIO, LRIO, ASTAT

1 Full Interview
2 Proxy interview
3 Telephone interview
10 Adult: Refusal
11 Adult: Other non-interview
12 Moved
20 Child under 16 years
21 Youth interview
22 Youth: Refusal
23 Youth: Other non-interview
24 Child under 11 years
30 Adult: Refusal / non-interview household
31 Adult: Other non-interview / non-interview household
32 Moved / non-interview household
40 Child under 16 years / non-interview household
41 Youth: Refusal / non-interview household
42 Youth: Other non-interview / non-interview household
43 Child under 11 years / non-interview household
50 Adult: Refusal / non-contact household
51 Adult: Language Problems / non-contact household

52 Adult: Age, infirmity or disability / non-contact household
53 Adult: Non-contact / non-contact household
54 Adult: Out-of-scope / non-contact household
55 Adult: Institutionalised / non-contact household
56 Adult: Other mover / non-contact household
60 Child under 16 years : Refusal / non-contact household
61 Child under 16 years : Language Problems / non-contact household
62
63
64

# Child under 16 years: Age, infirmity or disability / non-contact household 

Child under 16 years : Non-contact / non-contact household
Child under 16 years: Out-of-scope / non-contact household
Child under 16 years: Institutionalised / non-contact household
Child under 16 years: Other mover / non-contact household
Isolated Temporary Sample Member
Previous Wave Adamant Refusal
Long-term untraced, withdrawn
Other Retiring
Dead

### 3.2. Reasons for Refusing

### 3.2.1 Whole household refusal reasons (wIVRREFH) First Occurrence W3

## Competence of respondent(s)

01 Too ill
02 Too elderly
$03 R(s)$ is senile or otherwise incompetent
$04 \quad R(s)$ does not speak English
05 Stressful family situation (eg bereavement, divorce)

## Too busy

10 Looking after ill/elderly
11 Looking after child(ren)
$12 \quad R(s)$ almost never home
$13 \quad R(s)$ are temporarily away/absent
14 Too busy (not elsewhere specified)

## Personal reasons

20 Unhappy about confidentiality
21 Questions too personal

## Attitudes towards survey

$30 \quad \mathrm{R}(\mathrm{s})$ doesn't want to be bothered
31 Nothing has changed since last year
32 Survey is too long
33 Survey is a waste of time/suspicious of survey/opposed to survey
34 Previous bad experience with surveys (in general)
35 Have had problems with LIB voucher payment(s) in past

## Family pressure

$40 \quad$ Other family member(s) oppose participation
41 One family member refuses on behalf of all $R(s)$ (no reason specified)

## Other

94 Address occupied - no contact
95
$R(s)$ have moved out-of scope/institutionalised
96 Other
99 No reason given

### 3.2.2 Individual within household refusal reasons (wIVRREF) First Occurrence W2

## Competence of respondent

01 Too ill
02 Too elderly
$03 \quad \mathrm{R}$ is senile or otherwise incompetent
$04 \quad \mathrm{R}$ does not speak English
05 Stressful family situation (eg bereavement, divorce)

## Too busy

10 Looking after ill/elderly
11 Looking after child(ren)
12 R almost never home
$13 \quad \mathrm{R}$ is temporarily absent
14 Too busy (not elsewhere specified)

## Personal reasons

20 Unhappy about confidentiality
21 Questions too personal

## Attitudes towards survey

$30 \quad \mathrm{R}$ doesn't want to be bothered
31 Nothing has changed since last year
32 Survey is too long

## Individual Within Household Refusal Reasons (Continued)

33 Survey is a waste of time/suspicious of survey/opposed to survey
34 Previous bad experience with surveys (in general)
35 Has had problems with LIB voucher payment in past

## Family pressure

40 Other family member opposes R's participating/includes refusal of parental permission.
41 Someone has convinced R to refuse
42 Other household member refuses on behalf of $R$.
43 Never interviewed - pressure may jeopardise other interviews in hhold

## Other

96 Other
99 No reason given

### 3.3. Relationship to HRP

## HOUSEHOLD GRID

Relationship to Reference Person Codes (wHGR2R) also used for wREL on wEGOALT First Occurrence W1

01 Reference person
02 Lawful spouse (husband/wife)
03 Live-in partner (common-law husband/wife, cohabitee) (include same sex partner)
04 Natural child
05 Adopted child
06 Foster child
07 Step-child
08 Partner's child
09 Daughter/son-in-law
10 Natural brother/sister (half brother/sister)
11 Other brother/sister (adopted, step)
12 Brother/sister-in-law
13 Natural parent
14 Other parent (adopted/foster/step)
15 Mother/father-in-law
16 Any grand parent (incl of partner)
17 Any grand child (incl of partner)
18 Any cousin (incl of partner)
19 Any aunt/uncle (incl of partner)
20 Any nephew/niece (incl of partner)
21 Any other relative
22 Employee (e.g. nanny)
23 Lodger/boarder
24 Unrelated sharer
30 Other

### 3.4. Reasons for Moving

### 3.4.1 Main Reason for Preference to Move - (wLKMOVY) First Occurrence W1

## HOUSING RELATED REASONS

01 Wants larger accommodation (other than reference solely to garden / garage)
02 Wants smaller/cheaper accommodation
03 Wants accommodation of their own / to form their own household (other than wanting to purchase accommodation)
04 To buy somewhere
05 Health reasons (eg house too damp, house not healthy) (other than needing accommodation without stairs)
06 To bungalow / accommodation with no stairs / ground floor flat
07 Wants other specific type of accommodation (eg detached house) (This code used only if no reference to larger / better or smaller / cheaper accommodation)
08 Wants change in other aspects of the property (eg wants a garden, larger garden, garage)
09 Dislikes current house / flat (not elsewhere specified)
10 Wants better accommodation (not elsewhere specified)

## AREA RELATED REASONS

11 Dislikes isolation / absence of facilities
12 Wants move to a more rural environment
13 Dislike of urban environment (not elsewhere specified)
14 Dislikes traffic (include noise or danger from traffic)
15 Dislikes crime, vandalism, etc. / area unsafe
16 Noise (other than traffic)
17 Unfriendly area / Dislikes neighbours
18 Wants to move to specific place (not elsewhere specified)
19 Dislikes area (not elsewhere specified)

## OTHER REASONS

21 Wants to move for new job / to find work
22 Wants to move to reduce commuting time
23 Wants to move because of retirement (If retirement is specifically mentioned, this code takes precedence over other codes)
24 Wants to be closer to family / friends
25 Wants more privacy
26 Wants a change
96 Other
97 No Reason (written in)

### 3.4.2 Other reasons for move (1st \& 2nd) -( wMOVY1 and wMOVY2) First Occurrence W2

PERSONAL REASONS
01 To marry / move in with partner
02 To separate / divorce/split up from spouse / partner
03 Moved in with family / moved back with family (other than 01)
04 Moved away from family (other than 02)
05 Moved in with friends
06 Moved to be closer to family / friends

## EDUCATIONAL/EMPLOYMENT RELATED REASONS

10 Moved to / be closer to / for term-time accommodation / college or university
11 Left education / ended course
12 Job related reason for self, include commuting time (not elsewhere specified)
13 Job related reason for other (include commuting time)
14 Retirement (self or spouse) (NB if retirement is specifically mentioned, this code takes precedence over other codes)

## FORCED MOVES

15 Evicted from rented accommodation / repossessed / other forced moves

## HOUSING RELATED REASONS

21 Wanted larger accommodation (other than reference solely to garden / garage)
22 Wanted smaller / cheaper accommodation
23 Wanted accommodation of their own / to form their own household / setting up house with partner (other than wanting to purchase accommodation)
24 To buy somewhere
25 Health reasons (eg house too damp, house not healthy) (other than needing accommodation without stairs)
26 To bungalow / accommodation with no stairs / ground floor flat
27 To sheltered accommodation / institution (needed care)
28 Wanted other specific type of accommodation (eg detached house, wanted a garden, larger garden, garage) (Only used if no reference to larger, better or smaller / cheaper accommodation)
29 Disliked previous house / flat (not elsewhere specified)
30 Wanted better accommodation (not elsewhere specified)
31 Wanted more privacy / previous accommodation overcrowded
32 Wants a change (not elsewhere specified)

## AREA RELATED REASONS

## 41 Disliked isolation / absence of facilities

42 Wanted to move to a more rural environment
43 Disliked urban environment (not elsewhere specified)
44 Disliked traffic (include noise or danger from traffic)
45 Disliked crime, vandalism, etc. / area unsafe
$46 \quad$ Noise (other than traffic)
$47 \quad$ Unfriendly area / Disliked neighbours
48 Wanted to move to specific place
49 Disliked area (not elsewhere specified)
96 Other (include being nearer to children's school)
97 No other reason (written in)

### 3.5. Coding Frame for GCITZN1, GCITZN2, present citizenship / Wave 7

## 3 Digit Citizenship (wCITZN1 and CITZN2)

## First Occurrence W7

## Code both if dual citizenship

```
0 1 ~ F r e n c h ~
0 2 \text { Belgian}
0 3 \text { Dutch}
0 4 \text { German (East and West)}
0 5 ~ I t a l i a n ~
0 6 ~ B r i t i s h ~ ( U K ) ~
0 7 \text { Irish (Republic of / Southern)}
0 8 \text { Danish}
0 9 \text { Greek}
10 Portuguese
1 1 ~ S p a n i s h
12 Luxembourg
1 4 \text { Monaco}
1 5 \text { San Marino}
24 Icelandic
28 Norwegian
30 Swedish
32 Finish
36 Swiss
37 Liechtenstein
38 Austrian
41 Faroe Islander
43 Andorra
4 4 \text { Gibraltar}
4 5 \text { Vatican City State}
4 6 ~ M a l t e s e
52 Turkish
5 3 \text { Estonian}
54 Latvian
55 Lithuanian
6 0 ~ P o l i s h ~
6 1 ~ C z e c h ~
6 3 \text { Slovak}
64 Hungarian
6 6 \text { Romanian}
6 8 \text { Bulgarian}
7 0 ~ A l b a n i a n ~
72 Ukrainian
7 3 \text { Belarussian}
74 Moldavian
7 5 \text { Russian}
76 Georgian
77 Armenian
7 8 \text { Azerbaijani}
79 Kazakhstani
```

```
80 Turkmenistan
8 1 ~ U z b e k
82 Tadjikistani
83 Kyrghystani
91 Slovenian
92 Croatian
93 Bosnian
94 Serbian (formally Yugoslavian)
96 Macedonian
2 0 4 \text { Moroccon}
208 Algerian
212 Tunisian
216 Libyan
220 Egyptian
2 2 4 ~ S u d a n e s e
228 Mauritanian
232 Mali
236 Burkina Faso
2 4 0 ~ N i g e r ~
244 Chad
247 Cape Verde
248 Senegalese
252 Gambian
257 Guinea-Bissau
260 Guinea
264 Sierra Leone
268 Liberian
2 7 2 \text { Ivory Coast}
276 Ghanain
280 Togo
2 8 4 \text { Benin}
288 Nigerian
302 Cameroon
306 Central Africa
310 Equatorial Guinea
3 1 1 \text { Sao Tome and Principe}
314 Gabon
318 Congolese
322 Zairean
324 Rwandan
328 Burundian
3 2 9 \text { St.Helena}
330 Angolan
334 Ethiopian
3 3 8 \text { Djibouti}
3 4 2 ~ S o m a l i a n ~
346 Kenyan
350 Ugandan
352 Tanzanian
355 Seychelles
3 5 7 \text { British Indian Ocean Territory}
3 6 6 ~ M o z a m b i g u e
3 7 0 ~ M a d a g a s c a n ~
3 7 2 \text { Reunion}
373 Mauritian
3 7 5 \text { Comorose}
3 7 7 \text { Mayotte}
```

| 378 | Zambian |
| :---: | :---: |
| 382 | Zimbabwe |
| 386 | Malawian |
| 388 | South African |
| 389 | Namibian |
| 391 | Botswana |
| 393 | Swaziland |
| 395 | Lesotho |
| 400 | American |
| 401 | Puerto Rican |
| 404 | Canadian |
| 406 | Greenlander |
| 408 | St.Pierre and Miguelon |
| 412 | Mexican |
| 413 | Bermuda |
| 416 | Guatemalan |
| 421 | Belize |
| 424 | Honduras |
| 428 | El Salvador |
| 432 | Nicaraguan |
| 436 | Costa Rican |
| 442 | Panama |
| 446 | Anguilla |
| 448 | Cuban |
| 449 | St.Christopher and Nevis |
| 452 | Haitian |
| 453 | Bahamas |
| 454 | Turks and Caicos Island |
| 456 | Dominican Republic |
| 457 | Virgin Islands of the US |
| 458 | Guadeloupe |
| 459 | Antigua and Barbuda |
| 460 | Dominica |
| 461 | British Virgin Islands and Montserrat |
| 462 | Martinique |
| 463 | Cayman Island |
| 464 | Jamaican |
| 465 | St Lucian |
| 467 | St Vincent |
| 469 | Barbados |
| 472 | Trinidad and Tobago |
| 473 | Grenada |
| 474 | Aruba |
| 478 | Netherlands Antilles |
| 480 | Colombian |
| 484 | Venezuelan |
| 488 | Guyanese |
| 492 | Surinam |
| 496 | French Guiana |
| 500 | Ecuadorian |
| 504 | Peruvian |
| 508 | Brazilian |
| 512 | Chilean |
| 516 | Bolivian |
| 520 | Paraguay |
| 524 | Uruguay |
| 528 | Argentinian |
| 529 | Falkland Islands |

```
600 Cypriat
604 Lebanese
608 Syrian
612 Iraqi
616 Iranian
624 Israeli
628 Jordanian
632 Saudi
636 Kuwaiti
640 Bahrain
644 Qatar
647 United Arab Emirates
649 Oman
653 Yemeni
660 Afghani
662 Pakistani
664 Indian
666 Bangladeshi
667 Maldives
669 Sri Lanka
672 Nepalese
675 Bhutan
676 Myanmar
680 Thai
684 Laos
690 Vietnamese
696 Cambodian Kampuchean)
700 Indonesian
701 Malaysian
703 Brunei
706 Singapore
708 Philippino
716 Mongolian
720 Chinese
724 North Korean
728 South Korean
732 Japanese
736 Taiwanese
740 Hong Kong
743 Macao
800 Australian
801 Papua New Guinea
802 Australian Oceania
803 Nauru
804 New Zealand
806 Solomon Island
807 Tuvalu
809 New Caledonian
810 American Oceania
811 Wallis and Futuna
812 Kiribati
813 Pitcairn
814 New Zealand Oceania
815 Fiji
816 Vanuatu
817 Tonga
819 Western Samoan
822 French Polynesian
```

```
8 2 3 \text { States of Micronesia}
8 2 4 ~ M a r s h a l l ~ I s l a n d ~
8 9 0 ~ P o l a r ~ r e g i o n
900 EUROPEAN
901 European Community
902 Other European countries
910 AFRICAN
9 1 1 ~ N o r t h ~ A f r i c a n ~
912 West African
913 Central, East and South African
921 North American
922 Central and South American
930 ASIAN
931 Near and Middle Eastern
932 Other Asian countries
940 AUSTRALIAN,OCEANIA
990 ANY OTHER COUNTRY /
```


### 3.6. Main Attraction of Respondent's Current Job

## Main thing attracted respondent about current job (wJBLKY)

## First Occurrence W1

## READ WHOLE ANSWER BUT CODE ONLY ONE MENTION

PRIORITY CODE (Lower numbered codes have priority over higher numbers)
01 More/better money
02 Better promotion or career prospects
03 More responsibility
04 New job more secure
05 Work in new job more interesting
06 To do specific type of work (eg. is what I want to do, like working with elderly/young people etc)

07 Given chance to be own boss (NB Self-employed only)
08 More opportunity to work on/use own initiative (other than self-employed)
09 Closer to home - less travelling time to work or while working
10 Shorter/fewer hours
11 More flexible hours (eg work when I want to, flexitime)
12 Health reasons (eg changed jobs because of health problems associated with conditions of previous employment)
13 New job better suited to respondent's qualifications, training or experience (eg what R had been trained for, what R used to do)
14 Work less demandingleasier than previous job (other than health reason)
15 Preferred to previous job (not elsewhere specified)
16 New job better (not elsewhere specified)
96 Other
98 Don't know
99 Refused/Not available

### 3.7. Standard Industrial Classification 1980 (SIC)

## Used at Waves 1-12 (not available from W13 onwards)

The Standard Industrial Classification (SIC) is broken down into 4 areas; the divisions, the classes, the groups, and the activity units. At the most detailed level the units are distinguished with a 4 digit classification. Each unit is allocated to a group (3 digits). Each group is allocated to a class (2 digits) and each class allocated to a division (1 digit).

In the four digit activity units, the first digit denotes the division in which the unit is contained. The first 2 digits denote the class and the first 3 digits denote the group classification.

In the British Household Panel Survey, we have coded to SIC activity level. Where it was impossible to classify an industry in this detail, the broader category was filled out with trailing 0s. This means that "2400", for example, corresponds to Class " 24 " and so on.

Source: Quarterly Labour Force Survey, March-May 1992: User Guide, September 1992

## 1: $\quad$ DIVISIONS ${ }^{1}$

$0 \quad$ Agriculture, forestry \& fishing
1 Energy \& water supplies
2 Extraction of minerals \& ores other than fuels; manufacture of metals, mineral products \& chemicals
3 Metal goods, engineering \& vehicles industries
$4 \quad$ Other manufacturing industries
5 Construction
6 Distribution, hotels \& catering (repairs)
7 Transport \& communication
8 Banking, finance, insurance, business services \& leasing
$9 \quad$ Other services

## 2: CLASSES

01 Agriculture \& horticulture
02 Forestry
03 Fishing
11 Coal extraction \& manufacture of solid fuels
12 Coke ovens
13 Extraction of mineral oil \& natural gas
14 Mineral oil processing
15 Nuclear fuel production
16 Production \& distribution of electricity, gas \& other forms of energy
17 Water supply industry
21 Extraction \& preparation of metalliferous ores
22 Metal manufacturing
23 Extraction of minerals not elsewhere specified
24 Manufacture of non-metallic mineral products
25 Chemical industry
26 Production of man-made fibres
31 Manufacture of metal goods not elsewhere specified
32 Mechanical engineering
33 Manufacture of office machinery \& data processing equipment
34 Electrical \& electronic engineering
35 Manufacture of motor vehicles \& parts thereof
36 Manufacture of other transport equipment
37 Instrument engineering
41/42 Food, drink \& tobacco manufacturing industries

1. In the following, "nec" means "not elsewhere classified".

43 Textile industry
44 Manufacture of leather \& leather goods
45 Footwear \& clothing industries
46 Timber \& wooden furniture industries
47 Manufacture of paper \& paper products; printing \& publishing
48 Processing of rubber \& plastics
49 Other manufacturing industries
50 Construction
61 Wholesale distribution (except dealing in scrap \& waste materials)
62 Dealing in scrap \& waste materials
63 Commission agents
64/65 Retail distribution
66 Hotels \& catering
67 Repair of consumer goods \& vehicles
71 Railways
72 Other inland transport
$74 \quad$ Sea transport
75 Air transport
76 Supporting services to transport
77 Miscellaneous transport services \& storage nec
79 Postal services \& telecommunications
81 Banking \& finance
82 Insurance, except for compulsory social security
83 Business services
84 Renting of movables
85 Owning \& dealing in real estate
91 Public administration, national defence \& compulsory social security
92 Sanitary services
93 Education
94 Research \& development

## 3: GROUPS

010 agriculture \& horticulture
020 forestry
030 fishing
111 coal extraction \& manufacture of solid fuels
120 coke ovens
130 extraction of mineral oil \& natural gas
140 mineral oil processing
152 nuclear fuel production
161 production \& distribution of electricity
162 public gas supply
163 production \& distribution of other forms of energy
170 water supply industry
210 extraction \& preparation of metalliferous ores
221 iron \& steel industry
222 steel tubes
223 drawing, cold rolling \& cold forming of steel
224 non-ferrous metals industry
231 extraction of stone, clay, sand \& gravel
233 salt extraction \& refining
239 extraction of other minerals nec
241 structural clay products
242 cement, lime \& plaster
243 building products of concrete, cement or plaster
244 asbestos goods
245 working of stone \& other non-metallic minerals nec
246 abrasive products
247 glass \& glassware

248 refractory \& ceramic goods
251 basic industrial chemicals
255
256
257
258
259
260
311
312
313
314
316
paints, varnishes \& printing ink
pharmaceutical products
soap \& toilet preparations
production of man-made fibres
foundries
forging, pressing \& stamping
metal doors, windows etc
hand tools \& finished metal goods
industrial plant \& steelwork
agricultural machinery \& tractors
textile machinery
mechanical power transmission equipment dry cleaning equipment
other machinery \& mechanical equipment
ordnance, small arms \& ammunition
insulated wires \& cables
basic electrical equipment
passive electronic components
other electronic equipment
domestic-type electric appliances
electrical equipment installation
motor vehicles \& their engines
motor vehicle bodies, trailers \& caravans
motor vehicle parts
shipbuilding \& repairing
railway \& tramway vehicles
cycles \& motor cycles
other vehicles
clocks, watches \& other timing devices
preparation of milk \& milk products
processing of fruit \& vegetables
fish processing
grain milling
starch
bread, biscuits \& flour confectionery
sugar \& sugar by-products
animal feeding stuffs
miscellaneous foods
spirit distilling \& compounding
wines, cider \& perry
brewing \& malting
soft drinks
specialised chemical products mainly for industrial \& agricultural purposes
specialised chemical products mainly for household \& office use
bolts, nuts etc; springs; non precision chains; metals treatment
metal-working machine tools \& engineer's tools
machinery for the food, chemical \& related industries; process engineering contractors
mining machinery, construction \& mechanical handling equipment
machinery for the printing, paper, wood, leather, rubber, glass \& related industries; laundry \&
manufacture of office machinery \& data processing equipment
electrical equipment for industrial use \& batteries \& accumulators
telecommunication equipment, electrical measuring equipment, electronic capital goods \&
electric lamps \& other electric lighting equipment
aerospace equipment manufacturing \& repairing
measuring, checking \& precision instruments \& apparatus
medical \& surgical equipment \& orthopaedic appliances
optical precision instruments \& photographic equipment
organic oils \& fats (other than crude animal fats)
slaughtering of animals \& production of meat \& by-products
ice cream, cocoa, chocolate \& sugar confectionery

429 tobacco industry
431 woollen \& worsted industry
cotton \& silk industries

611 wholesale distribution of agricultural raw materials, live animals, textile raw materials \& semimanufactures
612 wholesale distribution of fuels, ores, metals \& industrial materials
throwing, texturing, etc of continuous filament yarn
spinning \& weaving of flax, hemp \& ramie
jute \& polypropylene yarns \& fabrics
hosiery \& other knitted goods
textile finishing
carpets \& other textile floor coverings
miscellaneous textiles
leather (tanning \& dressing) \& fellmongery
leather goods
footwear
clothing, hats \& gloves
household textiles \& other made-up textiles
fur goods
sawmilling, planing, etc of wood
manufacture of semi-finished wood products \& further processing \& treatment of wood
builders' carpentry \& joinery
wooden containers
other wooden articles (except furniture)
articles of cork \& plaiting materials, brushes \& brooms
wooden \& upholstered furniture and shop \& office fittings
pulp, paper \& board
conversion of paper \& board
printing \& publishing
rubber products
retreading \& specialist repairing of rubber tyres
processing of plastics
jewellery \& coins
musical instruments
photographic \& cinematographic processing laboratories
toys \& sports goods
miscellaneous manufacturing industries
general construction \& demolition work
construction \& repair of buildings
civil engineering
installation of fixtures \& fittings
building completion work
wholesale distribution of timber \& building materials
Wholesale distribution of machinery, industrial equipment \& vehicles
wholesale distribution of household goods, hardware \& ironmongery
wholesale distribution of textiles, clothing, footwear \& leather goods
wholesale distribution of food, drink \& tobacco
wholesale distribution of pharmaceutical, medical \& other chemist's goods
other wholesale distribution including general wholesalers
dealing in scrap metals
dealing in other scrap materials, or general dealers
commission agents
food retailing
confectioners, tobacconists \& newsagents; off-licences
dispensing \& other chemists
retail distribution of clothing
retail distribution of footwear \& leather goods
retail distribution of furnishing fabrics \& household textiles
retail distribution of household goods, hardware \& ironmongery
retail distribution of motor vehicles \& parts
filling stations (motor fuel \& lubricants)
retail distribution of books, stationery \& office supplies

654 other specialised retail distribution (non food)
656 mixed retail businesses
661 restaurants, snack bars, cafes \& other eating places
public houses \& bars
night clubs \& licensed clubs
canteen \& messes
hotel trade
other tourist or short-stay accommodation
repair \& servicing of motor vehicles
repair of footwear \& leather goods
repair of other consumer goods
railways
scheduled road passenger transport \& urban railways
other road passenger transport
road haulage
transport nec
sea transport
air transport
supporting services to inland transport
supporting services to sea transport
supporting services to air transport
miscellaneous transport services \& storage nec
postal services \& telecommunications
banking \& bill-discounting
other financial institutions
insurance, except for compulsory social security
activities auxiliary to banking \& finance
activities auxiliary to insurance
house \& estate agents
legal services
accountants, auditors, tax experts
professional \& technical services nec
advertising
business services
hiring out agricultural \& horticultural equipment
hiring out construction machinery \& equipment
hiring out office machinery \& furniture
hiring out consumer goods
hiring out transport equipment
hiring out movables
owning \& dealing in real estate
national government service nec
justice
police
fire services
national defence
social security
refuse disposal, sanitation \& similar services
cleaning services
higher education
school education (nursery, primary \& secondary)
education nec \& vocational training
driving \& flying schools
research \& development
hospitals, nursing homes etc
other medical care institutions
medical practices
dental practices
agency \& private midwives, nurses etc
veterinary practices \& animal hospitals
social welfare, charitable \& community services
trade unions, business \& professional associations

966 religious services \& other cultural services

## 4: UNITS

2552 printing ink
2562 formulated adhesives \& sealants
2563 chemical treatment of oils \& fats
2564 essential oils \& flavouring materials
2565 explosives
2567 miscellaneous chemical products for industrial use
2568 formulated pesticides
2569 adhesive film, cloth \& foil
2570 pharmaceutical products
2581 soap \& synthetic detergents
2582 perfumes, cosmetics \& toilet preparations
2591 photographic materials \& chemicals
2599 chemical products nec
2600 production of man-made fibres
3111 ferrous metal foundries
3112 non-ferrous metal foundries
3120 forging, pressing \& stamping
3137 bolts, nuts, washers, rivets, springs \& non-precision chains
3138 heat \& surface treatment of metals, including sintering
3142 metal doors, windows etc
3161 hand tools \& implements
3162 cutlery, spoons, forks \& similar tableware; razors
3163 metal storage vessels (mainly non-industrial)
3164 packaging products of metal
3165 domestic heating \& cooking appliances (non-electrical)
3166 metal furniture \& safes
3167 domestic \& similar utensils of metal
3169 finished metal products nec
3204 fabricated constructional steelwork
3205 boilers \& process plant equipment
3211 agricultural machinery
3212 wheeled tractors
3221 metal-working machine tools
3222 engineers' small tools
3230 textile machinery
3244 food, drink \& tobacco processing machinery; packaging \& bottling machinery
3245 chemical industry machinery; furnaces \& kilns; gas, water \& waste treatment plant
3246 process engineering contractors
3251 mining machinery
3254 construction \& earth moving equipment
3255 mechanical lifting \& handling equipment
3261 precision chains \& other mechanical power transmission equipment
3262 ball, needle \& roller bearings
3275 machinery for working wood, rubber, plastics, leather \& making paper, glass, bricks \& similar materials; laundry \& dry cleaning machinery
3276 printing, bookbinding \& paper goods machinery
3281 internal combustion engines (except for road vehicles, wheeled tractors primarily for agricultural purposes \& aircraft) \& other prime movers
3283 compressors \& fluid power equipment
3284 refrigerating machinery, space heating, ventilating \& air conditioning equipment
3285 scales, weighing machinery \& portable power tools
3286 other industrial \& commercial machinery
3287 pumps
3288 industrial valves
3289 mechanical, marine \& precision engineering nec
3290 ordnance, small arms \& ammunition
3301 office machinery
3302 electronic data processing equipment
3410 insulated wires \& cables
3420 basic electrical equipment
3432 batteries \& accumulators
3433 alarms \& signalling equipment

3434 electrical equipment for motor vehicles, cycles \& aircraft
3435 electrical equipment for industrial use nec
3441 telegraph \& telephone apparatus \& equipment
3442 electrical instruments \& control systems
3443 radio \& electronic capital goods
3444 components other than active components, mainly for electronic equipment
3452 gramophone records \& pre-recorded tapes
3453 active components \& electronic sub-assemblies
3454 electronic consumer goods \& other electronic equipment nec
3460 domestic-type electric appliances
3470 electric lamps \& other electric lighting equipment
3480 electrical equipment installation
3510 motor vehicles \& their engines
3521 motor vehicle bodies
3522 trailers \& semi-trailers
3523 caravans
3530 motor vehicle parts
3610 shipbuilding \& repairing
3620 railway \& tramway vehicles
3633 motor cycles \& parts
3634 pedal cycles \& parts
3640 aerospace equipment manufacturing \& repairing
3650 other vehicles
3710 measuring, checking \& precision instruments \& apparatus
3720 medical \& surgical equipment \& orthopaedic appliances
3731 spectacles \& unmounted lenses
3732 optical precision instruments
3733 photographic \& cinematographic equipment
3740 clocks, watches \& other timing devices
4115 margarine \& compound cooking fats
4116 processing organic oils \& fats (other than crude animal fat production)
4121 slaughterhouses
4122 bacon curing \& meat processing
4123 poultry slaughter \& processing
4126 animal by-product processing
4130 preparation of milk \& milk products
4147 processing of fruit \& vegetables
4150 fish processing
4160 grain milling
4180 starch
4196 bread \& flour confectionery
4197 biscuits \& crispbread
4200 sugar \& sugar by-products
4213 ice cream
4214 cocoa, chocolate \& sugar confectionery
4221 compound animal feeds
4222 pet foods \& non-compound animal feeds
4239 miscellaneous foods
4240 spirit distilling \& compounding
4261 wines, cider \& perry
4270 brewing \& malting
4283 soft drinks
4290 tobacco industry
4310 woollen \& worsted industry
4321 spinning \& doubling on the cotton system
4322 weaving of cotton, silk \& man-made fibres
4336 throwing, texturing, etc of continuous filament yarn
4340 spinning \& weaving of flax, hemp \& ramie
4350 jute \& polypropylene yarns \& fabrics
4363 hosiery \& other weft knitted goods \& fabrics
4364 warp knitted fabrics
4370 textile finishing

4384 pile carpets, carpeting \& rugs
4385 other carpets, carpeting, rugs \& matting
4395 lace
4396 rope, twine \& net
4398 narrow fabrics
4399 other miscellaneous textiles
4410 leather (tanning \& dressing) \& fellmongery
4420 leather goods
4510 footwear
4531 weatherproof outerwear
4532 men's \& boys' tailored outerwear
4533 women's \& girls' tailored outerwear
4534 work clothing \& men's \& boys' jeans
4535 men's \& boys' shorts, underwear \& nightwear
4536 women's \& girls' light outerwear, lingerie \& infants' wear
4537 hats, caps \& millinery
4538 gloves
4539 other dress industries
4555 soft furnishings
4556 canvas goods, sacks \& other made-up textiles
4557 household textiles
4560 fur goods
4610 sawmilling, planing, etc of wood
4620 manufacture of semi-finished wood products \& further processing \& treatment of wood
4630 builders' carpentry \& joinery
4640 wooden containers
4650 other wooden articles (except furniture)
4663 brushes \& brooms
4664 articles of cork \& basketware, wickerwork \& other plaiting materials
4671 wooden \& upholstered furniture
4672 shop \& office fitting
4710 pulp, paper \& board
4721 wall coverings
4722 household \& personal hygiene products of paper
4723 stationery
4724 packaging products of paper \& pulp
4725 packaging products of board
4728 other paper \& board products
4751 printing \& publishing of newspapers
4752 printing \& publishing of periodicals
4753 printing \& publishing of books
4754 other printing \& publishing
4811 rubber tyres \& inner tubes
4812 other rubber products
4820 retreading \& specialist repairing of rubber tyres
4831 plastic coated textile fabric
4832 plastics semi-manufactures
4833 plastics floor coverings
4834 plastics building products
4835 plastics packaging products
4836 plastics products nec
4910 jewellery \& coins
4920 musical instruments
4930 photographic \& cinematographic processing laboratories
4941 toys \& games
4942 sports goods
4954 miscellaneous stationers' goods
4959 other manufactures nec
5000 general construction \& demolition work
5010 construction \& repair of buildings
5020 civil engineering
5030 installation of fixtures \& fittings

5040 building completion work
6110 wholesale distribution of agricultural raw materials, live animals, textile raw materials \& semimanufactures
6120 wholesale distribution of fuels, ores, metals \& industrial materials
6130 wholesale distribution of timber \& building materials
6148 wholesale distribution of motor vehicles \& parts \& accessories
6149 wholesale distribution of machinery, industrial equipment \& transport equipment other than motor vehicles
6150 wholesale distribution of household goods, hardware \& ironmongery
6160 wholesale distribution of textiles, clothing, footwear \& leather goods
6170 wholesale distribution of food, drink \& tobacco
6180 wholesale distribution of pharmaceutical, medical \& other chemist's goods
6190 other wholesale distribution including general wholesalers
6210 dealing in scrap \& waste materials
6220 dealing in scrap \& waste materials
6300 commission agents
6410 food retailing
6420 confectioners, tobacconists \& newsagents; off-licences
6430 dispensing \& other chemists
6450 retail distribution of clothing
6460 retail distribution of footwear \& leather goods
6470 retail distribution of furnishing fabrics \& household textiles
6480 retail distribution of household goods, hardware \& ironmongery
6510 retail distribution of motor vehicles \& parts
6520 filling stations (motor fuel \& lubricants)
6530 retail distribution of books, stationery \& office equipment
6540 other specialised retail distribution (non food)
6560 mixed retail businesses
6611 eating places supplying food for consumption on the premises
6612 take-away food shops
6620 public houses \& bars
6630 night clubs \& licensed clubs
6640 canteen \& messes
6650 hotel trade
6670 other tourist or short-stay accommodation
6710 repair \& servicing of motor vehicles
6720 repair of footwear \& leather goods
6730 repair of other consumer goods
7100 railways
7210 scheduled road passenger transport \& urban railways
7220 other road passenger transport
7230 road haulage
7260 transport nec
7400 sea transport
7500 air transport
7610 supporting services to inland transport
7630 supporting services to sea transport
7640 supporting services to air transport
7700 miscellaneous transport services \& storage nec
7901 postal services
7902 telecommunications
8140 banking \& bill-discounting
8150 other financial institutions
8200 insurance, except for compulsory social security
8310 activities auxiliary to banking \& finance
8320 activities auxiliary to insurance
8340 house \& estate agents
8350 legal services
8360 accountants, auditors, tax experts
8370 professional \& technical services nec
8380 advertising
8394 computer services

8395 business services nec
8396 central offices not allocable elsewhere
8410 hiring out agricultural \& horticultural equipment
8420 hiring out construction machinery \& equipment
8430 hiring out office machinery \& furniture
8460 hiring out consumer goods
8480 hiring out transport equipment
8490 hiring out movables
8500 owning \& dealing in real estate
9111 national government service nec
9112 local government service nec
9120 justice
9130 police
9140 fire services
9150 national defence
9190 social security
9211 refuse disposal, street cleaning, fumigation etc
9212 sewage disposal
9230 cleaning services
9310 higher education
9320 school education (nursery, primary \& secondary)
9330 education nec \& vocational training
9360 driving \& flying schools
9400 research \& development
9510 hospitals, nursing homes etc
9520 other medical care institutions
9530 medical practices
9540 dental practices
9550 agency \& private midwives, nurses etc
9560 veterinary practices \& animal hospitals
9611 social welfare, charitable \& community services
9631 trade unions, business \& professional associations
9660 religious services \& other cultural services
9690 tourist offices \& other community services
9711 film production, distribution \& exhibition
9741 radio \& television services, theatres etc
9760 authors, music composers \& other own account artists nec
9770 libraries, museums, art galleries etc
9791 sport \& other recreational services
9811 laundries
9812 dry cleaning \& allied services
9820 hairdressing \& beauty parlours
9890 personal services nec
9900 domestic services
0000 diplomatic representation, international organisations, allied armed forces

### 3.8. Standard Industrial Classification 92 (SIC92)

## Used at Waves 4, 7, 11 and 12 onwards

In the British Household Panel Study this coding frame applies to one variable only DJBSIC92. We have included this to enable comparison with our usual coding i.e. to SIC 1980. The SIC 92 coding frame is identical to NACE - European Community Classification of Economic Activities. For further details see Standard Industrial Classification of economic activities 1992. (London CSO/GSS/HMSO 1992).

Source: Labour Force Survey User's Guide, Volume 5 LFS Classifications, 1995
Note the data in DJBSIC92 is coded to 4 digits without the decimal points shown in the table below. Note also, any case with 3 digits is missing a leading zero. This means that " 501 " should be read as 05.01 .

## UK STANDARD INDUSTRIAL CLASSIFICATION OF ECONOMIC ACTIVITIES - SIC 92

The 1992 SIC is broken down into 17 main alphabetical sections, 14 sub-sections, 60 divisions, 222 groups, 503 classes and 142 subclasses; these are set out in the following pages:

The 17 main Divisions in the 1992 SIC are:
A Agriculture, Hunting and Forestry
B Fishing
C Mining and Quarrying
D Manufacturing
E Electricity, Gas and Water Supply
F Construction
G Wholesale and Retail Trade: Repair of Motor Vehicles, Motorcycles and Personal Household Goods
H Hotels and Restaurants
I Transport, Storage and Communication
J Financial Intermediation
K Real Estate, Renting and Business Activities
L Public Administration and Defence: Compulsory Social Security
M Education
N Health and Social Work
O Other Community, Social and Personal Service Activities
P Private Households with Employed Persons
Q Extra-Territorial Organisations and Bodies

Detailed breakdown of the full 1992 Standard Industrial Classification
Division Class Class and Description

## SECTION A

01

## AGRICULTURE, HUNTING AND FORESTRY

AGRICULTURE, HUNTING AND RELATED SERVICE ACTIVITIES

| 01.1 | Growing of crops; market gardening; horticulture |  |
| :--- | :--- | :--- |
|  | 01.11 | Growing of cereals and other crops not elsewhere classified <br> Growing of vegetables, horticultural specialties and nursery products <br>  <br> 01.12 |
| 01.13 |  | Growing of fruit, nuts, beverage and spice crops |


| 01.3 |  | Growing of crops combined with farming of animals (mixed farming) |
| :---: | :---: | :---: |
|  | 01.30 | Growing of crops combined with farming of animals (mixed farming) |
| 01.4 |  | Agricultural and animal husbandry service activities, except veterinary activities |
|  | 01.41 | Agricultural service activities |
|  | 01.42 | Animal husbandry service activities, except veterinary activities |
| 01.5 |  | Hunting, trapping and game propagation including related service activities |
|  | 01.50 | Hunting, trapping and game propagation including related service activities |
| 0202.0 |  | FORESTRY, LOGGING AND RELATED SERVICE ACTIVITIES |
|  |  | Forestry, logging and related service activities |
|  | 02.01 | Forestry and logging |
|  | 02.02 | Forestry and logging related service activities |
| SECTION B |  | FISHING |
| $\begin{array}{rr}05 \\ & 05.0\end{array}$ |  | FISHING, OPERATION OF FISH HATCHERIES AND FISH FARMS; SERVICE ACTIVITIES INCIDENTAL TO FISHING |
|  |  | Fishing 9, operation of fish hatcheries and fish farms; service activities incidental to fishing |
|  | 05.01 | Fishing |
|  | 05.02 | Operation of fish hatcheries and fish farms |
| SECTION C |  | MINING AND QUARRYING |
| Subsection CA |  | MINING AND QUARRYING OF ENERGY PRODUCING |
|  |  | MATERIALS |
| 10 |  | MINING OF COAL AND LIGNITE; EXTRACTION OF PEAT |
| 10.1 |  | Mining and agglomeration of hard coal |
|  | 10.10 | Mining and agglomeration of hard coal |
| 10.2 |  | Mining and agglomeration of lignite |
|  | 10.20 | Mining and agglomeration of lignite |
| 10.3 |  | Extraction and agglomeration of peat |
|  | 10.30 | Extraction and agglomeration of peat |
| 11 |  | EXTRACTION OF CRUDE PETROLEUM AND NATURAL GAS; |
|  |  | SERVICE ACTIVITIES INCIDENTAL TO OIL AND GAS |
|  |  | EXTRACTION EXCLUDING SURVEYING |
| 11.1 |  | Extraction of crude petroleum and natural gas |
|  | 11.10 | Extraction of crude petroleum and natural gas |
| 11.2 |  | Service activities incidental to oil and gas extraction excluding surveying |
|  | 11.20 | Service activities incidental to oil and gas extraction excluding surveying |
| 12 |  | MINING OF URANIUM AND THORIUM ORES |
| 12.0 |  | Mining of uranium and thorium ores |
| 12.00 |  | Mining of uranium and thorium ores |
| Subsection CB |  | MINING AND QUARRYING EXCEPT ENERGY PRODUCING MATERIALS |
| 13 |  | MINING OF METAL ORES |
| 13.1 |  | Mining of iron ores |


|  | 13.10 | Mining of iron ores |
| :---: | :---: | :---: |
| 13.2 |  | Mining of non-ferrous metal ores, except uranium and thorium ores |
|  | 13.20 | Mining of non-ferrous metal ores, except uranium and thorium ores |
| 14 |  | OTHER MINING AND QUARRYING |
| 14.1 |  | Quarrying of stone |
|  | 14.11 | Quarrying of stone for construction |
|  | 14.12 | Quarrying of limestone, gypsum and chalk |
|  | 14.13 | Quarrying of slate |
| 14.2 |  | Quarrying of sand and clay |
|  | 14.21 | Operation of gravel and sand pits |
|  | 14.22 | Mining of clays and kaolin |
| 14.3 |  | Mining of chemical and fertilizer minerals |
|  | 14.30 | Mining of chemical and fertilizer minerals |
| 14.4 |  | Production of salt |
|  | 14.40 | Production of salt |
| 14.5 |  | Other mining and quarrying not elsewhere classified |
|  | 14.50 | Other mining and quarrying not elsewhere classified |
| SECTION D |  | MANUFACTURING |
| Subsection DA |  | MANUFACTURE OF FOOD PRODUCTS; BEVERAGES AND tobacco |
| 15 |  | MANUFACTURE OF FOOD PRODUCTS AND BEVERAGES |
| 15.1 |  | Production, processing and preserving of meat and meat products |
|  | 15.11 | Production and preserving of meat |
|  | 15.12 | Production and preserving of poultry meat |
|  | 15.13 | Production of meat and poultry meat products |
| 15.2 |  | Processing and preserving of fish and fish products |
|  | 15.20 | Processing and preserving of fish and fish products |
| 15.3 |  | Processing and preserving of fruit and vegetables |
|  | 15.31 | Processing and preserving of potatoes |
|  | 15.32 | Manufacture of fruit and vegetable juice |
|  | 15.33 | Processing and preserving of fruit and vegetables not elsewhere classified |
| 15.4 |  | Manufacture of vegetable and animal oils and fats |
|  | 15.41 | Manufacture of crude oils and fats |
|  | 15.42 | Manufacture of refined oils and fats |
|  | 15.43 | Manufacture of margarine and similar edible fats |
| 15.5 |  | Manufacture of dairy products |
|  | 15.51 | Operation of dairies and cheese making |
|  | 15.52 | Manufacture of ice cream |
| 15.6 |  | Manufacture of grain mill products, starches and starch products |
|  | 15.61 | Manufacture of grain mill products |
|  | 15.62 | Manufacture of starches and starch products |
| 15.7 |  | Manufacture of prepared animal feeds |
|  | 15.71 | Manufacture of prepared feeds for farm animals |
|  | 15.72 | Manufacture of prepared pet foods |
| 15.8 |  | Manufacture of other food products |
|  | 15.81 | Manufacture of bread; manufacture of pastry goods and cakes |
|  | 15.82 | Manufacture of rusks and biscuits; manufacture of preserved pastry goods and cakes |
|  | 15.83 | Manufacture of sugar |


|  | 15.84 | Manufacture of cocoa; chocolate and sugar confectionary |
| :---: | :---: | :---: |
|  | 15.85 | Manufacture of macaroni, noodles, couscous and similar farinaceous products |
|  | 15.86 | Processing of tea and coffee |
|  | 15.87 | Manufacture of condiments and seasonings |
|  | 15.88 | Manufacture of homogenised food preparations and dietetic food |
|  | 15.89 | Manufacture of other foods products not elsewhere specified |
| 15.9 |  | Manufacture of beverages |
|  | 15.91 | Manufacture of distilled potable alcoholic beverages |
|  | 15.92 | Production of ethyl alcohol from fermented materials |
|  | 15.93 | Manufacture of wines |
|  | 15.94 | Manufacture of cider and other fruit wines |
|  | 15.95 | Manufacture of other non-distilled fermented beverages |
|  | 15.96 | Manufacture of beer |
|  | 15.97 | Manufacture of malt |
|  | 15.98 | Production of mineral waters and soft drinks |
| 16 |  | MANUFACTURE OF TOBACCO PRODUCTS |
| 16.0 |  | Manufacture of tobacco products |
|  | 16.00 | Manufacture of tobacco products |
| Subsection DB |  | MANUFACTURE OF TEXTILES AND TEXTILE PRODUCTS |
| 17 |  | MANUFACTURE OF TEXTILES |
|  |  | Preparation and spinning of textile fibres |
|  | 17.11 | Preparation and spinning of cotton-type fibres |
|  | 17.12 | Preparation and spinning of woollen-type fibres |
|  | 17.13 | Preparation and spinning of worsted-type fibres |
|  | 17.14 | Preparation and spinning of flax-type fibres |
|  | 17.15 | Throwing and preparation of silk including from noils and throwing and texturing of synthetic or artificial filament yarns |
|  | 17.16 | Manufacture of sewing threads |
|  | 17.17 | Preparation and spinning of other textile fibres |
| 17.2 |  | Textile weaving |
|  | 17.21 | Cotton type weaving |
|  | 17.22 | Woollen type weaving |
|  | 17.23 | Worsted type weaving |
|  | 17.24 | Silk type weaving |
|  | 17.25 | Other textile weaving |
| 17.3 |  | Finishing of textiles |
|  | 17.30 | Finishing of textiles |
| 17.4 |  | Manufacture of made-up textile articles, except apparel |
|  | 17.40 | Manufacture of made-up textile articles, except apparel |
| 17.5 |  | Manufacture of other textiles |
|  | 17.51 | Manufacture of carpets and rugs |
|  | 17.52 | Manufacture of cordage, rope, twine and netting |
|  | 17.53 | Manufacture of non-wovens and articles made from non-wovens, except apparel |
|  | 17.54 | Manufacture of other textiles not elsewhere specified |
| 17.6 |  | Manufacture of knitted and crocheted fabrics |
|  | 17.60 | Manufacture of knitted and crocheted fabrics |
| 17.7 |  | Manufacture of knitted and crocheted articles |
|  | 17.71 | Manufacture of knitted and crocheted hosiery |
|  | 17.72 | Manufacture of knitted and crocheted pullovers, cardigans and similar articles |
| 18 |  | MANUFACTURE OF WEARING APPAREL; DRESSING AND DYING OF FUR |


| 18.1 |  | Manufacture of leather clothes |
| :---: | :---: | :---: |
|  | 18.10 | Manufacture of leather clothes |
| 18.2 |  | Manufacture of wearing apparel and accessories |
|  | 18.21 | Manufacture of workwear |
|  | 18.22 | Manufacture of other outerwear |
|  | 18.23 | Manufacture of underwear |
|  | 18.24 | Manufacture of other wearing apparel and accessories not elsewhere specified |
| 18.3 |  | Dressing and dyeing of fur; manufacture of articles of fur |
|  | 18.30 | Dressing and dyeing of fur; manufacture of articles of fur |
| Subsection DC |  | MANUFACTURE OF LEATHER AND LEATHER PRODUCTS |
| 19 |  | TANNING AND DRESSING OF LEATHER; MANUFACTURE OF LUGGAGE,HANDBAGS, SADDLERY, HARNESS AND FOOTWEAR |
| 19.1 |  | Tanning and dressing of leather |
|  | 19.10 | Tanning and dressing of leather |
| 19.2 |  | Manufacture of luggage, handbags and the like, saddlery and harness |
|  | 19.20 | Manufacture of luggage, handbags and the like, saddlery and harness |
| 19.3 |  | Manufacture of footwear |
|  | 19.30 | Manufacture of footwear |
| Subsection DD |  | MANUFACTURE OF WOOD AND WOOD PRODUCTS |
| 20 |  | MANUFACTURE OF WOOD AND OF PRODUCTS OF WOOD AND CORK, EXCEPT FURNITURE; MANUFACTURE OF ARTICLES OF STRAW AND PLAITING MATERIALS |
| 20.1 |  | Sawmilling and planing of wood, impregnation of wood |
|  | 20.10 | Sawmilling and planing of wood, impregnation of wood |
| 20.2 |  | Manufacture of veneer sheets; manufacture of plywood, laminboard, particle board, fibre board and other panels and boards |
|  | 20.20 | Manufacture of veneer sheets; manufacture of plywood, laminboard, particle board, fibre board and other panels and boards |
| 20.3 |  | Manufacture of builders' carpentry and joinery |
|  | 20.30 | Manufacture of builders' carpentry and joinery |
| 20.4 |  | Manufacture of wooden containers |
|  | 20.40 | Manufacture of wooden containers |
| 20.5 |  | Manufacture of other products of wood; manufacture of articles of cork, straw and plaiting materials |
|  | 20.51 | Manufacture of other products of wood |
|  | 20.52 | Manufacture of articles of cork, straw and plaiting materials |
| Subsection DE |  | manufacture of pulp, paper and paper products; PUBLISHING AND PRINTING |
| 21 |  | MANUFACTURE OF PULP, PAPER AND PAPER PRODUCTS |
|  |  | Manufacture of pulp, paper and paperboard |
|  | 21.11 | Manufacture of pulp |
|  | 21.12 | Manufacture of paper and paperboard |
| 21.2 |  | Manufacture of articles of paper and paperboard |
|  | 21.21 | Manufacture of corrugated paper and paperboard and of containers of paper and paperboard |
|  | 21.22 | Manufacture of household and sanitary goods and of toilet requisites |
|  | 21.23 | Manufacture of paper stationery |


|  | $\begin{aligned} & 21.24 \\ & 21.25 \end{aligned}$ | Manufacture of wallpaper <br> Manufacture of other articles of paper and paperboard not elsewhere classified |
| :---: | :---: | :---: |
| $\begin{array}{rr}22 \\ & 22.1\end{array}$ |  | PUBLISHING, PRINTING AND REPRODUCTION OF RECORDED MEDIA |
|  |  | Publishing |
|  | 22.11 | Publishing of books |
|  | 22.12 | Publishing of newspapers |
|  | 22.13 | Publishing of journals and periodicals |
|  | 22.14 | Publishing of sound recordings |
|  | 22.15 | Other publishing |
| 22.2 |  | Printing and service activities related to printing |
|  | 22.21 | Printing of newspapers |
|  | 22.22 | Printing not elsewhere classified |
|  | 22.23 | Bookbinding and finishing |
|  | 22.24 | Composition and plate-making |
|  | 22.25 | Other activities related to printing |
| 22.3 |  | Reproduction of recorded media |
|  | 22.31 | Reproduction of sound recording |
|  | 22.32 | Reproduction of video recording |
|  | 22.33 | Reproduction of computer media |
| Subsection DF |  | manufacture of coke, refined petroleum products AND NUCLEAR FUEL |
| 23 |  | manufacture of coke, refined petroleum products AND NUCLEAR FUEL |
| 23.1 |  | Manufacture of coke oven products |
|  | 23.10 | Manufacture of coke oven products |
| 23.2 |  | Manufacture of refined petroleum products |
|  | 23.20 | Manufacture of refined petroleum products |
| 23.3 |  | Processing of nuclear fuel |
|  | 23.30 | Processing of nuclear fuel |
| Subsection DG |  | MANUFACTURE OF CHEMICALS, CHEMICAL PRODUCTS AND MAN-MADE FIBRES |
| 24 |  | MANUFACTURE OF CHEMICALS AND CHEMICAL PRODUCTS |
|  |  | Manufacture of basic chemicals |
|  | 24.11 | Manufacture of industrial gases |
|  | 24.12 | Manufacture of dyes and pigments |
|  | 24.13 | Manufacture of other inorganic basic chemicals |
|  | 24.14 | Manufacture of other organic basic chemicals |
|  | 24.15 | Manufacture of fertilizers and nitrogen compounds |
|  | 24.16 | Manufacture of plastics in primary forms |
|  | 24.17 | Manufacture of synthetic rubber in primary forms |
| 24.2 |  | Manufacture of pesticides and other agro-chemical products |
|  | 24.20 | Manufacture of pesticides and other agro-chemical products |
| 24.3 |  | Manufacture of paints, varnishes and similar coatings, printing ink and mastics |
|  | 24.30 | Manufacture of paints, varnishes and similar coatings, printing ink and mastics |
| 24.4 |  | Manufacture of pharmaceuticals, medicinal chemicals and botanical products |
|  | 24.41 | Manufacture of basic pharmaceutical products |
|  | 24.42 | Manufacture of pharmaceutical preparations |


| 24.5 |  | Manufacture of soap and detergents, cleaning and polishing preparations, perfumes and toilet preparations |
| :---: | :---: | :---: |
|  | 24.51 | Manufacture of soap and detergents, cleaning and polishing preparations |
|  | 24.52 | Manufacture of perfumes and toilet preparations |
| 24.6 |  | Manufacture of other chemical products |
|  | 24.61 | Manufacture of explosives |
|  | 24.62 | Manufacture of glues and gelatine |
|  | 24.63 | Manufacture of essential oils |
|  | 24.64 | Manufacture of photographic chemical material |
|  | 24.65 | Manufacture of prepared unrecorded media |
|  | 24.66 | Manufacture of other chemical products not elsewhere classified |
| 24.7 |  | Manufacture of man-made fibres |
|  | 24.70 | Manufacture of man-made fibres |
| Subsection DH |  | MANUFACTURE OF RUBBER AND PLASTIC PRODUCTS |
| 25 |  | MANUFACTURE OF RUBBER AND PLASTIC PRODUCTS |
|  |  | Manufacture of rubber products |
|  | 25.11 | Manufacture of rubber tyres and tubes |
|  | 25.12 | Retreading and rebuilding of rubber tyres |
|  | 25.13 | Manufacture of other rubber products |
| 25.2 |  | Manufacture of plastic products |
|  | 25.21 | Manufacture of plastic plates, sheets, tubes and profiles |
|  | 25.22 | Manufacture of plastic packing goods |
|  | 25.23 | Manufacture of builders' ware of plastic |
|  | 25.24 | Manufacture of other plastic products |
| Subsection DI |  | MANUFACTURE OF OTHER NON-METALLIC MINERAL PRODUCTS |
| 26 |  | MANUFACTURE OF OTHER NON-METALLIC MINERAL PRODUCTS |
| 26.1 |  | Manufacture of glass and glass products |
|  | 26.11 | Manufacture of flat glass |
|  | 26.12 | Shaping and processing of flat glass |
|  | 26.13 | Manufacture of hollow glass |
|  | 26.14 | Manufacture of glass fibres |
|  | 26.15 | Manufacture and processing of other glass including technical glassware |
| 26.2 |  | Manufacture of non-refractory ceramic goods other than for construction purposes; manufacture of refractory ceramic products |
|  | 26.21 | Manufacture of ceramic household and ornamental articles |
|  | 26.22 | Manufacture of ceramic sanitary fixtures |
|  | 26.23 | Manufacture of ceramic insulators and insulating fittings |
|  | 26.24 | Manufacture of other technical ceramic products |
|  | 26.25 | Manufacture of other ceramic products |
|  | 26.26 | Manufacture of refractory ceramic products |
| 26.3 |  | Manufacture of ceramic tiles and flags |
|  | 26.30 | Manufacture of ceramic tiles and flags |
| 26.4 |  | Manufacture of bricks, tiles and construction products, in baked clay |
|  | 26.40 | Manufacture of bricks, tiles and construction products, in baked clay |
| 26.5 |  | Manufacture of cement, lime and plaster |
|  | 26.51 | Manufacture of cement |
|  | 26.52 | Manufacture of lime |
|  | 26.53 | Manufacture of plaster |
| 26.6 |  | Manufacture of articles of concrete, plaster and cement |
|  | 26.61 | Manufacture of concrete products for construction purposes |




|  |  | $\begin{aligned} & 30.01 \\ & 30.02 \end{aligned}$ | Manufacture of office machinery <br> Manufacture of computers and other information processing equipment |
| :---: | :---: | :---: | :---: |
| 31 |  |  | MANUFACTURE OF ELECTRICAL MACHINERY AND APPARATUS NOT ELSEWHERE CLASSIFIED |
|  | 31.1 |  | Manufacture of electric motors, generators and transformers |
|  |  | 31.10 | Manufacture of electric motors, generators and transformers |
|  | 31.2 |  | Manufacture of electricity distribution and control apparatus |
|  |  | 31.20 | Manufacture of electricity distribution and control apparatus |
|  | 31.3 |  | Manufacture of insulated wire and cable |
|  |  | 31.30 | Manufacture of insulated wire and cable |
|  | 31.4 |  | Manufacture of accumulators, primary cells and primary batteries |
|  |  | 31.40 | Manufacture of accumulators, primary cells and primary batteries |
|  | 31.5 |  | Manufacture of lighting equipment and electric lamps |
|  |  | 31.50 | Manufacture of lighting equipment and electric lamps |
|  | 31.6 |  | Manufacture of electrical equipment not elsewhere classified |
|  |  | 31.61 | Manufacture of electrical equipment for engines and vehicles not elsewhere classified |
|  |  | 31.62 | Manufacture of other electrical equipment not elsewhere classified |
| 32 |  |  | MANUFACTURE OF RADIO, TELEVISION AND COMMUNICATION EQUIPMENT AND APPARATUS |
|  | 32.1 |  | Manufacture of electronic valves and tubes and other electronic components |
|  |  | 32.10 | Manufacture of electronic valves and tubes and other electronic components |
|  | 32.2 |  | Manufacture of television and radio transmitters and apparatus for line telephony and line telegraphy |
|  |  | 32.20 | Manufacture of television and radio transmitters and apparatus for line telephony and line telegraphy |
|  | 32.3 |  | Manufacture of television and radio receivers, sound or video recording or reproducing apparatus and associated goods |
|  |  | 32.30 | Manufacture of television and radio receivers, sound or video recording or reproducing apparatus and associated goods |
| 33 |  |  | MANUFACTURE OF MEDICAL, PRECISION AND OPTICAL INSTRUMENTS, WATCHES AND CLOCKS |
|  | 33.1 |  | Manufacture of medical and surgical equipment and orthopaedic appliances |
|  |  | 33.10 | Manufacture of medical and surgical equipment and orthopaedic appliances |
|  | 33.2 |  | Manufacture of instruments and appliances for measuring, checking, testing, navigating and other purposes, except industrial process control equipment |
|  |  | 33.20 | Manufacture of instruments and appliances for measuring, checking, testing, navigating and other purposes, except industrial process control equipment |
|  | 33.3 |  | Manufacture of industrial process control equipment |
|  |  | 33.30 | Manufacture of industrial process control equipment |
|  | 33.4 |  | Manufacture of optical instruments and photographic equipment |
|  |  | 33.40 | Manufacture of optical instruments and photographic equipment |
|  | 33.5 |  | Manufacture of watches and clocks |
|  |  | 33.50 | Manufacture of watches and clocks |


| Subsection DM |  | MANUFACTURE OF TRANSPORT EQUIPMENT |
| :---: | :---: | :---: |
| 34 |  | MANUFACTURE OF MOTOR VEHICLES, TRAILERS AND SEMITRAILERS |
| 34.1 | 34.10 | Manufacture of motor vehicles |
|  |  | Manufacture of motor vehicles |
| 34.2 | 34.20 | Manufacture of bodies (coachwork) for motor vehicles; manufacture of trailers and semi-trailers |
|  |  | Manufacture of bodies (coachwork) for motor vehicles; manufacture of trailers and semi-trailers |
| 34.3 | 34.30 | Manufacture of parts and accessories for motor vehicles and their engines |
|  |  | Manufacture of parts and accessories for motor vehicles and their engines |
| 35 |  | MANUFACTURE OF OTHER TRANSPORT EQUIPMENT |
|  |  | Building and repairing of ships and boats |
|  | 35.11 | Building and repairing of ships |
|  | 35.12 | Building and repairing of pleasure and sporting boats |
| 35.2 |  | Manufacture of railway and tramway locomotives and rolling stock |
|  | 35.20 | Manufacture of railway and tramway locomotives and rolling stock |
| 35.3 |  | Manufacture of aircraft and spacecraft |
|  | 35.30 | Manufacture of aircraft and spacecraft |
| 35.4 |  | Manufacture of motorcycles and bicycles |
|  | 35.41 | Manufacture of motorcycles |
|  | 35.42 | Manufacture of bicycles |
|  | 35.43 | Manufacture of invalid carriages |
| 35.5 | 35.50 | Manufacture of other transport equipment not elsewhere classified |
|  |  | Manufacture of other transport equipment not elsewhere classified |
| Subsection DN |  | MANUFACTURING NOT ELSEWHERE CLASSIFIED |
| $\begin{array}{rr}36 \\ & 36.1\end{array}$ |  | MANUFACTURE OF FURNITURE; MANUFACTURING NOT ELSEWHERE CLASSIFIED |
|  |  | Manufacture of furniture |
|  | 36.11 | Manufacture of chairs and seats |
|  | 36.12 | Manufacture of other office and shop furniture |
|  | 36.13 | Manufacture of other kitchen furniture |
|  | 36.14 | Manufacture of other furniture |
|  | 36.15 | Manufacture of mattresses |
| 36.2 |  | Manufacture of jewellery and related articles |
|  | 36.21 | Striking of coins and medals |
|  | 36.22 | Manufacture of jewellery and related articles not elsewhere classified |
| 36.3 |  | Manufacture of musical instruments |
|  | 36.30 | Manufacture of musical instruments |
| 36.4 |  | Manufacture of sports goods |
|  | 36.40 | Manufacture of sports goods |
| 36.5 |  | Manufacture of games and toys |
|  | 36.50 | Manufacture of games and toys |
| 36.6 |  | Miscellaneous manufacturing not elsewhere classified |
|  | 36.61 | Manufacture of imitation jewellery |
|  | 36.62 | Manufacture of brooms and brushes |
|  | 36.63 | Other manufacturing not elsewhere classified |

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|  | 37.1 |  |
| :--- | :--- | :--- |
|  | 37.10 | Recycling of metal waste and scrap <br> Recycling of metal waste and scrap |
| SECTION E |  | Recycling of non-metal waste and scrap <br> Recycling of non-metal waste and scrap |
| 40 | 37.20 | ELECTRICITY, GAS AND WATER SUPPLY |

Recycling of metal waste and scrap
Recycling of metal waste and scrap
Recycling of non-metal waste and scrap
Recycling of non-metal waste and scrap
ELECTRICITY, GAS AND WATER SUPPLY
ELECTRICITY, GAS, STEAM AND HOT WATER SUPPLY
Production and distribution of electricity
Production and distribution of electricity
Manufacture of gas; distribution of gaseous fuels through mains Manufacture of gas; distribution of gaseous fuels through mains

Steam and hot water supply
Steam and hot water supply
COLLECTION, PURIFICATION AND DISTRIBUTION OF WATER
Collection, purification and distribution of water
Collection, purification and distribution of water

## CONSTRUCTION

CONSTRUCTION
Site preparation
Demolition and wrecking of buildings; earth moving
Test drilling and boring
Building of complete constructions or parts thereof-, civil engineering
General construction of buildings and civil engineering works
ens,
Construction of water projects
Other construction work involving special trades
Building installation
Installation of electrical wiring and fittings
Insulation work activities
Plumbing

Building completion
Plastering
Join
eor and wall covering
Painting and glazing

Renting of construction or demolition equipment with operator Renting of construction or demolition equipment with operator

WHOLESALE AND RETAIL TRADE; REPAIR OF MOTOR VEHICLES, MOTORCYCLES AND PERSONAL AND HOUSEHOLD GOODS

Sale of motor vehicles

| 50.2 |  | Maintenance and repair of motor vehicles |
| :---: | :---: | :---: |
|  | 50.20 | Maintenance and repair of motor vehicles |
| 50.3 |  | Sale of motor vehicle parts and accessories |
|  | 50.30 | Sale of motor vehicle parts and accessories |
| 50.4 |  | Sale, maintenance and repair of motorcycles and related parts and accessories |
|  | 50.40 | Sale, maintenance and repair of motorcycles and related parts and accessories |
| 50.5 |  | Retail sale of automotive fuel |
|  | 50.50 | Retail sale of automotive fuel |
|  |  | wholesale trade and commission trade, except of MOTOR VEHICLES AND MOTORCYCLES |
| 51.1 |  | Wholesale on a fee or contract basis |
|  | 51.11 | Agents involved in the sale of agricultural raw materials, live animals, textile raw materials and semi-finished goods |
|  | 51.12 | Agents involved in the sale of agricultural raw materials, live animals, textile raw materials and semi-finished goods |
|  | 51.13 | Agents involved in the sale of agricultural raw materials, live animals, textile raw materials and semi-finished goods |
|  | 51.14 | Agents involved in the sale of machinery, industrial equipment, ships and aircraft |
|  | 51.15 | Agents involved in the sale of furniture, household goods, hardware and ironmongery |
|  | 51.16 | Agents involved in the sale of textiles, clothing, footwear and leather goods |
|  | 51.17 | Agents involved in the sale of food, beverages and tobacco |
|  | 51.18 | Agents specialising in the sale of particular products or ranges of products not elsewhere classified |
|  | 51.19 | Agents involved in the sale of a variety of goods |
| 51.2 |  | Wholesale of agricultural raw materials and live animals |
|  | 51.21 | Wholesale of grain, seeds and animal feeds |
|  | 51.22 | Wholesale of flowers and plants |
|  | 51.23 | Wholesale of live animals |
|  | 51.24 | Wholesale of hides, skins and leather |
|  | 51.25 | Wholesale of unmanufactured tobacco |
| 51.3 |  | Wholesale of food, beverages and tobacco |
|  | 51.31 | Wholesale of fruit and vegetables |
|  | 51.32 | Wholesale of meat and meat products |
|  | 51.33 | Wholesale of dairy produce, eggs and edible oils and fats |
|  | 51.34 | Wholesale of alcoholic and other beverages |
|  | 51.35 | Wholesale of tobacco products |
|  | 51.36 | Wholesale of sugar and chocolate and sugar confectionery |
|  | 51.37 | Wholesale of coffee, tea, cocoa and spices |
|  | 51.38 | Wholesale of other food including fish, crustaceans and molluscs |
|  | 51.39 | Non-specialised wholesale of food, beverages and tobacco |
| 51.4 |  | Wholesale of household goods |
|  | 51.41 | Wholesale of textiles |
|  | 51.42 | Wholesale of clothing and footwear |
|  | 51.43 | Wholesale of electrical household appliances and radio and television goods |
|  | 51.44 | Wholesale of china and glassware, wallpaper and cleaning materials |
|  | 51.45 | Wholesale of perfume and cosmetics |
|  | 51.46 | Wholesale of pharmaceutical goods |
|  | 51.47 | Wholesale of other household goods |
| 51.5 |  | Wholesale of non-agricultural intermediate products, waste and scrap |
|  | 51.51 | Wholesale of solid, liquid and gaseous fuels and related products |
|  | 51.52 | Wholesale of metals and metal ores |
|  | 51.53 | Wholesale of wood, construction materials and sanitary equipment |


|  | 51.54 | Wholesale of hardware, plumbing and heating equipment and supplies |
| :---: | :---: | :---: |
|  | 51.55 | Wholesale of chemical products |
|  | 51.56 | Wholesale of other intermediate products |
|  | 51.57 | Wholesale of waste and scrap |
| 51.6 |  | Wholesale of machinery, equipment and supplies |
|  | 51.61 | Wholesale of machine tools |
|  | 51.62 | Wholesale of construction machinery |
|  | 51.63 | Wholesale of machinery for the textile industry, and of sewing and knitting machines |
|  | 51.64 | Wholesale of office machinery and equipment |
|  | 51.65 | Wholesale of other machinery for use in industry, trade and navigation |
|  | 51.66 | Wholesale of agricultural machinery and accessories and implements, including tractors |
| 51.7 |  | Other wholesale |
|  | 51.70 | Other wholesale |
|  |  | RETAIL TRADE, EXCEPT OF MOTOR VEHICLES AND MOTORCYCLES; REPAIR OF PERSONAL AND HOUSEHOLD GOODS |
| 52.1 |  | Retail sale in non-specialised stores |
|  | 52.11 | Retail sale in non-specialised stores with food, beverages or tobacco predominating |
|  | 52.12 | Other retail sale in non-specialised stores |
| 52.2 |  | Retail sale of food, beverages and tobacco in specialised stores |
|  | 52.21 | Retail sale of fruit and vegetables |
|  | 52.22 | Retail sale of meat and meat products |
|  | 52.23 | Retail sale of fish, crustaceans and molluscs |
|  | 52.24 | Retail sale of bread, cakes, flour confectionery and sugar confectionery |
|  | 52.25 | Retail sale of alcoholic and other beverages |
|  | 52.26 | Retail sale of tobacco products |
|  | 52.27 | Other retail sale of food, beverages and tobacco in specialised stores |
| 52.3 |  | Retail sale of pharmaceutical and medical goods, cosmetic and toilet articles |
|  | 52.31 | Dispensing chemists |
|  | 52.32 | Retail sale of medical and orthopaedic goods |
|  | 52.33 | Retail sale of cosmetic and toilet articles |
| 52.4 |  | Other retail sale of new goods in specialised stores |
|  | 52.41 | Retail sale of textiles |
|  | 52.42 | Retail sale of clothing |
|  | 52.43 | Retail sale of footwear and leather goods |
|  | 52.44 | Retail sale of furniture, lighting equipment and household articles not elsewhere classified |
|  | 52.45 | Retail sale of electrical household appliances and radio and television goods |
|  | 52.46 | Retail sale of hardware, paints and glass |
|  | 52.47 | Retail sale of books, newspapers and stationery |
|  | 52.48 | Other retail sale in specialised stores |
| 52.5 |  | Retail sale of second-hand goods in stores |
|  | 52.50 | Retail sale of second-hand goods in stores |
| 52.6 |  | Retail sale not in stores |
|  | 52.61 | Retail sale via mail order houses |
|  | 52.62 | Retail sale via stalls and markets |
|  | 52.63 | Other non-store retail sale |
| 52.7 |  | Repair of personal and household goods |
|  | 52.71 | Repair of boots, shoes and other articles of leather |
|  | 52.72 | Repair of electrical household goods |




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RENTING OF MACHINERY AND EQUIPMENT WITHOUT OPERATOR AND OF PERSONAL AND HOUSEHOLD GOODS

Renting of automobiles
Renting of automobiles
Renting of other transport equipment
Renting of other land transport equipment
Renting of water transport equipment
Renting of air transport equipment
Renting of other machinery and equipment
Renting of agricultural machinery and equipment
Renting of construction and civil engineering machinery and equipment
Renting of office machinery and equipment including computers
Renting of other machinery and equipment not elsewhere classified
Renting of personal and household goods not elsewhere classified
Renting of personal and household goods not elsewhere classified
COMPUTER AND RELATED ACTIVITIES
Hardware consultancy
Hardware consultancy
Software consultancy and supply
Software consultancy and supply
Data processing
Data processing
Data base activities
Data base activities
Maintenance and repair of office, accounting and computing machinery Maintenance and repair of office, accounting and computing machinery

Other computer related activities
Other computer related activities
RESEARCH AND DEVELOPMENT
Research and experimental development on natural sciences and engineering
Research and experimental development on natural sciences and engineering

Research and experimental development on social sciences and humanities
Research and experimental development on social sciences and humanities

## OTHER BUSINESS ACTIVITIES

Legal, accounting, book-keeping and auditing activities; tax consultancy; market research and public opinion polling; business and management consultancy; holdings
Legal activities
Accounting, book-keeping and auditing activities; tax consultancy Market research and public opinion polling Business and management consultancy activities Management activities of holding companies

Architectural and engineering activities and related technical

|  | 74.20 | consultancy <br> Architectural and engineering activities and related technical consultancy |
| :---: | :---: | :---: |
| 74.3 |  | Technical testing and analysis |
|  | 74.30 | Technical testing and analysis |
| 74.4 |  | Advertising |
|  | 74.40 | Advertising |
| 74.5 |  | Labour recruitment and provision of personnel |
|  | 74.50 | Labour recruitment and provision of personnel |
| 74.6 |  | Investigation and security activities |
|  | 74.60 | Investigation and security activities |
| 74.7 |  | Industrial cleaning |
|  | 74.70 | Industrial cleaning |
| 74.8 |  | Miscellaneous business activities not elsewhere classified |
|  | 74.81 | Photographic activities |
|  | 74.82 | Packaging activities |
|  | 74.83 | Secretarial and translation activities |
|  | 74.84 | Other business activities not elsewhere classified |
| SECTION L |  | PUBLIC ADMINISTRATION AND DEFENCE; COMPULSORY SOCIAL SECURITY |
| $\begin{array}{rr}75 \\ & 75.1\end{array}$ |  | PUBLIC ADMINISTRATION AND DEFENCE; COMPULSORY SOCIAL SECURITY |
|  |  | Administration of the State and the economic and social policy of the community |
|  | 75.11 | General (overall) public service activities |
|  | 75.12 | Regulation of the activities of agencies that provide health care, education, cultural services and other social services excluding social security |
|  | 75.13 | Regulation of and contribution to more efficient operation of business |
|  | 75.14 | Supporting service activities for the government as a whole |
| 75.2 |  | Provision of services to the community as a whole |
|  | 75.21 | Foreign affairs |
|  | 75.22 | Defence activities |
|  | 75.23 | Justice and judicial activities |
|  | 75.24 | Public security, law and order activities |
|  | 75.25 | Fire service activities |
| 75.3 |  | Compulsory social security activities |
|  | 75.30 | Compulsory social security activities |
| SECTION M |  | EDUCATION |
| 80 |  | EDUCATION |
| 80.1 |  | Primary education |
|  | 80.10 | Primary education |
| 80.2 |  | Secondary education |
|  | 80.21 | General secondary education |
|  | 80.22 | Technical and vocational secondary education |
| 80.3 |  | Higher education |
|  | 80.30 | Higher education |
| 80.4 |  | Adult and other education |
|  | 80.41 | Driving school activities |
|  | 80.42 | Adult and other education not elsewhere classified |


| SECTION N |  | HEALTH AND SOCIAL WORK |
| :---: | :---: | :---: |
| 85 |  | HEALTH AND SOCIAL WORK |
|  |  | Human health activities |
|  | 85.11 | Hospital activities |
|  | 85.12 | Medical practice activities |
|  | 85.13 | Dental practice activities |
|  | 85.14 | Other human health activities |
| 85.2 |  | Veterinary activities |
|  | 85.20 | Veterinary activities |
| 85.3 |  | Social work activities |
|  | 85.31 | Social work activities with accommodation |
|  | 85.32 | Social work activities without accommodation |
| SECTION 0 |  | OTHER COMMUNITY, SOCIAL AND PERSONAL SERVICE ACTIVITIES |
| 90 |  | SEWAGE AND REFUSE DISPOSAL, SANITATION AND SIMILAR ACTIVITIES |
| 90.0 |  | Sewage and refuse disposal, sanitation and similar activities Sewage and refuse disposal, sanitation and similar activities |
|  | 90.00 |  |
| 91 |  | ACTIVITIES OF MEMBERSHIP ORGANISATIONS NOT ELSEWHERE CLASSIFIED |
|  |  | Activities of business, employers and professional organisations Activities of business and employers organisations Activities of professional organisations |
|  | 91.11 |  |
|  | 91.12 |  |
| 91.2 |  | Activities of trade unions |
|  | 91.20 | Activities of trade unions |
| 91.3 |  | Activities of other membership organisations |
|  | 91.31 | Activities of religious organisations |
|  | 91.32 | Activities of political organisations |
|  | 91.33 | Activities of other membership organisations not elsewhere classified |
| 92 |  | RECREATIONAL, CULTURAL AND SPORTING ACTIVITIES |
|  |  | Motion picture and video activities |
|  | 92.11 | Motion picture and video production |
|  | 92.12 | Motion picture and video production |
|  | 92.13 | Motion picture projection |
| 92.2 |  | Radio and television activities |
|  | 92.20 | Radio and television activities |
| 92.3 |  | Other entertainment activities |
|  | 92.31 | Artistic and literary creation and interpretation |
|  | 92.32 | Operation of arts facilities |
|  | 92.33 | Fair and amusement park activities |
|  | 92.34 | Other entertainment activities not elsewhere classified |
| 92.4 |  | News agency activities |
|  | 92.40 | News agency activities |
| 92.5 |  | Library, archives, museums and other cultural activities <br> Library and archives activities <br> Museum activities and preservation of historical sites and buildings <br> Botanical and zoological gardens and nature reserves activities |
|  | 92.51 |  |
|  | 92.52 |  |
|  | 92.53 |  |
| 92.6 |  | Sporting activities Operation of sports arenas and stadiums Other sporting activities |
|  | 92.61 |  |
|  | 92.62 |  |


| 92.7 |  | Other recreational activities |
| :---: | :---: | :---: |
|  | 92.71 | Gambling and betting activities |
|  | 92.72 | Other recreational activities not elsewhere classified |
| $\begin{array}{r}93 \\ \hline 93.0\end{array}$ |  | OTHER SERVICE ACTIVITIES |
|  |  | Other service activities |
|  | 93.01 | Washing and dry cleaning of textile and fur products |
|  | 93.02 | Hairdressing and other beauty treatment |
|  | 93.03 | Funeral and related activities |
|  | 93.04 | Physical well-being activities |
|  | 93.05 | Other service activities not elsewhere classified |
| SECTION P |  | PRIVATE HOUSEHOLDS WITH EMPLOYED PERSONS |
| 95 |  | PRIVATE HOUSEHOLDS WITH EMPLOYED PERSONS |
| 95.0 |  | Private households with employed persons |
|  | 95.00 | Private households with employed persons |
| SECTION Q |  | EXTRA-TERRITORIAL ORGANISATIONS AND BODIES |
| 99 |  | EXTRA-TERRITORIAL ORGANISATIONS AND BODIES |
| 99.0 |  | Extra-territorial organisations and bodies |
|  | 99.00 | Extra-territorial organisations and bodies |

### 3.9. Standard Occupational Classification 1990 (SOC)

## Available at all waves

Occupational coding was carried out using the CASOC system. See Section on Sampling and Survey Methods for more details.

The Standard Occupational Classification 1990 (SOC) is broken down into 3 areas; the major groups, the minor groups and the constituent unit groups. At the most detailed level of classification 374 unit groups are distinguished, each with a 3 digit classification. Each occupation unit group is allocated to a minor group (two digit), of which there are 77 and a major group (one digit) of which there are 9. The major group structure is a set of broad occupational categories which are designed be useful in bringing together unit groups which are similar in terms of the qualifications, training, skills and experience.

In the 3 digit unit group codes, the first digit denotes the major group classification in which it is contained. The first 2 digits of the unit group codes denote the minor group classification.

Source: Quarterly Labour Force Survey, March-May 1992: User Guide, September 1992.

## 1: MAJOR GROUPS

1 Managers \& administrators
2 Professional occupations
3 Associate professional \& technical occupations
4 Clerical \& secretarial occupations
5 Craft \& related occupations
$6 \quad$ Personal \& protective service occupations
7 Sales occupations
8 Plant \& machine operatives
$9 \quad$ Other occupations

## 2: MINOR GROUPS²

10 General managers \& administrators in national \& local Government, large companies \& organisations
11 Production managers in manufacturing, construction, mining \& energy industries
12 Specialist managers
13 Financial institution \& office managers, civil service executive officers
14 Managers in transport \& storing
15 Protective service officers
16 Managers in farming, horticulture, forestry \& fishing
17 Managers \& proprietors in service industries
19 Managers \& administrators nec
20 Natural scientists
21 Engineers \& technologists
22 Health professionals
23 Teaching professionals
24 Legal professionals
25 Business \& financial professionals
26 Architects, town planners \&surveyors
27 Librarians \& related professionals
29 Professional occupations nec
30 Scientific technicians
31 Draftspersons, quantity \& other surveyors
32 Computer analyst/programmers
33 Ship \& aircraft officers, air traffic planners \& controllers
2. In the following, "nec" means "not elsewhere classified".

34 Health associate professionals
35 Legal associate professionals
36 Business \& financial associate professionals
37 Social welfare associate professionals
39 Associate professional \& technical occupations nec
40 Administrative/clerical officers \& assistants in civil service \& local government
41 Numerical clerks \& cashiers
42 Filing \& records clerks
43 Clerks (not otherwise specified)
44 Stores \& despatch clerks, storekeepers
45 Secretaries, personal assistants, typists, word processor operators
46 Receptionists, telephonists \& related occupations
49 Clerical \& secretarial occupations nec
50 Construction trades
51 Metal machining, fitting \&instrument making trades
52 Electrical/electronic trades
53 Metal forming, welding \& related trades
54 Vehicle trades
55 Textiles, garments \& related trades
56 Printing \& related trades
57 Woodworking trades
58 Food preparation trades
59 Other craft \&related occupations nec
60 NCOs \& other ranks, armed forces
61 Security \& protective service occupations
62 Catering occupations
63 Travel attendants \& related occupations
64 Health \& related occupations
65 Childcare \& related occupations
66 Hairdressers, beauticians \& related occupations
67 Domestic staff \&related occupations
69 Personal \& protective service occupations nec
70 Buyers, brokers \& related agents
71 Sales representatives
72 Sales assistants \& check-out operators
73 Mobile market \& door-to-door salespersons \& agents
79 Sales occupations nec
80 Food, drink \& tobacco process operatives
81 Textiles \& tannery process operatives
82 Chemicals, paper, plastics \& related process operatives
83 Metal making \&treating process operatives
84 Metal working process operatives
85 Assemblers/lineworkers
86 Other routine process operatives
87 Road transport operatives
88 Other transport \& machinery operatives
89 Plant \& machine operatives nec
90 Other occupations in agriculture, forestry \& fishing
91 Other occupations in mining \& manufacture
92 Other occupations in construction
93 Other occupations in transport
94 Other occupations in communication
95 Other occupations in sales \& service
99 Other occupations nec

## 3: UNIT GROUPS

100 General administrators; nation government (Assistant Secretary/Grade 5 \& above)

216 Design \& development engineers
217 Process \& production engineers
218 Planning \& quality control engineers

219 Other engineers \& technologists nec
220 Medical practitioners
221 Pharmacists/pharmacologists
222 Ophthalmic opticians
223 Dental practitioners

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271 Archivists \& curators
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312 Quantity surveyors
313 Marine, insurance \& other surveyors
320 Computer analyst/programmers
330 Air traffic planners \& controllers
331 Aircraft flight deck officers
332 Ship \& hovercraft officers
340 Nurses
341 Midwives
342 Medical radiographers
343 Physiotherapists
344 Chiropodists
345 Dispensing opticians
346 Medical technicians, dental auxiliaries
347 Occupational \& speech therapists, psychotherapists, therapists nec
348 Environmental health officers
349 Other health associate professionals nec
350 Legal service \& related occupations
360 Estimators, valuers
361 Underwriters, claims assessors, brokers, investment analysts
362 Taxation experts
363 Personnel \& industrial relations officers
364 Organisation \& methods \& work study officers
370 Matrons, houseparents
371 Welfare, community \& youth workers
380 Authors, writers, journalists

381 Artists, commercial artists, graphic designers

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501 Roofers, slaters, tilers, sheeters, cladders
502 Plasterers
503 Glaziers
504 Builders, building contractors
505
Floorers, floor coverers, carpet fitters \& planners, floor \& wall tilers
507 Painters \& decorators
509 Other construction trades nec
510 Centre, capstan, turret \& other lathe setters \& setter-operators
511 Boring \& drilling machine setters \& setter-operators
512 Grinding machine setters \& setter-operators
513 Milling machine setters \& setter-operators
514 Press setters \& setter-operators
515 Tool makers, tool fitters \& markers-out
516 Metal working production \& maintenance fitters
517 Precision instrument makers \& repairers
518 Goldsmiths, silversmiths, precious stone workers
519 Other machine tool setters \& setter-operators nec (inc CNC setter-operators)
520 Production fitters (electrical/electronic)
521 Electricians, electrical maintenance fitters
522 Electrical engineers (not professional)
523 Telephone fitters
524 Cable jointers, lines repairers
525 Radio, TV \& video engineers
526 Computer engineers, installation \& maintenance
529 Other electrical/electronic trades nec

530 Smiths \& forge workers
531 Moulders, core makers, die casters
532 Plumbers, heating \& ventilating engineers \& related trades
533 Sheet metal workers
534 Metal plate workers, shipwrights, riveters
535 Steel erectors
536 Barbenders, steel fixers
537 Welding trades
540 Motor mechanics, auto engineers (inc. road patrol engineers)
541 Coach \& vehicle body builders
542 Vehicle body repairers, panel beaters
543 Auto electricians
544 Tyre \& exhaust fitters
550 Weavers
551 Knitters
552 Warp preparers, bleachers, dyers \& finishers
553 Sewing machinists, menders, darners \& embroiderers
554 Coach trimmers, upholsterers \& mattress makers
555 Shoe repairers, leather cutters \& sewers, footwear lasters, makers \& finishers, other leather making \& repairing
556 Tailors \& dressmakers
557 Clothing cutters, milliners, furriers
559 Other textiles, garments \& related trades nec
560 Originators, compositors \& print preparers
561 Printers
562 Bookbinders \& print finishers
563 Screen printers
569 Other printing \& related trades nec
570 Carpenters \& joiners
571 Cabinet makers
572 Case \& box makers
573 Pattern makers (moulds)
579 Other woodworking trades nec
580 Bakers, flour confectioners
581 Butchers, meat cutters
582 Fishmongers, poultry dressers
590 Glass product \& ceramics makers
591 Glass product \& ceramics finishers \& decorators
592 Dental technicians
593 Musical instrument makers, piano tuners
594 Gardeners, groundsmen/groundswomen
595 horticultural trades
596 Coach painters, other spray painters
597 Face trained coalmining workers, shotfirers \& deputies
598 Other machinery mechanics
599 Other craft \& related occupations nec
600 NCOs \& other ranks, UK armed forces
601 NCOs \& other ranks, foreign \& Commonwealth armed forces
610 Police officers (sergeant \& below)
611 Fire service officers (leading fire officer \& below)
612 Prison service officers (below principal officer)
613 Customs \& excise officers, immigration officers (customs: below chief preventive officer; excise: below surveyor)
614 Traffic wardens
615 Security guards \& related occupations
619 Other security \& protective service occupations nec
620 Chefs, cooks
621 Waiters, waitresses
622 Bar staff
630 Travel \& flight attendants
631 Railway station staff
640 Assistant nurses, nursing auxiliaries

641 Hospital ward assistants
642 Ambulance staff
643 Dental nurses
644 Care assistants \& attendants
650 Nursery nurses
651 Playgroup leaders
652 Educational assistants
659 Other childcare \& related occupations nec
660 Hairdressers, barbers
661 Beauticians \& related occupations
670 Domestic housekeepers \& related occupations
671 Housekeepers (non domestic)
672 Caretakers
673 Launderers, dry cleaners, pressers
690 Undertakers
691 Bookmakers
699 Other personal \& protective service occupations nec
700 Buyers (retail trade)
701 Buyers \& purchasing officers (not retail)
702 Importers \& exporters
703 Air, commodity \& ship brokers
710 Technical \& wholesale sales representatives
719 Other sales representatives nec
720 Sales assistants
721 Retail cash desk \& check-out operators
722 Petrol pump forecourt attendants
730 Collector salespersons \& credit agents
731 Roundsmen/women \& van salespersons
732 Market \& street traders \& assistants
733 Scrap dealers, scrap metal merchants
790 Merchandisers
791 Window dressers, floral arrangers
792 Telephone salespersons
800 Bakery \& confectionery process operatives
801 Brewery \& vinery process operatives
802 Tobacco process operatives
809 Other food, drink \& tobacco process operatives nec
810 Tannery production operatives
811 Preparatory fibre processors
812 Spinners, doublers,twisters
813 Winders, reelers
814 Other textiles processing operatives
820 Chemical, gas \& petroleum process plant operatives
821 Paper, wood \& related process plant operatives
822 Cutting \& slitting machine operatives (paper products etc)
823 Glass \& ceramics furnace operatives, kilnsetters
824 Rubber process operatives, moulding machine operatives, tyre builders
825 Plastics process operatives, moulders \& extruders
826 Synthetic fibre makers
829 Other chemicals, paper, plastics \& related process operatives nec
830 Furnace operatives (metal)
831 Metal drawers
832 Rollers
833 Annealers, hardeners, temperers (metal)
834 Electroplaters, galvanisers, colour coaters
839 Other metal making \& treating process operatives nec
840 Machine tool operatives (inc CNC machine tool operatives)
841 Press stamping \& automatic machine operatives
842 Metal polishers
843 Metal dressing operatives
844 Shot blasters
850 Assemblers/lineworkers (electrical/electronic goods)

851 Assemblers/lineworkers (vehicles \& other metal goods)
859 Other assemblers/lineworkers nec
860 Inspectors, viewers \& testers (metal \& electrical goods)
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956 Window cleaners
957 Road sweepers
958 Cleaners, domestics
959 Other occupations in sales \& services nec
990 All other labourers \& related workers
999 All others in miscellaneous occupations nec

### 3.10. Standard Occupational Classification 2000 (SOC2000)

## Used from Wave 11 onwards

## Standard Occupational Classification 2000 (SOC2000)

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## Summary of Structure

The Standard Occupational Classification consists of the following major groups:

## 1 Managers and Senior Officials

2 Professional Occupations
3 Associate Professional and Technical Occupations
4 Administrative and Secretarial Occupations
5 Skilled Trades Occupations
6 Personal Service Occupations
7 Sales and Customer Service Occupations
8 Process, Plant and Machine Operatives
9 Elementary Occupations
The sub-major, minor group and unit group structure of these major groups is defined as follows:

| Major | Sub-Major | Minor | Unit | Group Title |
| :--- | :--- | :--- | :--- | :--- |
| Group | Group | Group | Group |  |

1

111 Corporate Managers And Senior Officials
1111 Senior officials in national government
1112 Directors and chief executives of major organisations
1113 Senior officials in local government
1114 Senior officials of special interest organisations
112
1121 Production, works and maintenance managers
1122 Managers in construction
1123 Managers in mining and energy
113
Functional Managers
1131 Financial managers and chartered secretaries
1132 Marketing and sales managers
1133 Purchasing managers
1134 Advertising and public relations managers
1135 Personnel, training and industrial relations managers
1136 Information and communication technology managers
1137 Research and development managers

|  | 114 |  | Quality And Customer Care Managers |
| :---: | :---: | :---: | :---: |
|  |  | 1141 | Quality assurance managers |
|  |  | 1142 | Customer care managers |
|  | 115 |  | Financial Institution And Office Managers |
|  |  | 1151 | Financial institution managers |
|  |  | 1152 | Office managers |
|  | 116 |  | Managers In Distribution, Storage And Retailing |
|  |  | 1161 | Transport and distribution managers |
|  |  | 1162 | Storage and warehouse managers |
|  |  | 1163 | Retail and wholesale managers |
|  | 117 |  | Protective Service Officers |
|  |  | 1171 | Officers in armed forces |
|  |  | 1172 | Police officers (inspectors and above) |
|  |  | 1173 | Senior officers in fire, ambulance, prison and related services |
|  |  | 1174 | Security managers |
|  | 118 |  | Health And Social Services Managers |
|  |  | 1181 | Hospital and health service managers |
|  |  | 1182 | Pharmacy managers |
|  |  | 1183 | Healthcare practice managers |
|  |  | 1184 | Social services managers |
|  |  | 1185 | Residential and day care managers |
| 12 |  |  | MANAGERS AND PROPRIETORS IN AGRICULTURE AND SERVICES |
|  | 121 |  | Managers In Farming, Horticulture, Forestry And Fishing |
|  |  | 1211 | Farm managers |
|  |  | 1212 | Natural environment and conservation managers |
|  |  | 1219 | Managers in animal husbandry, forestry and fishing n.e.c. |
|  | 122 |  | Managers And Proprietors In Hospitality And Leisure Services |
|  |  | 1221 | Hotel and accommodation managers |
|  |  | 1222 | Conference and exhibition managers |
|  |  | 1223 | Restaurant and catering managers |
|  |  | 1224 | Publicans and managers of licensed premises |
|  |  | 1225 | Leisure and sports managers |
|  |  | 1226 | Travel agency managers |
|  | 123 |  | Managers And Proprietors In Other Service Industries |
|  |  | 1231 | Property, housing and land managers |
|  |  | 1232 | Garage managers and proprietors |
|  |  | 1233 | Hairdressing and beauty salon managers and proprietors |
|  |  | 1234 | Shopkeepers and wholesale/retail dealers |
|  |  | 1235 | Recycling and refuse disposal managers |
|  |  | 1239 | Managers and proprietors in other services n.e.c. |


| Major | Sub-Major | Minor | Unit | Group Title |
| :--- | :--- | :--- | :--- | :--- |
| Group | Group | Group | Group |  |

21

211

212

2121
2122
2123
2124
2125
2126
2127
2128
2129
213

2131 IT strategy and planning professionals
2132 Software professionals
22
221
2211 Medical practitioners
2212 Psychologists
2213 Pharmacists/pharmacologists
2214 Ophthalmic opticians
2215 Dental practitioners
2216
23
231
2311
2312
2313
2314
2315
2316
2317
2319 Teaching professionals n.e.c.
232
Research Professionals
2321 Scientific researchers
2322 Social science researchers
2329 Researchers n.e.c.

## 241

242
2421 Chartered and certified accountants
2422 Management accountants
2423 Management consultants, actuaries, economists and statisticians

Architects, Town Planners, Surveyors
2431 Architects
2432 Town planners
2433 Quantity surveyors
2434 Chartered surveyors (not quantity surveyors)

2441 Public service administrative professionals
2442 Social workers
2443 Probation officers
2444 Clergy
245
45
Librarians And Related Professionals

2451 Librarians
2452 Archivists and curators

| Major | Sub-Major | Minor | Unit | Group Title |
| :--- | :--- | :--- | :--- | :--- |
| Group | Group | Group | Group |  |

3111 Laboratory technicians
3112 Electrical/electronics technicians
3113 Engineering technicians
3114 Building and civil engineering technicians
3115 Quality assurance technicians
3119 Science and engineering technicians n.e.c.

3121 Architectural technologists and town planning technicians
3122 Draughtspersons
3123 Building inspectors

3131 IT operations technicians
3132 IT user support technicians
32

3211
HEALTH AND SOCIAL WELFARE ASSOCIATE PROFESSIONALS

Health Associate Professionals

3211 Nides
3212 Midwives
3213 Paramedics
3214 Medical radiographers
3215 Chiropodists
3216 Dispensing opticians
3217 Pharmaceutical dispensers
3218 Medical and dental technicians
322
3221 Physiotherapists
3222 Occupational therapists
3223 Speech and language therapists
3229 Therapists n.e.c.
323
Social Welfare Associate Professionals

3231 Youth and community workers
3232 Housing and welfare officers
33
331
PROTECTIVE SERVICE OCCUPATIONS
Protective Service Occupations
3311 NCOs and other ranks
3312 Police officers (sergeant and below)
3313 Fire service officers (leading fire officer and below)

3314 Prison service officers (below principal officer)
3319 Protective service associate professionals n.e.c.

3414
Dancers and choreographers
3415 Musicians
3416 Arts officers, producers and directors

3431 Journalists, newspaper and periodical editors
3432 Broadcasting associate professionals
3433 Public relations officers
3434 Photographers and audio-visual equipment operators

3441 Sports players
3442 Sports coaches, instructors and officials
3443 Fitness instructors
3449 Sports and fitness occupations n.e.c.
BUSINESS AND PUBLIC SERVICE ASSOCIATE PROFESSIONALS

Transport Associate Professionals
3511 Air traffic controllers
3512 Aircraft pilots and flight engineers
3513 Ship and hovercraft officers
3514 Train drivers
Legal Associate Professionals
3520 Legal associate professionals

3531 Estimators, valuers and assessors
3532 Brokers
3533 Insurance underwriters
3534 Finance and investment analysts/advisers
3535 Taxation experts
3536 Importers, exporters
3537 Financial and accounting technicians
3539 Business and related associate professionals n.e.c.

Sales And Related Associate Professionals
Buyers and purchasing officers
Sales representatives

|  | 3543 | Marketing associate professionals |
| :---: | :---: | :---: |
|  | 3544 | Estate agents, auctioneers |
| 355 |  | Conservation Associate Professionals |
|  | 3551 | Conservation and environmental protection officers |
|  | 3552 | Countryside and park rangers |
| 356 |  | Public Service And Other Associate Professionals |
|  | 3561 | Public service associate professionals |
|  | 3562 | Personnel and industrial relations officers |
|  | 3563 | Vocational and industrial trainers and instructors |
|  | 3564 | Careers advisers and vocational guidance specialists |
|  | 3565 | Inspectors of factories, utilities and trading standards |
|  | 3566 | Statutory examiners |
|  | 3567 | Occupational hygienists and safety officers (health and safety) |
|  | 3568 | Environmental health officers |


| Major <br> Group | Sub-Major <br> Group | Minor <br> Group | Unit <br> Group |
| :--- | :--- | :--- | :--- | | Group Title |
| :--- |
| 4 |


| Major | Sub-Major | Minor | Unit | Group Title |
| :--- | :--- | :--- | :--- | :--- |
| Group | Group | Group | Group |  |

5111 Farmers

5112 Horticultural trades
5113 Gardeners and groundsmen/groundswomen
5119 Agricultural and fishing trades n.e.c.
52
521
5211 Smiths and forge workers
5212 Moulders, core makers, die casters
5213 Sheet metal workers
5214 Metal plate workers, shipwrights, riveters
5215 Welding trades
5216 Pipe fitters
522

5221 Metal machining setters and setter-operators
5222 Tool makers, tool fitters and markers-out
5223 Metal working production and maintenance fitters
5224 Precision instrument makers and repairers
Vehicle Trades

5232 Vehicle body builders and repairers
5233 Auto electricians
5234 Vehicle spray painters
524
5241
5242
5243
5244 TV, video and audio engineers
5245 Computer engineers, installation and maintenance
5249 Electrical/electronics engineers n.e.c.
53

## 531

SKILLED CONSTRUCTION AND BUILDING TRADES

## Construction Trades

5311 Steel erectors
5312 Bricklayers, masons
5313 Roofers, roof tilers and slaters
5314 Plumbers, heating and ventilating engineers
5315 Carpenters and joiners
5316 Glaziers, window fabricators and fitters
5319 Construction trades n.e.c.

5321 Plasterers
5322 Floorers and wall tilers
5323 Painters and decorators

5411 Weavers and knitters
5412 Upholsterers
5413 Leather and related trades
5414 Tailors and dressmakers
5419 Textiles, garments and related trades n.e.c.
Printing Trades

5421 Originators, compositors and print preparers
5422 Printers
5423 Bookbinders and print finishers
5424 Screen printers
Food Preparation Trades
5431 Butchers, meat cutters
5432 Bakers, flour confectioners
5433 Fishmongers, poultry dressers
5434 Chefs, cooks

5491 Glass and ceramics makers, decorators and finishers
5492 Furniture makers, other craft woodworkers
5493 Pattern makers (moulds)
5494 Musical instrument makers and tuners
5495 Goldsmiths, silversmiths, precious stone workers
5496 Floral arrangers, florists
5499 Hand craft occupations n.e.c.

| Major | Sub-Major | Minor | Unit | Group Title |
| :--- | :--- | :--- | :--- | :--- |
| Group | Group | Group | Group |  |

6

## 61

6111 Nursing auxiliaries and assistants
6112 Ambulance staff (excluding paramedics)
6113 Dental nurses
6114 Houseparents and residential wardens
6115 Care assistants and home carers
612 Childcare And Related Personal Services
6121 Nursery nurses
6122 Childminders and related occupations
6123 Playgroup leaders/assistants
6124 Educational assistants
613
Animal Care Services
6131 Veterinary nurses and assistants
6139 Animal care occupations n.e.c.
62
LEISURE AND OTHER PERSONAL SERVICE OCCUPATIONS

Leisure And Travel Service Occupations
6211 Sports and leisure assistants
6212 Travel agents
6213 Travel and tour guides
6214 Air travel assistants
6215 Rail travel assistants
6219 Leisure and travel service occupations n.e.c.

6221 Hairdressers, barbers
6222 Beauticians and related occupations

623
6231 Housekeepers and related occupations
6232 Caretakers
Personal Services Occupations n. e. c.
6291 Undertakers and mortuary assistants
6292 Pest control officers

| Major <br> Group | Sub-Major <br> Group | Minor <br> Group | Unit <br> Group | Group Title |
| :--- | :--- | :--- | :--- | :--- |
| $\mathbf{7}$ |  |  |  | SALES AND CUSTOMER SERVICE OCCUPATIONS |
|  | 71 |  |  | SALES OCCUPATIONS |

$\left.\begin{array}{llll}\begin{array}{l}\text { Major } \\ \text { Group }\end{array} & \begin{array}{l}\text { Sub-Major } \\ \text { Group }\end{array} & \begin{array}{l}\text { Minor } \\ \text { Group }\end{array} & \begin{array}{l}\text { Unit } \\ \text { Group }\end{array}\end{array} \begin{array}{l}\text { Group Title }\end{array}\right]$

8219 Transport operatives n.e.c.

## Mobile Machine Drivers And Operatives

8221 Crane drivers
8222 Fork-lift truck drivers
8223 Agricultural machinery drivers
8229 Mobile machine drivers and operatives n.e.c.

| Major <br> Group | Sub-Major <br> Group | Minor <br> Group | Unit <br> Group |
| :--- | :--- | :--- | :--- | | Group Title |
| :--- |
| 9 |

### 3.11. International Standard Classification of Occupations ISCO-88

## Available at all waves.

The ISCO-88 has a hierarchical structure, with ten major groups at the top level of aggregation, subdivided into 28 major sub-groups, 116 minor groups, and 390 unit groups. The BHPS is coded to the four digit level. Coding has been done using CASOC; the resulting variable is a string variable, unlike SOC coding. For further details, see section on Sampling and Survey Methods or the publication on CASOC referenced there.

Source: International Labour Organisation ${ }^{3}$

## MAJOR, SUB-MAJOR, MINOR AND UNIT GROUP TITLES

## MAJOR GROUP 1

## LEGISLATORS, SENIOR OFFICIALS AND MANAGERS

11 LEGISLATORS AND SENIOR OFFICIALS
111 LEGISLATORS
1110 Legislators

112 SENIOR GOVERNMENT OFFICIALS
1120 Senior government officials

113 TRADITIONAL CHIEFS AND HEADS OF VILLAGES
1130 Traditional chiefs and heads of villages

114 SENIOR OFFICIALS OF SPECIAL-INTEREST ORGANISATIONS
1141 Senior officials of political-party organisations
1142 Senior officials of employers', workers' and other economic-interest organisations
1143 Senior officials of humanitarian and other special-interest organisations

12 CORPORATE MANAGERS (This group is intended to include persons who - as directors, chief executives or department managers - manage enterprises or organisations, or departments, requiring a total of three or more managers.)

121 DIRECTORS AND CHIEF EXECUTIVES
1210 Directors and chief executives
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## PRODUCTION AND OPERATIONS DEPARTMENT MANAGERS

Production and operations department managers in agriculture, hunting, forestry and fishing
Production and operations department managers in manufacturing
Production and operations department managers in construction
Production and operations department managers in wholesale and retail trade
Production and operations department managers in restaurants and hotels
Production and operations department managers in transport, storage and communications
Production and operations department managers in business services
Production and operations department managers in personal care, cleaning and related services

Production and operations department managers not elsewhere classified

## OTHER DEPARTMENT MANAGERS

Finance and administration department managers
Personnel and industrial relations department managers
Sales and marketing department managers
Advertising and public relations department managers
Supply and distribution department managers
Computing services department managers
Research and development department managers
Other department managers not elsewhere classified

GENERAL MANAGERS (This group is intended to include persons who manage enterprises, or in some cases organisations, on their own behalf, or on behalf of the proprietor, with some non-managerial help and the assistance of no more than one other manager who should also be classified in this sub- major group as, in most cases, the tasks will be broader than those of a specialised manager in a larger enterprise or organisation. Non-managerial staff should be classified according to their specific tasks.

GENERAL MANAGERS

General managers in agriculture, hunting, forestry/ and fishing
General managers in manufacturing
General managers in construction
General managers in wholesale and retail trade
General managers of restaurants and hotels

1316 General managers in transport, storage and communications
1317 General managers of business services
1318 General managers in personal care, cleaning and related services
1319 General managers not elsewhere classified

## MAJOR GROUP 2

## PROFESSIONALS

21 PHYSICAL, MATHEMATICAL AND ENGINEERING SCIENCE PROFESSIONALS
211 PHYSICISTS, CHEMISTS AND RELATED PROFESSIONALS
2111 Physicists and astronomers
2112 Meteorologists
2113 Chemists
2114 Geologists and geophysicists

212 MATHEMATICIANS, STATISTICIANS AND RELATED PROFESSIONALS
2121 Mathematicians and related professionals
2122 Statisticians

213 COMPUTING PROFESSIONALS
2131 Computer systems designers and analysts
2132 Computer programmers
2139 Computing professionals not elsewhere classified

214 ARCHITECTS, ENGINEERS AND RELATED PROFESSIONALS
2141 Architects, town and traffic planners
2142 Civil engineers
2143 Electrical engineers
2144 Electronics and telecommunications engineers
2145 Mechanical engineers
2146 Chemical engineers
2147 Mining engineers, metallurgists and related professionals
2148 Cartographers and surveyors
2149 Architects, engineers and related professionals not elsewhere classified

## 22 LIFE SCIENCE AND HEALTH PROFESSIONALS

221 LIFE SCIENCE PROFESSIONALS
2211 Biologists, botanists, zoologists and related professionals
2212 Pharmacologists, pathologists and related professionals
2213 Agronomists and related professionals

222 HEALTH PROFESSIONALS (except nursing)
2221 Medical doctors
2222 Dentists
2223 Veterinarians
2224 Pharmacists
2229 Health professionals (except nursing) not elsewhere classified

223 NURSING AND MIDWIFERY PROFESSIONALS
2230 Nursing and midwifery professionals

23 TEACHING PROFESSIONALS
231 COLLEGE, UNIVERSITY AND HIGHER EDUCATION TEACHING PROFESSIONALS
2310 College, university and higher education teaching professionals

SECONDARY EDUCATION TEACHING PROFESSIONALS
2320 Secondary education teaching professionals

PRIMARY AND PRE-PRIMARY EDUCATION TEACHING PROFESSIONALS
2331 Primary education teaching professionals
2332 Pre-primary education teaching professionals

SPECIAL EDUCATION TEACHING PROFESSIONALS
2340 Special education teaching professionals
235 OTHER TEACHING PROFESSIONALS
2351 Education methods specialists
2352 School inspectors
2359 Other teaching professionals not elsewhere classified

24 OTHER PROFESSIONALS
241 BUSINESS PROFESSIONALS

2411 Accountants
2412 Personnel and careers professionals
2419 Business professionals not elsewhere classified

242 LEGAL PROFESSIONALS
2421 Lawyers
2422 Judges
2429 Legal professionals not elsewhere classified

ARCHIVISTS, LIBRARIANS AND RELATED INFORMATION PROFESSIONALS
2431 Archivists and curators
2432 Librarians and related information professionals

244 SOCIAL SCIENCE AND RELATED PROFESSIONALS
2441 Economists
2442 Sociologists, anthropologists and related professionals
2443 Philosophers, historians and political scientists
2444 Philologists, translators and interpreters
2445 Psychologists
2446 Social work professionals

245 WRITERS AND CREATIVE OR PERFORMING ARTISTS
2451 Authors, journalists and other writers
2452 Sculptors, painters and related artists
2453 Composers, musicians and singers
2454 Choreographers and dancers
2455 Film, stage and related actors and directors

246 RELIGIOUS PROFESSIONALS
2460 Religious professionals

## MAJOR GROUP 3

## TECHNICIANS AND ASSOCIATE PROFESSIONALS

31 PHYSICAL AND ENGINEERING SCIENCE ASSOCIATE PROFESSIONALS
311 PHYSICAL AND ENGINEERING SCIENCE TECHNICIANS
3111 Chemical and physical science technicians
3112 Civil engineering technicians
3113 Electrical engineering technicians
3114 Electronics and telecommunications engineering technicians
3115 Mechanical engineering technicians
3116 Chemical engineering technicians
3117 Mining and metallurgical technicians
3118 Draughtspersons
3119 Physical and engineering science technicians not elsewhere classified

312 COMPUTER ASSOCIATE PROFESSIONALS
3121 Computer assistants
3122 Computer equipment operators
3123 Industrial robot controllers

3131 Photographers and image and sound recording equipment operators
3132 Broadcasting and telecommunications equipment operators
3133 Medical equipment operators
3139 Optical and electronic equipment operators not elsewhere classified

3141 Ships' engineers
3142 Ships' deck officers and pilots
3143 Aircraft pilots and related associate professionals
3144 Air traffic controllers
3145 Air traffic safety technicians

3151 Building and fire inspectors
3152 Safety, health and quality inspectors

32 LIFE SCIENCE AND HEALTH ASSOCIATE PROFESSIONALS

321 LIFE SCIENCE TECHNICIANS AND RELATED ASSOCIATE PROFESSIONALS
3211 Life science technicians
3212 Agronomy and forestry technicians
3213 Farming and forestry advisers

322 MODERN HEALTH ASSOCIATE PROFESSIONALS (except nursing)
3221 Medical assistants
3222 Sanitarians
3223 Dieticians and nutritionists
3224 Optometrists and opticians
3225 Dental assistants
3226 Physiotherapists and related associate professionals
3227 Veterinary assistants
3228 Pharmaceutical assistants
3229 Modern health associate professionals (except nursing) not elsewhere classified

323 NURSING AND MIDWIFERY ASSOCIATE PROFESSIONALS
3231 Nursing associate professionals
3232 Midwifery associate professionals

324 TRADITIONAL MEDICINE PRACTITIONERS AND FAITH HEALERS
3241 Traditional medicine practitioners
3242 Faith healers

33 TEACHING ASSOCIATE PROFESSIONALS
331 PRIMARY EDUCATION TEACHING ASSOCIATE PROFESSIONALS
3310 Primary education teaching associate professionals

PRE-PRIMARY EDUCATION TEACHING ASSOCIATE PROFESSIONALS
3320 Pre-primary education teaching associate professionals

341 FINANCE AND SALES ASSOCIATE PROFESSIONALS
3411 Securities and finance dealers and brokers
3412 Insurance representatives
3413 Estate agents
3414 Travel consultants and organisers
3415 Technical and commercial sales representatives
3416 Buyers
3417 Appraisers, valuers and auctioneers
3419 Finance and sales associate professionals not elsewhere classified

342 BUSINESS SERVICES AGENTS AND TRADE BROKERS
3421 Trade brokers
3422 Clearing and forwarding agents
3423 Employment agents and labour contractors
3429 Business services agents and trade brokers not elsewhere classified

## SPECIAL EDUCATION TEACHING ASSOCIATE PROFESSIONALS

Special education teaching associate professionals

OTHER TEACHING ASSOCIATE PROFESSIONALS
Other teaching associate professionals

OTHER ASSOCIATE PROFESSIONALS

ADMINISTRATIVE ASSOCIATE PROFESSIONALS
Administrative secretaries and related associate professionals
Legal and related business associate professionals
Bookkeepers
Statistical, mathematical and related associate professionals
Administrative associate professionals not elsewhere classified

CUSTOMS, TAX AND RELATED GOVERNMENT ASSOCIATE PROFESSIONALS
Customs and border inspectors
Government tax and excise officials

3443 Government social benefits officials
3444 Government licensing officials
3449 Customs, tax and related government associate professionals not elsewhere classified

## 345 POLICE INSPECTORS AND DETECTIVES

3450 Police inspectors and detectives
346 SOCIAL WORK ASSOCIATE PROFESSIONALS
3460 Social work associate professionals

347 ARTISTIC, ENTERTAINMENT AND SPORTS ASSOCIATE PROFESSIONALS
3471 Decorators and commercial designers
3472 Radio, television and other announcers
3473 Street, night-club and related musicians, singers and dancers
3474 Clowns, magicians, acrobats and related associate professionals
3475 Athletes, sportspersons and related associate professionals

RELIGIOUS ASSOCIATE PROFESSIONALS
3480 Religious associate professionals

## MAJOR GROUP 4

## CLERKS

## 41 OFFICE CLERKS

411 SECRETARIES AND KEYBOARD-OPERATING CLERKS
4111 Stenographers and typists
4112 Word-processor and related operators
4113 Data entry operators
4114 Calculating-machine operators
4115 Secretaries

412 NUMERICAL CLERKS
4121 Accounting and bookkeeping clerks
4122 Statistical and finance clerks

413 MATERIAL-RECORDING AND TRANSPORT CLERKS

## 4131 Stock clerks <br> 4132 Production clerks <br> 4133 Transport clerks

414 LIBRARY, MAIL AND RELATED CLERKS
4141 Library and filing clerks
4142 Mail carriers and sorting clerks
4143 Coding, proof-reading and related clerks
4144 Scribes and related workers

419 OTHER OFFICE CLERKS

4190 Other office clerks

42 CUSTOMER SERVICES CLERKS
421 CASHIERS, TELLERS AND RELATED CLERKS
4211 Cashiers and ticket clerks
4212 Tellers and other counter clerks

4213 Bookmakers and croupiers
4214 Pawnbrokers and money-lenders
4215 Debt-collectors and related workers

422 CLIENT INFORMATION CLERKS
4221 Travel agency and related clerks
4222 Receptionists and information clerks
4223 Telephone switchboard operators

## MAJOR GROUP 5

## SERVICE WORKERS AND SHOP AND MARKET SALES WORKERS

51 PERSONAL AND PROTECTIVE SERVICES WORKERS
511 TRAVEL ATTENDANTS AND RELATED WORKERS
5111 Travel attendants and travel stewards
5112 Transport conductors
5113 Travel guides

## 512 HOUSEKEEPING AND RESTAURANT SERVICES WORKERS

5121 Housekeepers and related workers
5122 Cooks
5123 Waiters, waitresses and bartenders

513 PERSONAL CARE AND RELATED WORKERS
5131 Child-care workers
5132 Institution-based personal care workers
5133 Home-based personal care workers
5139 Personal care and related workers not elsewhere classified

514 OTHER PERSONAL SERVICES WORKERS
5141 Hairdressers, barbers, beauticians and related workers
5142 Companions and valets
5143 Undertakers and embalmers
5149 Other personal services workers not elsewhere classified

515 ASTROLOGERS, FORTUNE-TELLERS AND RELATED WORKERS
5151 Astrologers and related workers
5152 Fortune-tellers, palmists and related workers

516 PROTECTIVE SERVICES WORKERS
5161 Fire-fighters
5162 Police officers
5163 Prison guards
5169 Protective services workers not elsewhere classified

52 MODELS, SALESPERSONS AND DEMONSTRATORS
521 FASHION AND OTHER MODELS
5210 Fashion and other models

522 SHOP SALESPERSONS AND DEMONSTRATORS
5220 Shop salespersons and demonstrators

5230 Stall and market salespersons

## MAJOR GROUP 6

## SKILLED AGRICULTURAL AND FISHERY WORKERS

61 MARKET-ORIENTED SKILLED AGRICULTURAL AND FISHERY WORKERS
611 MARKET GARDENERS AND CROP GROWERS
6111 Field crop and vegetable growers
6112 Tree and shrub crop growers
6113 Gardeners, horticultural and nursery growers
6114 Mixed-crop growers

612 MARKET-ORIENTED ANIMAL PRODUCERS AND RELATED WORKERS

6121 Dairy and livestock producers
6122 Poultry producers
6123 Apiarists and sericulturists
6124 Mixed-animal producers
6129 Market-oriented animal producers and related workers not elsewhere classified

613 MARKET-ORIENTED CROP AND ANIMAL PRODUCERS
6130 Market-oriented crop and animal producers

614 FORESTRY AND RELATED WORKERS
6141 Forestry workers and loggers
6142 Charcoal burners and related workers

615 FISHERY WORKERS, HUNTERS AND TRAPPERS
6151 Aquatic-life cultivation workers
6152 Inland and coastal waters fishery/ workers
6153 Deep-sea fishery workers
6154 Hunters and trappers

62 SUBSISTENCE AGRICULTURAL AND FISHERY WORKERS
621 SUBSISTENCE AGRICULTURAL AND FISHERY WORKERS
6210 Subsistence agricultural and fishery/ workers

## MAJOR GROUP 7 <br> CRAFT AND RELATED TRADES WORKERS

71 EXTRACTION AND BUILDING TRADES WORKERS
711 MINERS, SHOTFIRERS, STONE CUTTERS AND CARVERS
7111 Miners and quarry workers
7112 Shotfirers and blasters
7113 Stone splitters, cutters and carvers

7137 Building and related electriciansPREPARERS, AND RELATED TRADES WORKERS

7211 Metal moulders and coremakers

7212 Welders and flamecutters
7213 Sheet metal workers
7214 Structural-metal preparers and erectors
7215 Riggers and cable splicers
7216 Underwater workers

7221 Blacksmiths, hammer-smiths and forging-press workers
7222 Tool-makers and related workers
7223 Machine-tool setters and setter-operators
7224 Metal wheel-grinders, polishers and tool sharpeners

723 MACHINERY MECHANICS AND FITTERS
7231 Motor vehicle mechanics and fitters
7232 Aircraft engine mechanics and fitters
7233 Agricultural- or industrial-machinery mechanics and fitters

7244 Telegraph and telephone installers and servicers
7245 Electrical line installers, repairers and cable jointers
ELECTRICAL AND ELECTRONIC EQUIPMENT MECHANICS AND FITTERS
Electrical mechanics and fitters
Electronics fitters
Electronics mechanics and servicers

PRECISION, HANDICRAFT, PRINTING AND RELATED TRADES WORKERS
PRECISION WORKERS IN METAL AND RELATED MATERIALS
Precision-instrument makers and repairers
Musical instrument makers and tuners
Jewellery and precious-metal workers

POTTERS, GLASS-MAKERS AND RELATED TRADES WORKERS
Abrasive wheel formers, potters and related workers
Glass makers, cutters, grinders and finishers

7323 Glass engravers and etchers
7324 Glass, ceramics and related decorative painters

7341 Compositors, typesetters and related workers
7342 Stereotypers and electrotypers
7343 Printing engravers and etchers
7344 Photographic and related workers
7345 Bookbinders and related workers
7346 Silk-screen, block and textile printers

7411 Butchers, fishmongers and related food preparers
7412 Bakers, pastry-cooks and confectionery makers
7413 Dairy-products makers
7414 Fruit, vegetable and related preservers
7415 Food and beverage tasters and graders
7416 Tobacco preparers and tobacco products makers

742 WOOD TREATERS, CABINET-MAKERS AND RELATED TRADES WORKERS
7421 Wood treaters
7422 Cabinet makers and related workers
7423 Woodworking machine setters and setter-operators
7424 Basketry weavers, brush makers and related workers

743 TEXTILE, GARMENT AND RELATED TRADES WORKERS
7431 Fibre preparers
7432 Weavers, knitters and related workers
7433 Tailors, dressmakers and hatters

7434 Furriers and related workers
7435 Textile, leather and related pattern-makers and cutters
7436 Sewers, embroiderers and related workers
7437 Upholsterers and related workers

744 PELT, LEATHER AND SHOEMAKING TRADES WORKERS
7441 Pelt dressers, tanners and fellmongers
7442 Shoe-makers and related workers

## MAJOR GROUP 8

## PLANT AND MACHINE OPERATORS AND ASSEMBLERS

81 STATIONARY-PLANT AND RELATED OPERATORS
811 MINING- AND MINERAL-PROCESSING PLANT OPERATORS
8111 Mining-plant operators
8112 Mineral-ore- and stone-processing-plan operators
8113 Well drillers and borers and related workers

812 METAL-PROCESSING-PLANT OPERATORS
8121 Ore and metal furnace operators
8122 Metal melters, casters and rolling-mill operators
8123 Metal-heat-treating-plant operators
8124 Metal drawers and extruders

813 GLASS, CERAMICS AND RELATED PLANT OPERATORS
8131 Glass and ceramics kiln and related machine operators
8139 Glass, ceramics and related plant operators not elsewhere classified

814 WOOD-PROCESSING- AND PAPERMAKING-PLANT OPERATORS
8141 Wood-processing-plant operators
8142 Paper-pulp plant operators
8143 Papermaking-plant operators

815 CHEMICAL-PROCESSING-PLANT OPERATORS
8151 Crushing-, grinding- and chemical-mixing machinery operators

8152

8231 Rubber-products machine operators
Plastic-products machine operators

824 WOOD-PRODUCTS MACHINE OPERATORS
8240 Wood-products machine operators

825 PRINTING-, BINDING- AND PAPER-PRODUCTS MACHINE OPERATORS
8251 Printing-machine operators
8252 Bookbinding-machine operators
Paper-products machine operators

FOOD AND RELATED PRODUCTS MACHINE OPERATORS
8271 Meat- and fish-processing-machine operators
8272 Dairy-products machine operators
8273 Grain- and spice-milling-machine operators
8274 Baked-goods, cereal and chocolate-products machine operators
8275 Fruit-, vegetable- and nut-processing-machine operators
8276 Sugar production machine operators
8277 Tea-, coffee-, and cocoa-processing-machine operators
8278 Brewers-, wine and other beverage machine operators
8279 Tobacco production machine operators

ASSEMBLERS
8281 Mechanical-machinery assemblers
8282 Electrical-equipment assemblers
8283 Electronic-equipment assemblers
8284 Metal-, rubber- and plastic-products assemblers
8285 Wood and related products assemblers
8286 Paperboard, textile and related products assemblers

829 OTHER MACHINE OPERATORS AND ASSEMBLERS
8290 Other machine operators and assemblers

83 DRIVERS AND MOBILE-PLANT OPERATORS

831 LOCOMOTIVE-ENGINE DRIVERS AND RELATED WORKERS
8311 Locomotive-engine drivers
8312 Railway brakers, signallers and shunters

832 MOTOR-VEHICLE DRIVERS
8321 Motor-cycle drivers
8322 Car, taxi and van drivers

8323 Bus and tram drivers
8324 Heavy truck and lorry drivers

833 AGRICULTURAL AND OTHER MOBILE-PLANT OPERATORS
8331 Motorised farm and forestry plant operators
8332 Earth-moving- and related plant operators
8333 Crane, hoist and related plant operators
8334 Lifting-truck operators

834 SHIPS' DECK CREWS AND RELATED WORKERS
8340 Ships' deck crews and related workers

## MAJOR GROUP 9

## ELEMENTARY OCCUPATIONS

91 SALES AND SERVICES ELEMENTARY OCCUPATIONS
911 STREET VENDORS AND RELATED WORKERS
9111 Street food vendors
9112 Street vendors, non-food products
9113 Door-to-door and telephone salespersons

912 SHOE CLEANING AND OTHER STREET SERVICES ELEMENTARY OCCUPATIONS
9120 Shoe cleaning and other street services elementary occupations

9131 Domestic helpers and cleaners
9132 Helpers and cleaners in offices, hotels and other establishments
9133 Hand-launderers and pressers

914 BUILDING CARETAKERS, WINDOW AND RELATED CLEANERS
9141 Building caretakers
9142 Vehicle, window and related cleaners

915 MESSENGERS, PORTERS, DOORKEEPERS AND RELATED WORKERS
9151 Messengers, package and luggage porters and deliverers
9152 Doorkeepers, watchpersons and related workers
9153 Vending-machine money collectors, meter readers and related workers

916 GARBAGE COLLECTORS AND RELATED LABOURERS
9161 Garbage collectors
9162 Sweepers and related labourers

AGRICULTURAL, FISHERY AND RELATED LABOURERS
921 AGRICULTURAL, FISHERY AND RELATED LABOURERS
9211 Farm-hands and labourers
9212 Forestry labourers
9213 Fishery, hunting and trapping labourers

LABOURERS IN MINING, CONSTRUCTION, MANUFACTURING AND TRANSPORT
931 MINING AND CONSTRUCTION LABOURERS
9311 Mining and quarrying labourers
9312 Construction and maintenance labourers: roads, dams and similar constructions
9313 Building construction labourers

932 MANUFACTURING LABOURERS
9321 Assembling labourers
9322 Hand packers and other manufacturing labourers

933 TRANSPORT LABOURERS AND FREIGHT HANDLERS

9331 Hand or pedal vehicle drivers
9332 Drivers of animal-drawn vehicles and machinery
9333 Freight handlers

## MAJOR GROUP 0

## ARMED FORCES

01 ARMED FORCES
011 ARMED FORCES
0110 Armed forces

### 3.12. National Statistics Socio-economic Classification (NS-SEC)

| Table $\mathbf{2}$ |  |  |
| :---: | :---: | :--- |
| Analytic |  |  |
| Classes |  |  |$\quad$ Operational Categories and Sub-Categories

$\left.\begin{array}{lll}\text { 8 } & \text { L14 } & \begin{array}{l}\text { Never worked and long-term unemployed } \\ \text { L14.1 } \\ \text { L14.2 }\end{array} \\ \text { * } & \text { Lover worked }\end{array}\right]$

* For complete coverage, catergories L15, L16 and L17 are added as 'Not Classified'. The composition of 'Not Classified' will be dependent on the data source.


### 3.13. Advantages / Disadvantages to Living as a Couple

### 3.13.1 Advantages to living as a couple (wCOHADV1 and wCOHADV2) First Occurrence W8

01 Trial marriage inc. get to know each other/try out compatibility before marriage/ before commitment of marriage and/or kids/less risk of divorce in future
02 No legal ties inc. easier to split up/separate if doesn't work out/simpler/safer than marriage/ can walk away/ less responsibility/ informal rather than formal relationship
03 Improves relationship inc. makes you work harder at relationship/don't take partner for granted/ more respect/ get on better/ less arguments
04 Bad experience marriage inc. previously married so prefers cohabitation this time/ marriage changes people/ seen bad marriages
05 Personal independence inc.no commitment/ personal freedom/ not ready for marriage/ keep own privacy
06 Financial inc. tax advantages/ no expense of wedding or divorce
07 Companionship inc. someone to share things with
08 Prefer cohabitation (n.e.s) inc. convenience
96 Other (n.e.s)
98 Don't know
99 Refused
00 Nothing written (blank)

### 3.13.2 Disadvantages of living as a couple (wCOHDIS1 and wCOHDIS2)

 First Occurrence W801 Lack of financial security inc. tax/pensions/benefit system favours marrieds/no discounts/no equal rights with marrieds
02 No legal status inc. difficult to split-up/ no automatic inheritance if partner dies/ division of assets difficult
03 Hard on children inc. affects children
04 Uncommitted relationship inc. lack of security/no recognition of lasting relationship for life/marriage would be better
05 Social stigma inc. embarrassment/ awkward social situations/ surname problems
96 Other (n.e.s)
98 Don't know
99 Refused
00 Nothing written (blank)

### 3.14. Reasons not to go onto Further Education

What are the main reasons you might not go on to further full-time education? (wFEDNT1 and wFEDNT2)

## First Occurrence W12

01 School level qualifications enough/all that is needed
02 Decided on specific career/job/apprenticeship/other training
03 Wants to work/get a job/earn money
04 Cost of education/too expensive/financial reasons/don't want debt
05 Depends on grades/may fail exams
06 Not academic enough/work too hard/no concentration
07 Just don't want to/Can't be bothered
08 Want to travel
09 Undecided/unsure at the moment
10 Other

97 Blank
98 Don't know
99 Refused

### 3.15. Why Financial Situation Changed

## Why Financial Situation Changed (wFISITY)

## First Occurrence W3

## Reasons better/worse off.

01 Earned income has increased (more pay, new/better job)
02 Benefits have increased (include pensions/child benefit)
03 Investment/asset income increased (higher interest rates/profit on selling shares/property)
04 Less expenses; spending reduced (lower bills, taxes, mortgages etc) prices fallen.
05 Had 'windfall' payment eg. inheritance, gifts, redundancy payments.
11 Earned income decreased (lost job, pay reduced, less hours)
12 Benefits reduced/stopped
13 Investment/asset income decreased (lower interest rates/losses on selling shares/property)
14 More expenses; spending increased; cost of living up/inflation (higher bills, taxes, mortgages etc) prices higher.
15 Unexpected/'one-off' expenditure eg. wedding, moved house.
21 Combination of income down and expenses down
22 Combination of income up and expenses up/inflation
23 Combination of benefits down and expenses up
24 Combination of benefits up and expenses up/inflation
25 Savings down but standard of living the same
26 Good management, thrift
27 No change in income/benefits/expenses (not elsewhere specified)
31

Other reasons for being better off (not elsewhere specified)
32
33
96
98
99

Other reasons neither better nor worse off (not elsewhere specified)
Other
Don't know
Refused

### 3.16. Purpose of Saving

## Purpose of Savings (wSAVEY1 and wSAVEY2)

## First Occurrence W3

01 Holidays
02 Old age/retirement specifically mentioned (include pension schemes/plans
03
04
Car
Child(ren) (include children's education, and if buying shares to invest in children's education)
05 Housing/property purchase inc. land purchase
06 Home improvements
07 Household bills (eg TV license, etc.; also include motor maintenance such as car/bike insurance, tax, servicing)
08 Special events (eg weddings, burials, Christmas)
09 No particular reason specified (eg just saving for a rainy day, to be safe, emergencies, just in case)
10 Shares schemes
11 Own education
12 Grandchild
96 Other (include shares not elsewhere specified)
98 Don't know
99 Refused / Not available

## Appendix 3.17. Counties and Unitary Authorities

## Coding frame for wLADUA found in Record Types wHHSAMP from Wave 9 onwards reflects the Boundary Commission changes introduced during the 1990's.

Please note that this is a string or alphanumeric variable

| AA | City of London |
| :---: | :---: |
| AB | Barking \& Dagenham |
| AC | Barnet |
| AD | Bexley |
| AE | Brent |
| AF | Bromley |
| AG | Camden |
| AH | Croydon |
| AJ | Ealing |
| AK | Enfield |
| AL | Greenwich |
| AM | Hackney |
| AN | Hammersmith \& Fulham |
| AP | Haringey |
| AQ | Harrow |
| AR | Havering |
| AS | Hillingdon |
| AT | Hounslow |
| AU | Islington |
| AW | Kensington \& Chelsea |
| AX | Kingston upon Thames |
| AY | Lambeth |
| AZ | Lewisham |
| BA | Merton |
| BB | Newham |
| BC | Redbridge |
| BD | Richmond upon Thames |
| BE | Southwark |
| BF | Sutton |
| BG | Tower Hamlets |
| BH | Waltham Forest |
| BJ | Wandsworth |
| BK | Westminster |
| BL | Bolton |
| BM | Bury |
| BN | Manchester |
| BP | Oldham |
| BQ | Rochdale |
| BR | Salford |
| BS | Stockport |
| BT | Tameside |
| BU | Trafford |
| BW | Wigan |
| BX | Knowsley |
| BY | Liverpool |
| BZ | St. Helens |
| CA | Sefton |
| CB | Wirral |
| CC | Barnsley |
| CE | Doncaster |
| CF | Rotherham |
| CG | Sheffield |
| CH | Gateshead |
| CJ | Newcastle upon Tyne |


| CK | North Tyneside |
| :---: | :---: |
| CL | South Tyneside |
| CM | Sunderland |
| CN | Birmingham |
| CQ | Coventry |
| CR | Dudley |
| CS | Sandwell |
| CT | Solihull |
| CU | Walsall |
| CW | Wolverhampton |
| CX | Bradford |
| CY | Calderdale |
| CZ | Kirklees |
| DA | Leeds |
| DB | Wakefield |
| HA | Bath \& NE Somerset |
| EX | Blackburn w Darwen |
| EY | Blackpool |
| HN | Bournemouth |
| MA | Bracknell Forest |
| ML | Brighton \& Hove |
| HB | City of Bristol |
| EH | Darlington |
| FK | Derby |
| FB | E Riding - Yorkshire |
| ET | Halton |
| EB | Hartlepool |
| GA | Herefordshire County |
| MW | Isle of Wight |
| FA | Kingston upon Hull |
| FN | Leicester |
| KA | Luton |
| LC | Medway |
| EC | Middlesbrough |
| MG | Milton Keynes |
| FC | NE Lincolnshire |
| FD | North Lincolnshire |
| HC | North Somerset |
| FY | Nottingham |
| JA | Peterborough |
| HG | Plymouth |
| HP | Poole |
| MR | Portsmouth |
| MC | Reading |
| EE | Redcar \& Cleveland |
| FP | Rutland |
| MD | Slough |
| MS | Southampton |
| KF | Southend-on-Sea |
| HD | S Gloucestershire |
| EF | Stockton-on-Tees |
| GL | Stoke-on-Trent |
| GF | Telford \& Wrekin |
| HX | Swindon |
| KG | Thurrock |
| HH | Torbay |
| EU | Warrington |
| MB | West Berkshire |
| ME | Windsor \& Maidenhead |
| MF | Wokingham |
| FF | York |
| NA | Isle of Anglesey |


| PL | Blaenau Gwent |
| :---: | :---: |
| PB | Bridgend |
| NC | Gwynedd |
| PK | Caerphilly |
| PT | Cardiff |
| NU | Carmarthenshire |
| NQ | Ceredigion |
| NE | Conwy |
| NG | Denbighshire |
| NJ | Flintshire |
| PH | Merthyr Tydfil |
| PP | Monmouthshire |
| NZ | Neath Port Talbot |
| PR | Newport |
| NS | Pembrokeshire |
| NN | Powys |
| PF | Rhondda, Cynon, Taff |
| NX | Swansea |
| PD | Vale of Glamorgan |
| PM | Torfaen |
| NL | Wrexham |
| QA | Aberdeen City |
| QB | Aberdeenshire |
| QC | Angus |
| QD | Argyll \& Bute |
| QE | The Scottish Borders |
| QF | Clackmannanshire |
| QG | West Dunbartonshire |
| QH | Dumfries \& Galloway |
| QJ | Dundee City |
| QK | East Ayrshire |
| QL | East Dunbartonshire |
| QM | East Lothian |
| QN | East Renfrewshire |
| QP | City of Edinburgh |
| QQ | Falkirk |
| QR | Fife |
| QS | Glasgow City |
| QT | Highland |
| QU | Inverclyde |
| QW | Midlothian |
| QX | Moray |
| QY | North Ayrshire |
| QZ | North Lanarkshire |
| RA | Orkney Islands |
| RB | Perth \& Kinross |
| RC | Renfrewshire |
| RD | Shetland Islands |
| RE | South Ayrshire |
| RF | South Lanarkshire |
| RG | Stirling |
| RH | West Lothian |
| RJ | Eilean Siar |
| 09 | Bedfordshire |
| 11 | Buckinghamshire |
| 12 | Cambridgeshire |
| 13 | Cheshire |
| 15 | Cornwall \& Scilly Isles |
| 16 | Cumbria |
| 17 | Derbyshire |
| 18 | Devon |
| 19 | Dorset |

Durham
East Sussex
Essex
Gloucestershire
Hampshire
Hertfordshire
Kent
Lancashire
Leicestershire
Lincolnshire
Norfolk
Northamptonshire
Northumberland
North Yorkshire
Nottinghamshire
Oxfordshire
Shropshire
Somerset
Staffordshire
Suffolk
Surrey
Warwickshire
West Sussex
Wiltshire
Worcestershire

### 3.18. To Whom External Payments Made

## To Whom Payments Made (wFTEXA ; wFTEXB wFTEXAC)

## First Occurrence W1

CODE PERSONS 1-3
01 Parent(s) (if both mentioned eg 'Mum and Dad' code once only)
02 Child (inc step/adopted)
03
04
05 Parents-in-law
Current (separated) spouse
Ex-spouse
06 Other relative
07 Other individual
08 Organisation (but code maintenance payments or alimony paid into court or to DSS/CSA as 2-4 above as apply)
96 Other

### 3.19. The Verbatim Coded Final Question (Individual Questionnaire)

From Wave Two onwards, an open ended question was placed as the final question on the individual questionnaire. To date, there have been five different questions used at varying intervals. These are detailed in the coding frames which follow. All of these verbatim questions are coded at the Essex Institute.

## Important Events

The first of these questions asked people to state in their own words what "has happened to you (or your family) which has stood out as important". Answers were recorded verbatim. Verbatim responses can not be made available for public release, because of confidentiality concerns. However, a numeric code was developed to capture the full range of events mentioned. Up to four events are coded for each response. Along with the events mentioned, code 97 has been retained for "nothing happened". This is sometimes a substantive response as people indicate that little of consequence occurred, although in the vast majority of cases, the answer is probably the equivalent of "don't know" (code -1). Missing data is assigned -9.

As would be expected, people's answers include not only events that happened to them personally but also events that happened to other family members or friends. Each event is therefore assigned a "subject code," with 20 being used if no subject is specified. The pertinent "subject code" where ambiguous is indicated by the event frame (e.g. code 40 pregnancy / birth indicates the subject is the parent). The subject code frame includes mentions of pets (code 18). For further details, see chapter 11 in Buck et al (1994).

For this question, coding was done at the Essex Institute, using specially trained coders. An intercoder reliability check was carried out on $10 \%$ of the sample. For Wave Two, inter-coder reliability was $97 \%$ for subject mentions, over $90 \%$ for the specific category of events, $90 \%$ and $95 \%$ for the 12 major categories (health, caring, education, employment, leisure / political, non-familial, family, financial, consumption, residential move, crime and religion).
3.19.1 Would you please tell me anything that has happened to you (or your family) which has stood out as important? This might be things you've done, or things that have been of interest or concern. Just whatever comes to mind as important to you. (MENTIONS: wEVENT1 - wEVENT4; SUBJECTS: wEVENT1S - wEVENT4S

First Occurrence W2

## HEALTH MENTIONS

01 III Health / Concern about Health
02 Hospitalisation / Operation
03 Accident (Involving Injury)
04 Health Tests (Positive \& Negative)
05 Loss of Mobility / House-Bound
06 Recovery / Continuing Good Health
09 Health (nec)

## CARING

10 Caring Responsibilities - Not Childcare (i.e. Who is Cared For?)
11 Babysitting (ie Who is the Sitter?)

## EDUCATION

## 12 Starting / In School

13 Leaving School
14 Starting / In Further Education (inc. Sixth Form)
15 Leaving Further Education

16 Studying For / Passing Educational / Vocational Qualifications / Acquiring Skills Training (nec)
17 Travel Related to Study
19 Education (nec)

## EMPLOYMENT

20 Change of Job (inc. Hours, Status) / Starting Own Business
21 Planned / Possible Change of Job
22 Getting Job (Following Economic Inactivity)
23 Work-related Training (inc. Apprenticeship / HGV Licence / Work Experience)
24 Redundancy / Unemployment (Threat of or Actual)
25 Retirement
26 Travel Related to Work (Who Travels?)
27 Work-related Problems (Recession and / or Personal - Whose Job?)
29 Jobs / Careers (nec)

## LEISURE I POLITICAL

$30 \quad$ Vacation / Travel (nec)
31 Leisure Activities
32 Learning to Drive / Passing Test (not HGV)
33 Political Participation / Voluntary Work (inc Committee Work)
34 Reference to National / World Events (who is Concerned by Event?)

## NON-FAMILIAL RELATIONSHIPS

35 Began Friendship (including Girl / Boy Friend)
36 End Friendship (including Girl / Boy Friend)
37 Spending Time with / Visiting Friends (Coded as Holiday as Appropriate)
38 Problems with Neighbours (Who Has the Problem?)
39 Non-Family Relationship (nec)

## FAMILY EVENTS

40 Pregnancy / Birth (Identity of Parent?)
41 Cohabitation
42 Engagements / Weddings
43 Separation / Divorce / End of Cohabitation
44 Leaving Parental Home
45 Death (Who Died?)
46 Wedding Anniversaries
47 Birthday Celebrations
48 Becoming Godparent
50 Spending Time / Visits with Relatives (Not Within Household)
51 Day-to-day Family Life
52 Family Problems (Person Causing Problems?)
53 Domestic Incident (eg Fire / Burst Pipes, etc)
54 Pets / Animals (Pet Coded)
59 Family Event / Family Reference (nec)

## FINANCIAL MATTERS

60 Money Problems / Drop in Income / Debt
61 Forced Move (Repossession / Eviction (Residential Move Not Included)
62 Improved Financial Situation
63 Received Money (Inheritance / Compensation / Pools)
69 Financial Other (nec)

## CONSUMPTION

## 70 Bought / Buying Vehicle (Car, Caravan, etc) <br> 71 Bought / Buying / Building House

72 Household Repairs / Improvements / Appliances
73 Won Prize (Not Cash) / Award
74 Received Present (from whom ?)
79 Other Purchases (nec)

## RESIDENTIAL MOVE

$80 \quad$ Moved In Past Year
81 Future Intention to Move
82 Move into Residential Home (Nursing / Retirement, etc)
83 Move into Respondent's Household (Who is Moving In?)

## CRIME

90 Victim of Crime (Burglary ,etc)
91 Committed Crime / In Trouble with Police

## RELIGION

92 Joined / Changed Religion
93 Other Religious Reference (Not Confirmation / Baptism of Children)
94 Plan Not Fulfilled/ Something That Didn't Happen (eg Didn't Have a Holiday)
95 Civil Court Action / Battles with Bureaucracy
96 Other Occurrence (nec) given low priority
97 Nothing Happened
-1 Don't Know
-9 Missing

## SUBJECT OF EVENT TOPIC

00 Not Mentioned
01 'We'/ Household
02 Self (Explicit or Inferred or No Pronoun)
03 Spouse /Partner
04 Daughter(s)
05 Son(s)
06 Child(ren) (nec)
07 Son / Daughter in-law
08 Mother
09 Father
10 Parents (both or not specified)
11 Parent(s) in-law
12 Siblings (sister / brother)
13 Sister-in-law / Brother-in-law
14 Grandparent(s)
15 Grandchild(ren)
16 Other Family Members / Family Members Unspecified
17 Friend / Colleague / Neighbour / Employer
18 Other
19 Pet
20 Not Specified

## Child faces different world today

### 3.19.2 Do you think children born today will face a very different world than you did when you were growing up? CODE UP TO FOUR MENTIONS (wDFWLD1; wDFWLD2; wDFWLD3 ; wDFWLD4 First Occurrence W6

## OPTIMISTIC / POSITIVE TONE

## Individual Level

1. More leisure, less work/ more free time
2. Increased freedom for the individual, freedom of speech, sexual freedom, etc.
3. More opportunities, e.g. travel

## Societal Level

11. Technological improvements beyond household. Emphasis on excitement, progress, advantages generally. Include mention of computers, space exploration and the like. Science, scientific advancements/contributions (see also 13)
12. Technological improvements: life will be easier or better or more convenient. (Include mention of technology here if it is given as emphasis or convenience (and there is no elaboration or examples that place it in 11 above)
13. Medical and health improvements. Emphasis on life being healthier, people living longer, etc. New medical drugs, new medical procedures.
14. Improvement in education. Children/people will be smarter, will know/learn more. Education better, more widely available/more educational opportunities
15 .More jobs. Working conditions easier
15. More (economic) opportunities. People will have more money
16. Political Improvements.

## Global Level

21. Peace/absence of war.
22. Improved Environmental awareness.
23. Other positive.

## PESSIMISTIC I NEGATIVE TONE

## Individual Level

31. Kids grow up too fast. E.g. Kids into sex, drugs etc. at a much earlier age. Kids are more sophisticated worldly wise; peer pressure.
32. Lack of discipline: Disrespect. Loss of respect for adults, for older people, for parents, for authority, for law, for others.
33. Too Individualistic. Lack of close relatives; anonymity. People don't think of others, just of themselves. (if emphasis on lack of community code 45)
34. Too Materialistic. Money all important; Too much money; Too much emphasis on consumption pressure to buy designer fashions
35. Life 'too cushy', have higher expectations. Want immediate gratification (see also 34)
36. More pressure. Too competitive; More complicated (technically or economically). Include need more education in order too compete; education more demanding.

## Family/Household Level

38. Family breakdown. Increase in divorce, loss of family values; breakdown in extended family
39. Parents working/absent from home mothers not at home, etc.

## Societal Level

40. Media influence. Exerts strong influence, has negative consequences (if specific consequence is increased crime/drugs/sex code 42/43/44 also)
41. Less safe society. (code 42 if crime mentioned) violence more accepted/kids have to be restricted - can't play out because of danger
42. Increased crime; fear of crime.
43. Increased drugs, alcohol.(if emphasis is on children's early exposure code 31, also)
44. Increased sex, promiscuity, pornography. (if emphasis is on children's early exposure code 31, also)
45. Moral Breakdown general; loss of religion.
46. Loss of Community (if emphasis on too individualistic code 33)
47. Increased Unemployment. job insecurity; fewer jobs/ more unemployment (see also code 52)
48. Other economic. E.g. huge deficit; incomes lower, prices too high; economy worse widening gap between have/have-nots; housing market collapse
49. Decline in Welfare state.
50. Decline in Education. Poor quality of education, decline in standards. Less availability (excl. due to cost, code 48); cuts in grants/loans
51. Increased Health Risks. E.g. AIDS, Bird Flu
52. Technological Change with bad consequences. e.g. 'with calculators people become less self-reliant'
53. Political Problems. Government not doing its job; dominance by Brussels

## Global Level

60. Urbanisation - loss of countryside.
61. Environmental Problems.
62. War/ Conflicts. Threat of war/nuclear weapons
63. Life will be harder - LOW PRIORITY. Not codable elsewhere
64. Other negative.

## NEUTRAL, MIXED, UNCLEAR IN VALENCE

i.e. objective statement that has no indication of whether R feels positively or negatively about change
81. Technological Change. No clear evaluation of change
82. Life has a faster pace. No clear evaluation
83. Neutral-individual level.
84. Neutral family/household level.
85. Neutral-societal level.
86. Neutral-global level.
89. Other neutral, mixed.
99. Not codable/Missing (FIRST MENTION ONLY)

## Quality of life

3.19.3 Would you take a moment to think about what 'quality of life' means to you, and tell me what things you consider are important for your own quality of life? ((wQUALLIF1, wQUALLIF2, wQUALLIF3, wQUALLIF4)

## First Occurrence W7

The two responses are coded together, with up to four mentions coded. Often the second response elaborates the first and makes clear under what category the response belongs. Most answers are positive but the few that are negative need to be distinguished by using the 70s codes.

## POSITIVE MENTIONS

## Personal characteristics

01 good health / mobility / living \& breathing / personal welfare
02 freedom / independence
03 happiness / peace of mind / security
04 safety; lack of fear (see also 54 below)
05 time for self / not too overworked / life in balance / sleep / no stress
09 Other personal characteristics (not elsewhere specified) / love / sense of humour / personal cleanliness

## Material characteristics

11 finances / money / standard of living
12 consumption / shopping / getting new things
13 home comforts / roof over head / regular meals / domestic hygiene
14 employment / job satisfaction
15 car - transport
16 education (own / children's / standards of system in general)
19 Other material benefits (not elsewhere codable)

## Leisure and pleasure activities

21 food - cooking (if stress on having enough food-code as 12 above) / having a drink
22 music / radio / theatre
23 sports
24 walking / exercise
25 TV
26 gardening / nature in general
27 reading / writing / painting
28 travel incl. holidays abroad / getting out and about (going places generally)
29 Other leisure/pleasure activities (not elsewhere codable) / exercising

## Spiritual/Moral/Community Aspects

31 religion
32 treating others well/ equality/ tolerance
33 helping others/voluntary work/community participation
34 political activities
39 other spiritual / moral / community aspects / law \& order

## Other People (includes pets)

41 children and grandchildren
42 partner / marriage
43 Other family members/family in general
44 neighbours
45 friends/friendship

## 46 pets

49 Other relationships (not elsewhere codable) / A relationship

## Aspects of Locality and Environment

51 good recreational facilities
52 neighbourhood - specific rural / urban benefits
53 neighbourhood - general mention / likes area or neighbourhood
54 environment - lack of pollution / general mention of environment
55 crime - lack of ; safe area
56 climate/weather
59 Other local / environment mentions (not elsewhere codable) / news \& current affairs
67 Other Positive Mentions (not elsewhere codable)

## NEGATIVE MENTIONS: (this could be by implication i.e. need more/better....)

70 need better personal characteristics - less worry; better health; more happiness
71 need better material characteristics - more money, better job etc.
72 more leisure - recreation
73 more morality/ spiritual /community spirit
74 better relationships
75 improvements in locality/environment e.g. less crime; less crowds etc.
77 Other Negative Mentions (not elsewhere codable) / need more time
97 Other (not clear whether positive or negative - use as last code after positive codes)
98 Don't know (use only if nothing else is mentioned)
99 Missing

## Attitudes to local neighbourhood

### 3.19.4 What makes your neighbourhood a good/bad place to live? (wNEIGH1, wNEIGH2, wNEIGH3, wNEIGH4, wNEIGH5, wNEIGH6) <br> First Occurrence W8

## Positive Responses

## Family, friends, neighbours, people

01 People friendly/ people in area generally friendly/helpful/ approachable/ nice people / decent people/ shopkeepers friendly/ no yobbos
02 Neighbours friendly/ helpful/ good neighbours
03 Family/ some/all extended family live in area
$04 \quad$ Friends live in area/ children have friends in area/ good social life
05 Privacy/ people keep themselves to themselves/ respect privacy/ don't interfere/ live and let live/ left to own devices
06 Community/ people know each other/ community spirit/ people trust each other/ people help each other/ do odd jobs for each other/ village life
07 Racial diversity/ like multi-cultural aspect of area/ no racial discrimination
08 Kids well behaved/ no problems with youngsters, children, teenagers
09 Mixture of types of people/ different classes, ages, occupations etc./cosmopolitan
10 White area
11 Long-standing connection to area/ childhood area/ brought up in area as child/lived in area whole life/ know area well

## Local facilities and services/ access to facilities

12 Good public transport/ near to, easy access to public transport/ convenient for bus, train etc.
13 Good shopping facilities/ near to, easy access to shopping/ convenient for shops/ post office
14 Entertainment/ plenty of/ good/ interesting restaurants, cafes cinemas, clubs, pubs, bingo/ can go out to eat, drink locally
15 Leisure facilities/ not too far from/ plenty of/ good/ sporting /leisure facilities (inc. libraries) / leisure centres/swimming pools/ ice rink/ tennis/ bowls/recreation ground/ village hall / cricket ground etc.
16 Open spaces/ has parks/ green open spaces/ commons/ green and leafy/ places to walk/ places for children to play
17 Schools/ has primary school/ secondary school/ schools nearby/ convenient/ good school(s) in area
18 Church/ has Church (that R attends)/ good churches
19 Medical facilities/ doctor's surgery nearby/ hospital close/ health centre, clinic nearby/ easy to get to
20 Good local facilities/ amenities/ lots of things to do in area (n.e.s)

## Crime and security

21 Feels safe/ can walk safely at night / good street lighting/ Police station nearby
22 Not many/ no drugs
23 Not much/ no physical violence/ muggings
24 Not much/ no car crime (car specifically mentioned)
25 Not much/ no burglary/ break-ins/ theft
26 Not much/ no vandalism/ graffiti
27 Not much/ no crime/never any / not much trouble (n.e.s)

## Other positive area characteristics

28 Area quiet/ peaceful/relaxed/ low noise levels/ no noisy neighbours/ no noisy animals/ no wild parties
29 Good area for children/ kids/ inc. safe for children

30 City centre (town) accessible/ close to town/ can get to the city easily/ nicely situated/ good position
31 Accessible to London/central London/ West End / the City (London specifically mentioned)
32 Easy access to rest of country/ close to major roads/ motorways/ national rail links
33 Rural surroundings/ close to/ can get to countryside / in rural village/ like being in countryside, living by sea/ nice views of country, sea
34 Employment/ near to work/ handy for work/ easy to get to work/ employment in area/ good for commuting to work
Affluent area/ well off / Middle class area
No traffic problems/ Not too much traffic/ good for bikes and pedestrians
36
37
38
arking
No pollution/ from traffic, industry/ clean air/ clean and tidy
No housing problems/ houses well maintained by council / houses and gardens maintained well by residents/ small, good development of houses/ space around and between houses/ not too built up
40 Like architecture and buildings in area/ Conservation area/ pretty buildings
41 Like house where living/ nice views / own house has a nice garden/ well maintained /used to living in current house
House a good investment/ will sell easily in this area
Desirable area/ exclusive area/
Area improved in recent years/ nicer/ better atmosphere/ area more upmarket now/ new,decent people have moved into the area/ more professional people/got rid of troublemakers/ crime reduced
45 Like the area/ nice neighbourhood/ nice, good environment / good area (n.e.s)
46

## Negative responses

## Family, friends, neighbours, people

47 People unfriendly/ rough/ rude/ unpleasant/ no respect for others/ snobbish/ yobbos/ shopkeepers unfriendly
48 Neighbours unfriendly/ don't talk to you/ problem neighbours (noise, alcohol, abuse, drugs, arguments, several cars)
49 No family living in area
50 No friends living in area/ no social life in area
51 No privacy/ lack of privacy/ people too nosy/ gossip/ no respect for privacy
52 No sense of community/ no common interests among neighbours/ people don't help each other/ I don't fit in
53 Racial mix/ a lot of/ too many non white/non-British people in area/ illegal immigrants/ a lot of non-whites moving in
54 Problems with youngsters, teenagers, children, youths/ no respect from youngsters/ cheeky/ bullies/ rude/ generally cause trouble/ drinking and smoking/hang on street corner/too many on street/ no parental control
55 Use of bad language, spitting and swearing

## Local facilities and services

56 Poor/ no public transport/ poor access to public transport/ inconvenient for bus, train etc.
57 Poor/ no shopping facilities/ not close to shops/ inconvenient for shops/ shops closing down / no Post Office nearby
58 Poor/ no entertainment/ not many restaurants, cafes cinemas, clubs, pubs, bingo/ can't go out to eat
59 Poor/ no leisure facilities/ not many sporting /leisure facilities (inc. libraries) / leisure centres/ swimming pools/ ice rink/ tennis/ bowls/recreation ground/ village hall etc.
60 Lack of/ no open spaces/ no parks, green open spaces/ commons/ no places to walk/ no places for children to play
61 Poor/ no schools/ no schools nearby/ local schools bad, poor
62 No church/ has no Church (that R attends)/ no good churches

63 Poor/ no medical facilities/ no doctor's surgery nearby/ no hospital close/ no health centre, clinic nearby/ not easy to get to
64 Poor/ no local facilities/ nothing to do / boring area (n.e.s)

## Crime and security

65 Not safe environment/ don't feel safe/ poorly lit/ feels less secure now than before/ bad atmosphere/ no Police Station nearby/ no police presence
66 Drugs, drug addicts, drug dealers on street/in area
67 Physical violence/ muggings, stabbings, beatings
68 Car crime/ joy-riders/ theft/ vandalism (car specifically mentioned)
69 Burglary/ theft/ petty crime break-ins
$70 \quad$ Vandalism/ graffiti
$71 \quad$ Crime/ crime rate high/ lot of crime (n.e.s)
72 Alcohol/ drunken behaviour/ homeless alcoholics on street
73 Gangs on street/ children in gangs (gangs specifically mentioned)
74 Police involvement/ often calling on houses in area/ police raids/ dog vans etc.

## Other negative area characteristics

75 Noise problems/ too much traffic noise/ trains/ people generally noisy/ environmental noise/ noise from pubs or clubs
76 Not good area for children/ not safe for children/ can't play outside because of traffic
77 Unemployment in area/ no work
78 Area deprived and poor/ lot of people on benefits/ low incomes/ lone parents on benefits
79 Traffic problems/ busy main road/ too much traffic/ worsening traffic/ roads and footpaths not maintained
80 Lack of parking facilities/ difficult to park car/ no parking/ nowhere safe to park car
81 Pollution and dirt/ filth/ pollution from industry, traffic/dog dirt / roads not swept/ rubbish dumped and not collected/ getting more polluted
82 Housing problems/ housing in poor condition/ housing cramped/ no gardens/ too built up/ poor quality housing / derelict properties/ DSS bed-sit housing close by/ housing over crowded/ gardens not maintained/ local housing authority/ association not maintaining properties/
83 Over population/ too many people / too crowded
84 Area has become, is getting worse/more run-down/turning into a rough area / bad element moving in
85 Don't like area/ dreadful/ terrible/ hate area / bad environment (n.e.s)
86 'Other' negative aspect (n.e.s)

## Neutral responses

87 Good and bad people/ some okay, some not
88 Good and bad aspects of neighbourhood/ area
89 Average area/ no strong views either way/ is just where I live
$90 \quad$ Other neutral (n.e.s)
95 Blank/ nothing written in/ missing
96 Other
98 Don't know
99 Refused

## Advantages / disadvantages of current age

### 3.19.5 What are the main advantages or disadvantages of being aged \{R's age\} as far as you are concerned?

wAGEAD1, wAGEAD2, wAGEAD3, wAGEAD4

## First Occurrence W11

$0 \quad$ Not mentioned
1 Happy with work
2 Unhappy with work
3 Ageism in respect of work
4 More job opportunities
5 Advantages of (semi)retirement
6 Dissatisfaction with retirement
7 Mentions of education
$9 \quad$ Other work related mentions
10 Secure financially
11 Insecure financially
12 Financial concessions
13 Financial penalties
14 More financial responsibilities
15 Less financial responsibilities
16 Cost of education
19 Other money mentions
20 Happy with partner
21 Problems with partner
22 Mentions of children
23 Mentions of grandchildren
24 Happy with family
25 Family problems
26 Living alone
27 Happy with friends
28 Lack of friends/social life
29 Other family/friends mentions
30 More leisure time
31 Pressures on time
32 Reached legal drinking age
39 Other mentions of leisure/time
40 Good (physical) health
41 Complaints about (physical) health
42 Good psychological health
43 Problems with memory/depression
49 Other health mentions
50 More mature/experienced
51 Life slipping by
52 Stability/established
53 Greater freedom
54 Constraints of current age
55 Looking forward to future
56 Uncertain future
57 Fewer responsibilities
58 More responsibilities
59 Concerns of aging body
60 Positive with respect to body fitness
61 Towards end of life
69 Other issues of aging
70 Age not important
71 Other ages less desirable
72 Other ages more desirable

| 73 | Likes current age |
| :--- | :--- |
| 74 | Dislikes current age |
| 75 | More respect shown |
| 76 | Less respect shown |
| 77 | Generally happy with life |
| 90 | No disadvantages |
| 91 | No advantages |
| 96 | Other reason (not elsewhere specified) |
| 97 | Nothing/blank |
| -1 | Don't know |
| -2 | Refused |
| -8 | Not applicable |
| -9 | Missing |

### 3.20. Relationship of Closest Friend

## Relationship of closest friend (wSSUPR2R)

## First Occurrence W3

01 Partner/husband/wife
02 Child (natural, adopted, step or foster)
03 Sibling (brother, sister)
04 Parent
05 Grandparent
06 Grandchild
07 Aunt/Uncle/Cousin
08 Other eg (in-laws)
09 Friend
If left blank by respondent code 00

### 3.21. Why Wants Specific Job when Leaves School

## Why wants specified job when leaves school (wEYPSOCY) on record wYOUTH

## First Occurrence W5

If more than one reason given, code first mention

## REWARDS

01 Money/well paid
02 Good job/high status
APTITUDE/VOCATION
03 Have always wanted to do/be/ambition or career
04 Following family footsteps
SPECIFIC SKILLS OR APPEAL
05 Like/good at computing
06 Like/good at art/music/writing/theatre
07 Like/want to travel
08 Like/good at sports
09 Like/want to be working with people
10 Like/want to be working with hands/cars/want a trade
11 Has other specific skill (nes)
CARING/ETHICAL JOBS
12 Want to work with animals
13 Want to work with children
14 Want to help others/provide care/handicapped
15 General moral concern/environment/religion/law
GENERAL APPEAL
16 Job is interesting/would enjoy it/enjoy subject (at school)
UNKNOWN
17 Undecided/too young
97 Other
98 Don't know
99 Refused
00 Blank - nothing written in

### 3.22. Reason for not going on to Further/Higher Education

## Reasons may not go on to further/higher education when finishes school (wYPNUNA wYPNUNB) on record wYOUTH

## First Occurrence W12

## CODE FIRST TWO MENTIONS

01 - Want to earn money/Get a job (inc. Less money when you're a student. If going to university after working mentioned CODE 02)

02 - Earn money first then go to university (inc. Work experience/gap year and then go to university. If 'going to university or college' NOT mentioned CODE 01 (want to earn money/get job)

03 - Want to get an apprenticeship/Waiting to do a modern apprenticeship (apprenticeship explicitly mentioned)

04 - Specific job/career planned (E.G. want to be a carpenter/want to be a model/want to be famous/play professional football/ want to join the RAF/Army/Royal Marines)

05 - No need for more qualifications (inc. Won't teach anything useful/ Already got qualifications/Educated enough already, have grades needed/Had enough of education)

06 - Hard work/ Too much work and hassle
07 - Not capable of work at university (inc. Can't do the work/Won't do very well/Might not get in to college or university)

08 - Hate school/college (inc. Don't like teachers/Can't handle anymore school/ Boring/Quicker leave school the better)

09 - Waste of time / Takes up too much time (time explicitly mentioned)
10 - Wants to/prefers to stay at (parental) home
11 - Want to set up own home/ have a family
12 - Get on with life/Be out in the world/to do different things
13 - Want to go abroad/travel
14 - Can't be bothered / Don't want to/Don't feel like it/ (inc. not wanting to get up early every morning)

15 - Not sure what to do when leave school (inc. Haven't thought about it/Not decided/ Don't know what job I want)

| 96 | Other |
| :--- | :--- |
| 97 | Missing |
| 98 | Don't know/Pass (NES) |
| 99 | Refused |

### 3.23. Coding Frames Youth Questionnaire Verbatim

## Important Events

### 3.23.1 Please tell me anything that has happened to you (or your family) which has stood out

 as important. This might be things you've done or things that have been of interest or concern. Just whatever comes to mind as important to you. (wYPEVNT1, wYPEVNT2, wYPEVNT3, wYPEVNT4First Occurrence W4
Codes 01 to 19 are for events mentioned in a positive way, and also the default for 'happy' events such as holidays, leisure, recovery from illness, spending time with friends, and starting a relationship with a boy/girlfriend. Codes 21 to 39 are for negative references or objectively 'bad' events separation, death, illness, end of a relationship, etc. Codes 41 to 59 is the default for most other events which are neutral or ambiguous including school, births and getting a job. Where there is an orientation, this determines the coding - 'we have been blessed with a baby', etc. Similarly, where there is seemingly an indifference to a happy/sad event, the event is coded to neutral ('I have been in and out of relationships with three separate girls', 'gained/lost friends', etc.). A response is only coded as 'nothing' or 'don't know' if no event is subsequently mentioned.

Code up to four mentions.

## SCHOOL

01 positive - passing exams, improving at school - also taking music exams.
21 negative - pressure, worries.
41 neutral default
FAMILY RELATIONS
02 positive - 'parents trust me more' etc.
22 negative - separation, divorce, death rows.
42 neutral - birthdays and family visits.

## FAMILY EVENT

03 positive - recovery from illness (not youth's) and family holiday.
23 negative - illness (not youth's) and job loss.
43 neutral - birthdays and family visits.

## LEISURE

04 default for all mentions of leisure. Also for holidays taken with friends, youth club or school. 24 negative mentions of leisure - none at Wave 4.
PEERS
05 making/spending time with friends.
25 being bullied or losing friends.
45 neutral - foreign exchange student visit and 'gained/lost friends'.
MONEY
06 positive reference to earning/handling own money.
26 negative reference to earning/handling own money - none at Wave 4.
46 default for earning/handling own money.
CONSUMPTION
07 default for buying or being given things - includes the family's new car.
27 loss/damage/theft of items.
JOB/WORK EXPERIENCE
08 positive reference to own job or work experience.
28 negative reference - none at Wave 4.
48 default reference.

## BOYIGIRLFRIENDS

10 starting/maintaining a relationship with a boy/girlfriend.
30 end of a relationship.
50 visible indifference to the start/end of a relationship.

## OWN HEALTH

11 improvement in a long term health condition.
31 youth's ill health or accident.
51 default

## CAREER

14 positive reference to future career or long-term plans.
34 negative reference - none at Wave 4.
54 default for reference to future career or long-term plans.
PETS
33 death of pet.
53 reference to pet.
HOUSE MOVES
12 positive reference - none at Wave 4.
32 negative reference - none at Wave 4.
52 default
OTHER EVENT
19 other positive event.
39 other negative event.
59 other neutral event.

97 nothing happened
98 don't know
99 missing

## One change to life

### 3.23.2 If you could change just one thing to make your life better, what would you change? (wYPDLFA, wYPDLFB, wYPDLFC, wYPDLFD) <br> First Occurrence W7

## CODE FIRST TWO MENTIONS

## Self Image and Attributes

01 Appearance / weight
02 Personality/self-confidence/less worries/more social skills etc.
03 Age (include wanting to be older for specific purpose e.g. driving)
04 Academic ability/performance (e.g. want to work harder to get good qualifications; more brains etc.)
05 Health
06 Give up Smoking
07 Sporting ability / fitness
08 More Independence/ freedom (having/being given)
09 Other Changes in self and self attributes (not elsewhere specified)

## Relationship of Self and Others

11 Girl-friend/boy-friend; opposite sex - easier / better / new relationship
12 Other friends / peer-group mentions (NB mentions of bullying code 31)
Family Relationship / Household Change
13 Relationships of self and family members
14 Parental relations (with each other)
15 Living arrangements (who lives with whom)
16 Family relationship problems (include bereavement)
17 Other family problems/changes (health; financial; job etc.)

## Material Improvement / Life Style Change

21 Getting Job /Better Job
22 More money for self
23 More money for family
24 Bigger or better accommodation (house/room/garden)
25 New possessions
26 Animal/pet
$27 \quad$ Other life style changes (not elsewhere specified)

## School and Community

31 Being bullied (knowing bullies)
32 School circumstances (teacher, class etc.)
33 Leaving school
35 Change area/location - live somewhere else; change existing features
37 Other school/community changes

## General Well-Being of People / Planet

41 Less violence/ people happier / less suffering
42 Environmental improvement - less pollution; saving wildlife
47 Other societal world improvements

Other
50 NO CHANGE - everything OK /good now
51 NO CHANGE / NOTHING (no elaboration)
97 Other changes (not elsewhere specified)
98 Don't know (code only if no substantive response given)
99 No answer - BLANK

Future plans

### 3.23.3 What would you like to be doing with your life in about ten year's time from now? (wYPFUTA, wYPFUTB) <br> First Occurrence W12

## Career

01 have a particular career
02 have a good job (well paid / enjoyable / interesting / successful / secure)
03 have own particular business

## Education

10 pass my exams / get good qualifications
11 go to / have finished university or college / get a particular degree
Family
20 be married / have a partner / stable relationship
21 be married / have a partner AND children (includes: have a family / children)
22 be married / have a partner NO children
23 not settle down yet / not be married / be single
24 be in contact / get on well with family

## Material ownership

30 have own car
31 have own house / flat / move out / leave home
32 have a lot of money (if not specified elsewhere)

## Leisure / general

40 play sports
41 play music / be in a band
42 travel
43 have good friends / have a good social life
44 be happy / enjoy life / have fun
45 give money to charity / help society (others) / be involved in church
46 have financial security / no worries
47 move abroad
96 other / uncodable
97 missing/blank
98 don't know
99 refused

## Appendix 4. <br> Help For Old Friends: Modifications Since Eighteenth Release

This Appendix is intended for the use of those who have already worked with earlier releases of BHPS data. It lists changes that have been introduced since the original release of the wave 1 to 18 data in 2010. It lists the specific changes which have been made in data waves since that release and should be studied before repeating earlier analyses on this new release of the data.

A major enhancement for this release is that the BHPS Net income data which Stephen Jenkins and his colleagues prepared and were made available separately under SN3909 have now been incorporated with this release. This leads to the addition of a set of new variables on wHHRESP and wINDALL. These data continue to be documented in detail using http://doc.ukdataservice.ac.uk/doc/3909/mrdoc/pdf/3909userguide.pdf.

Some additional aids to linking BHPS cases to interviews with the same people in Understanding Society data are also include. This is includes a Understanding Society style PIDP wherever PID is included and also the variables ISSW2_UKHLS FIOW2_UKHLS WVEN_UKHLS on XWAVEID and XWAVEDAT indicate whether BHPS cases should be expected to be found in the Understanding Society data set.

There have been some further enhancements to the data in XWAVEDAT. In particular values for employment status and occupation variables for mother and father have been added where the respondent was first interviewed as a new 16 year old, on the basis of the values for co-resident parents. Also the panel data has been used to add in the value of date of first marriage, date of first cohabitation, date of first child birth and characteristics of first job where this took place after the respondent was first interviewed.

In additions to the above there are some corrections to a range of errors which users have reported in previous wave data as follows. We are very grateful to users for reporting these issues.

There were problems in in the copying of Wave 18 leisure activity questions from the survey source. This affects RLACTA, RLACKJ and RLACTK on RINDRESP.

A small number of problems in setting values for self-employment profit (wJSPROF) where this should have been inapplicable were fixed.

Missing cases on Wave 18 second job pay was (RJ2PAY) had previously not been imputed. This has now been done.

Total personal and total household income, along with components, were recalculated throughout to deal with a range of minor discrepancies. The number of cases affected at each wave was very small.

At Wave 18 the code for some of the annual employment history derived variables was not run correctly. This has now been rerun resulting in changes to the following variables: RCJSBLY, RCJSWK9, RJLID, RJLYID, RJTYID, RNJUWKS, RNJIWKS, RNJBNEW, RNJBSP, RNJUSP, RNJISP, RJBSTATL, RJBSTATT. In addition some issues with PNJIWKS and QNJIWKS at Waves 16 and 17 were fixed.

Around 70 erroneous occupation codes for main job were found in the wave 18 data. These have been fixed and related social classifications corrected.

There were two issues with weights. Firstly, some proxy respondents and within-household non-respondent adults were given positive cross-sectional respondent weights at wave 18.

These have been reset to 0 . Secondly new births at waves 5 and 6 did not get a positive weight. Weights have now been assigned for these cases and carried forward to subsequent waves.

Some variables containing the value -1 had not previously been correctly recorded as "don't know". In these cases they have been recoded as -9 "missing".

The other new feature at this wave is that we have separated out the End User Licence version of the data from a Special Licence version which includes the more disclosive variables (see section V1.2 above). This means that there are some condensed classification versions of occupational classifications, for example, available on the EUL version, with the full classification only available on the SL versions. These variables have a suffix _cc added.

# Appendix 5. Related Publications and Documentation 

### 5.1. Research Centre Publications

A book has been published containing initial results from the first two waves of the BHPS:
Changing Households: The British Household Panel Survey 1990-1992.
Nick Buck, Jonathan Gershuny, David Rose and Jacqueline Scott (1994)
In this book, researchers from the Research Centre analyse the data from the first two years of the study. Each chapter examines a different aspect of change in people's lives and the introduction provides an overview of longitudinal surveys in general and the BHPS in particular.

Copies can be ordered from the Research Centre.
Other documents which you might find useful can be ordered from the ESRC Research Centre at the address below. Among these are:

| Technical Paper Number 1 | British Household Panel Study Questionnaire Mainstage Wave One 1991 |
| :---: | :---: |
| Technical Paper Number 2 | British Household Panel Study Interviewer Instructions Mainstage Wave One 1991 |
| Technical Paper Number 3 | British Household Panel Study Technical Report Mainstage Wave One 1991 |
| Technical Paper Number 4 | British Household Panel Study Questionnaire Mainstage Wave Two 1992 |
| Technical Paper Number 5 | British Household Panel Study Wave One: Outline of the British Household Panel Study Documentation System. Marcia Freed Taylor, Elaine C.A. Prentice and John Brice. (1992) |
| Technical Paper Number 6 | British Household Panel Study Questionnaire Mainstage Wave Three 1993. |
| Technical Paper Number 7 | British Household Panel Study Technical Report Mainstage Two 1994 |
| Technical Paper Number 8 | Panel Study of Manufacturing Establishments - First Stage. Andrew K.G. Hildreth and Nigel Tremlett. (1994) |
| Technical Paper Number 9 | British Household Panel Study Questionnaire Mainstage Wave Four 1994. |


| Technical Paper Number 10 | British Household Panel Study Technical Report <br> Mainstage Three 1995 |
| :--- | :--- |
| Technical Paper Number 11 | British Household Panel Study Questionnaire Mainstage <br> Wave Five 1995 |
| Technical Paper Number 12 | British Household Panel Study Questionnaire Mainstage <br> Wave Six 1996 |
| Technical Paper Number 13 | Unified BHPS Work-life Histories: Combining Multiple <br> Sources into a User-friendly Format. Brendan Halpin <br> (1997) |
| Technical Paper Number 14 | British Household Panel Study Wave Four Technical |
| Technical Paper Number 15 | Report 1994. ESRC Research Centre on Micro-social <br> Change (1997) |
| Technical Paper Number 16 British Household Panel Study Wave Five Technical |  |

For information on research design and methodology, the following Research Papers can also be obtained:

| Working Paper 1 | Micro-social change in Britain: an outline of the role and <br> objectives of the British Household Panel Study. <br> David Rose et al. |
| :--- | :--- |
| Working Paper 2 | Design issues in the British Household Panel Study. <br> David Rose, Nick Buck and Louise Corti. |
| Working Paper 3 | Sample design issues in a panel survey: the case of the <br> British Household Panel Study. A P M Coxon (ed). |
| Working Paper 21 | Micro-social Change in Britain: Current and Future <br> Research Using the British Household Panel Study, <br> David Rose et al. (1992) |
| Working Paper 23 | Methodological Issues in the Design of the British <br> Household Panel Survey, Pamela C. Campanelli and <br> Louise Corti (1993) |
| Working Paper 25 | Using Household Panels to Study Micro-social Change, |
| Jacqueline Scott (1993) |  |

Other Research Papers of the ESRC Research Centre which might be of interest are:

| Working Paper 4 | The Use of Panel Data in Econometric Analysis: A Survey. Gordon Kemp. (1991) |
| :---: | :---: |
| Working Paper 5 | Methodological Issues in the Study of Household Allocative Systems. Heather Laurie. (1991) |
| Working Paper 6 | Household Allocative Systems, Gender and Class Analysis. David Rose and Heather Laurie. (1991) |
| Working Paper 7 | Combining Qualitative and Quantitative Data in the Longitudinal Study of Household Allocations. Heather Laurie and Oriel Sullivan. (1991) |
| Working Paper 8 | Gender Differences in Living Arrangements, Employment and Stress: Comparison of Britain and the USA. Jacqueline Scott and Louise Corti. (1991) |
| Working Paper 9 | A Cross-national Comparison of Gender-role Attitudes: Is the Working Mother Selfish? Jacqueline Scott and Jean Duncombe. (1991) |
| Working Paper 10 | Visions of the Future: A Computer Content Analysis of Open Ended Survey Data. Jacqueline Scott, David Fan, Howard Schuman and Carol Shaffer. (1991) |
| Working Paper 11 | The Reliability of Recall Data: A Literature Review. Shirley Dex. (1991) |
| Working Paper 12 | Spell Incidence, Spell Duration and the Measurement of Unemployment. A. F. Shorrocks. (1992) |
| Working Paper 13 | Response Contamination by Third Parties in a Household Interview Survey. Louise Corti and Karin M. Clissold. (1992) |
| Working Paper 14 | Comparative Analysis Using Large Scale National Data Sources of Women's Employment. Shirley Dex and Heather Laurie. (1992) |
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The Effects of Mobility on Neighbourhood Social Ties Gundi Knies (2009)

Birth Weight and the Dynamics of Early Cognitive and Behavioural Development Emilia Del Bono, John Ermisch (2009)

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Participation in disability benefit programmes. A partial identification analysis of the British Attendance Allowance system Stephen Pudney (2009)

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Measuring the size and impact of public cash support for children in cross-national perspective Alari Paulus, Holly Sutherland, Francesco Figari(2009)

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Recent Trends in Top Income Shares in the USA:
Reconciling Estimates from March CPS and IRS Tax Return Data Richard Burkhauser, Shuaizhang Feng, Stephen Jenkins, Jeff Larrimore (2009)

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### 5.2. A List of Publications Based on BHPS Data

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### 5.3. Notice for Users of BHPS Data

All users who obtain BHPS data through the Data Archive will have been required to sign a User Undertaking Form, under the terms of which they are required to deposit in the Data Archive two copies of all publications arising from the use of the data. One of these copies will be held in the Institute's Research Resources Unit. A list of these related publications can be obtained from that Unit upon request.

Volume A: Introduction, Technical Report and Appendices - Appendix 6.4: Question Number to Variable Index

## Appendix 6. Indexes

## Appendix 6.1. Subject Category Thesaurus

This Thesaurus has been created to allow users to more readily locate the variables which are most relevant to their research interests, and to find other variables with related data throughout the database. There are two types of entry:

Terms marked with a * are main terms which actually appear in the Cross-Wave Subject Category Index. For many of these, other related terms are indicated by "See also":

Alternative or expanded terms have references to the main term entries under which it is likely that variables of interest will appear.

Once you have consulted this Thesaurus, the identified terms can be used to interrogate the CrossWave Subject Category Index.

## Absence from work

See Employment: Hours of Work and Overtime

## Accidents

| See | Health: Accidents, Illness |
| :---: | :---: |
| Accommodation |  |
| See | Housing: Size and Condition of Dwelling |
| Adopted Children |  |
| See | Children |
| Adoption |  |
| See | Children |

## Affiliation and Social Psychology

See Social and Interest Group Activity Social and Interest Group Membership

Age
See Socio-Demographic Characteristics

## Alimony

## Allowances

See Financial Management: External Transfers

| See | Financial Management: Allowances |
| :--- | :--- |
| Incomes: Benefits and Allowances and Pensions |  |
|  | Housing: Allowances/Rebates |

## Assets

See Financial Management: Savings and Bank Accounts Housing: Ownership Status and Tenure Incomes: Rents, Savings, Investments

## Attitudes

| See | Employment: Attitudes to Work and Incentives |
| :--- | :--- |
| Health: NHS vs Private |  |
| Values, Opinions and Attitudes |  |

## Bedrooms

## Benefits

| See | Employment: Benefits Receipt |
| :--- | :--- |
| Incomes: Benefits and Allowances and Pensions |  |

## Births

|  | See | Children <br> Fertility |
| :--- | :--- | :--- |
| Birthplace |  |  |
| Board/Keep | See | Geographic Location <br> Socio-Demographic Characteristics |
| Caring |  | See |

## Cohabitation History

See Marital and Cohabitation History Marital Status

## Colour Television

See
Household Consumption: Consumer Durables

## * Computers and Computing

CD Player
See Household Consumption: Consumer Durables

## Consumer Confidence

See Financial Management: Savings and Bank Accounts Financial Management: Material Well-Being

## Consumer Durables

See Household Consumption: Consumer Durables

## Consumption

See

Geographic Location
Socio-Demographic Characteristics

## Credit and Debt

See Financial Management: Credit and Debt Financial Management: Loan Repayments Financial Management: Problems Financial Management: Savings and Bank Accounts Housing: Rent, Mortgage and Loan Details Incomes: Rents, Savings, Investments

## * Crime

See also Neighbourhood and Residence

## Decision-Making

See
Gender Roles

## Demographic Information

See
Children
Socio-Demographic Characteristics

## Dependants Allowances

Incomes: Benefits and Allowances and Pensions

## Difficulties with Rent

See Incomes: Benefits and Allowances and Pensions
Housing: Problems
Housing: Rent, Mortgage and Loan Details

## Disability Allowances

See
Incomes: Benefits and Allowances and Pensions

Disabilities

| See | Health: Accidents, Illness <br> Health: Effect on Daily Life, Employment <br> Incomes: Benefits and Allowances and Pensions |
| :---: | :---: |
| Dishwashers |  |
| See | Household Consumption: Consumer Durables |
| Division of Labour in Household |  |
| See | Child Care |
|  | Gender Roles |
|  | Values, Opinions and Attitudes |
| Divorce |  |
| See | Marital and Cohabitation History Marital Status |
| Doctors |  |
| See | Health: Childrens Health |
|  | Health: Medical Consultations |
|  | Health: NHS vs Private |
|  | Health: Use of Health and Welfare Services |
| Domestic Duties, Responsibility For |  |
| See | Child Care |
|  | Gender Roles |
|  | Values, Opinions and Attitudes |
|  | Family Life |
| Driving Licences |  |
| See | Transport |
| Earnings |  |
| See | Employment: Self-Employment |
|  | Employment: Wages, Salary and Deductions |
|  | Employment History: Wages, Salary and Deductions Incomes |
| * Education: Background and Attainments |  |
| * Education: Recent Education and Training |  |
| Elderly |  |
| See | Employment: Labour Force Status |
|  | Employment: Superannuation and Pension Schemes Financial Management: Pensions |
|  | Incomes: Benefits and Allowances and Pensions |
|  | Socio-Demographic Characteristics |
| * Employment: Attitude to Work and Incentives |  |
| * Employment: Benefits Receipt |  |
| * Employment: Expectations |  |
| * Employment: Hours Worked and Overtime |  |
| * Employment: Industrial and Occupational Classification |  |
| * Employment: Labour Force Status |  |

* Employment: Length of Job Tenure
* Employment: Not Working/Seeking Work
* Employment: Prospects and Training

See also Education: Background and Attainments Education: Recent Education and Training Values, Opinions, and Attitudes

* Employment: Second Job
* Employment: Sector and Duties
* Employment: Self-Employment
* Employment: Superannuation and Pension Schemes
* Employment: Travelling Time and Means of Travel

See also Transport

* Employment: Wages, Salary and Deductions

See also Employment History: Wages, Salary and Deductions

* Employment: Workplace and Size of Firm

See also Employment History: Size, Sector and Duties

* Employment History: Labour Force Status Spells

See also Lifetime Employment History

* Employment History: Reasons for Leaving and Taking Jobs
* Employment History: Size, Sector and Duties

See also Employment: Workplace and Size of Firm

* Employment History: Wages, Salary and Deductions

See also Employment: Wages, Salary and Deductions

## * Environmental Issues

See also Values, Opinions and Attitudes

* Ethnicity

See also Geographic Location, Geographic Mobility
Expenditure
See Financial Management: External Transfers Financial Management: Internal Transfers Financial Management: Loan Repayments Financial Management: Material Well-Being Financial Management: Personal Spending

## External Transfers

See Financial Management: External Transfers Financial Management: Loan Repayments Financial Management: Material Well-Being Financial Management: Personal Spending

## Family Allowances

Family History

Children
Fertility
Marital and Cohabitation History

* Family Life

See also

Children
Values Opinions and Attitudes

Family Structure
Children
Fertility
Marital and Cohabitation History
Relationship between Household Members Socio-Demographic Characteristics
Family Values
See Values, Opinions and Attitudes
Father's Employment
See
Socio-Demographic Characteristics
Father's Job Title
See Socio-Demographic Characteristics

* Fertility
See also Children
Finance
See Financial Management Incomes
* Financial Management: Allowances
* Financial Management: Credit and Debt
* Financial Management: External Transfers
* Financial Management: Internal Transfers
* Financial Management: Loan Repayments
See also Housing: Rent, Mortgage and Loan Details
* Financial Management: Material Well-Being
* Financial Management: Personal Spending
* Financial Management: Pensions
* Financial Management: Problems
See also
Credit and Debt
* Financial Management: Savings and Bank Accounts
See also Incomes: Rents, Savings, Investments


## Food

See Household Consumption: Food
Freezer
See Household Consumption: Consumer Durables
Friendship
See Social Support Networks
Fuel
See Household Consumption: Heating and Fuel

## Full-Time Education

See Education: Background and Attainments Education: Recent Education and Training

## Gas

See Household Consumption: Heating and Fuel

## * Gender Roles

See also
Child Care
Financial Management: Personal Spending
Values, Opinions and Attitudes

## General Election

See Political Support and Behaviour Values, Opinions and Attitudes

## General Health Questionnaire

See Health: Personal Health Condition

## * Geographic Location

See also Geographic Mobility Neighbourhood and Residence

## * Geographic Mobility

See also Geographic Location Neighbourhood and Residence

## Government Policies

See Values, Opinions and Attitudes

## Handicapped

See Health: Personal Health Condition Caring

\author{

* Health: Accidents, IIIness
}
* Health: Childrens Health
* Health: Effect on Daily Life, Employment
* Health: Hospital and Clinic Use
* Health: NHS vs Private
* Health: Medical Consultations
* Health: Personal Health Condition
* Health: Smoking
* Health: Subjective Well-Being
* Health: Use of Health and Welfare Services
Heating
See Household Consumption: Heating and Fuel
Home Computer
See Household Consumption: Consumer Durables
Home ImprovementsSee Household Consumption: Home ImprovementsHousing: Size, Condition of Housing
Home Purchase
See Housing: Ownership Status and TenureHousing: Rent, Mortgage and Loan Details
Home WorkingSee Employment: Workplace and Size of FirmEmployment History: Size, Sector and DutiesLifetime Employment History
Hospital
See Health: Accidents, Illness,Health: Hospital and Clinic UseHealth: Medical ConsultationsHealth: Use of Health and Welfare Services
Hospital Visits
See Health: Hospital and Clinic Use
Hours of WorkSee Employment: Hours Worked and Overtime
House PurchaseSee Housing: Ownership Status and TenureHousing: Rent, Mortgage and Loan Details
House Values
See Housing: Ownership Status and TenureHousing: Rent, Mortgage and Loan Details
* Household Changes
See also Geographic Mobility
Household Composition
See Relationship between Household Members Socio-Demographic Characteristics
* Household Consumption
* Household Consumption: Consumer Durables
* Household Consumption: Food
* Household Consumption: Heating and Fuel
* Household Consumption: Home Improvements
Household Finances: Decision-Making
See Gender Roles
Household Type
See Household ChangesKey Linking VariableRelationship between Household Members
Housekeeping - Responsibility for
See Gender Roles
Housekeeping CostsSeeFinancial Management: Internal Transfers
Housework
See Gender Roles
* Housing: Allowances/Rebates* Housing: Local Authority and Services Charges* Housing: Ownership Status and Tenure* Housing: Problems
* Housing: Rent, Mortgage and Loan Details
* Housing: Size and Condition of Dwelling
See also Household Consumption: Home Improvements
IIIness
See Health: Accidents, IllnessHealth: Childrens HealthHealth: Personal Health Condition
* Imputation Flag Variable
* Incomes
See also Employment: Wages, Salary and DeductionsEmployment History: Wages, Salary and Deductions
* Incomes: Benefits and Allowances and Pensions* Incomes: Grants for Education* Incomes: Household Income
* Incomes: Rents, Savings, InvestmentsSee also:Financial Management: Savings and Bank Accounts
*Incomes: WindfallsInformation TechnologySeeComputers and Computing
Inheritance
See Incomes
Internal Transfers


# See Financial Management: Internal Transfers <br> International Standard Occupational Classification ISCO : Parent <br> See <br> Socio-Demographic Characteristics <br> International Standard Occupational Classification ISCO : Respondent <br> See <br> Employment: Industrial and Occupational Classification Employment History: Size, Sector and Duties 

## *Interview Characteristics and Conditions

## Investments

$\begin{array}{ll}\text { See } & \text { Incomes: Rents, Savings, Investments } \\ \text { Financial Management: Savings and Bank Accounts }\end{array}$

## Job Description

See Employment: Sector and Duties Employment History: Size, Sector and Duties

## Job Expectations

See

Job History
See Employment History Lifetime Employment History: Events

## Job Preferences

See Employment: Attitudes to Work and Incentives
Employment: Expectations
Employment History: Reasons for Leaving and Taking Jobs

## Job Satisfaction

See
Employment: Attitudes to Work and Incentives
Employment History: Reasons for Leaving and Taking Jobs
Job Search
See Employment: Not Working/Seeking Work

* Key Linking Variable

Leisure
See Leisure Activity
Social and Interest Group Activity
Social and Interest Group Membership

## * Leisure Activity

* Life Events
* Lifetime Employment History: Events

Loans
See Financial Management: Loan Repayments Housing: Rent, Mortgage and Loan Details

## * Marital and Cohabitation History

## Maintenance Payments

See Financial Management: External Transfers Incomes: Benefits and Allowances and Pensions

[^9]
## Opinions

See | Health: Subjective Well-Being |
| :--- |
| Values, Opinions and Attitudes |
| Financial Management: Material Well-Being |
| Employment History: Reasons for Leaving and Taking Jobs |
| Employment: Attitudes to Work and Incentives |
| Health: NHS vs Private |
| Neighbourhood and Residence |
| Gender Roles |
| Life Events |

## Orphans

See

## Owner-Occupier

## See

## Part-Time Work

## Overtime

Fertility
Children
Relationship between Household Members
Socio-Demographic Characteristics

Employment: Hours Worked and Overtime

Housing: Ownership Status and Tenure

See

Parental Care

Employment: Hours Worked and Overtime Employment: Labour Force Status

Child Care
Children
Relationship between Household Members
Values, Opinions and Attitudes
Family Life
Parental Status
See Children

## Partisan Support

Newspaper Readership
Political Support and Behaviour
Values, Opinions and Attitudes
Pay
See Employment: Self-Employment
Employment: Wages, Salary and Deductions Employment History: Wages, Salary and Deductions Incomes

## Pensions

Employment: Superannuation and Pension Schemes Financial Management: Pensions Incomes: Benefits and Allowances and Pensions

## Personal Events

See

Life Events

## Personal Opinions

See | Values, Opinions and Attitudes |
| :--- |
| Financial Management: Material Well-Being |
| Employment History: Reasons for Leaving and Taking Jobs |
| Employment: Attitudes to Work and Incentives |
| Health: NHS vs Private |
| Health: Subjective Well-Being |
| Neighbourhood and Residence |
| Gender Roles |
| Life Events |

## Personal Spending

See Financial Management: Personal Spending

## * Physical Characteristics

## Place of Birth

See Geographic Location
Geographic Mobility
Socio-Demographic Characteristics

## Political Efficacy

Values, Opinions and Attitudes

## Political Party

See Newspaper Readership
Values, Opinions and Attitudes

## * Political Support and Behaviour

See also
Newspaper Readership Values, Opinions and Attitudes

## Politics

See Newspaper Readership
Political Support and Behaviour
Values, Opinions and Attitudes

## Private Medicine

See Health: Hospital and Clinic Use
Health: Medical Consultations
Health: NHS vs Private
Health: Use of Health and Welfare Services

## Promotions

See Employment: Attitudes to Work and Incentives
Employment: Sector and Duties
Employment History: Reasons for Leaving and Taking Jobs Lifetime Employment History

## Purchases

See Gender Roles
Household Consumption: Consumer Durables

## Redundancy

See Employment: Reasons for Leaving and Taking Jobs

## Region

See Geographic Location

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## * Religion

| See also | Values, Opinions and Attitudes <br> Social and Interest Group Activity <br> Social and Interest Group Membership |
| :--- | :--- |

## Rents

See | Housing: Allowances/Rebates |
| :--- | :--- |
| Housing: Rent, Mortgage and Loan Details |
| Incomes: Rent, Savings, Investments |

Residence
See $\quad$ Neighbourhood and Residence
Geographic Location
Housing: Size and Condition of Dwelling

## * Retirement

* Sampling Factors

Satisfaction with: Accommodation

| See | Housing: Problems |
| :--- | :--- |
|  | Neighbourhood and Residence |

Satisfaction with: Job
See
Employment: Attitudes to Work and Incentives
Employment: Reasons for Leaving and Taking Jobs

## Satisfaction with: Health Services

See Health: NHS vs Private

## Savings and Bank Accounts

See

See

Incomes: Rent,Savings,Investments Financial Management: Savings and Bank Accounts

## School

See Education: Background and Attainments
Education: Recent Education and Training

## Second Job

See | Employment: Second Job |
| :--- |
| Employment: Hours Worked and Overtime |
| Employment: Industrial and Occupational Classification |
| Employment: Labour Force Status |
| Employment: Self-Employment |
| Employment: Wages, Salary and Deductions |

## Sector of Employment

See
Employment: Industrial and Occupational Classification Employment: Sector and Duties

## Self-Employment

See
Employment: Self-Employment

## Sickness

See Health: Accidents, Illness
Health: Childrens Health
Health: Personal Health

## Size of Household

See

Household Changes
Relationship between Household Members
Socio-Demographic Characteristics
Key Linking Variable
Smoking
See ..... Health: Smoking

* Social and Interest Group Activity
* Social and Interest Group Membership
Social and Welfare Services
See ..... Health: Use of Health and Welfare Services
* Social Classification* Social Support Networks*Socio-demographic Characteristics
Socio-Economic StatusSee Employment: Industrial and Occupational ClassificationSocial ClassificationSocio-Demographic Characteristics
Standard Industrial Classification (SIC): ParentsSee Employment: Industrial and Occupational ClassificationSocio-Demographic Characteristics
Standard Industrial Classification (SIC): Respondent
See Employment: Industrial and Occupational ClassificationEmployment History: Size, Sector and Duties
Standard Occupational Classification (SOC): ParentsSee Socio-Demographic CharacteristicsEmployment: Industrial and Occupational Classification
Standard Occupational Classification (SOC): Respondent
See Employment: Industrial and Occupational ClassificationEmployment History: Size, Sector and Duties
Step Children
See Children
Telephone
See Household Consumption: Consumer Durables
Television
See Household Consumption: Consumer Durables
Terminal Education Age
See Education: Background and AttainmentsEducation: Recent Education and Training
* Time Use
* Trade Unions and Union Membership
See also Values, Opinions and Attitudes
TrainingSee Education: Background and AttainmentsEducation: Recent Education and TrainingEmployment: Prospects and Training


## * Transport

## Travel to Work

See Transport

## Unemployment

See Employment: Not Working/Seeking Work

## Unemployment Benefits

See Employment: Benefits Receipt Employment: Not Working/Seeking Work Incomes: Benefits and Allowances and Pensions

## Union Membership

See
Trades Unions and Union Membership

## Use of Health Services

See
Health: Use of Health and Welfare Services

## * Values, Opinions and Attitudes

## Video Recorder

See
Household Consumption: Consumer Durables

## Voting

See Political Support and Behaviour
Values, Opinions and Attitudes
Wages
See Employment: Second Job
Employment: Wages, Salary and Deductions Employment History: Size, Sector and Duties

## Washing Machine

See
Household Consumption: Consumer Durables
Welfare Services
Health: Use of Health and Welfare Services

## Well-Being

See Health: Subjective Well-Being
Financial Management: Material Well-Being

## Widows

## Workplace

See Employment: Workplace and Size of Firm Employment History: Size, Sector and Duties

## Young Persons

Children
Family Life

| AD1 | ALKNBRD | AD201 | AQFEDJ |
| :---: | :---: | :---: | :---: |
| AD2 | ALKMOVE | AD20J | AQFEDA |
| AD3 | ALKMOVY | AD20K | AQFEDK |
| AD4 | APLEVER | AD20L | AQFEDL |
| AD4M | APLNOWM | AD20M . | AQFEDM |
| AD4Y | APLNOWY | AD20N | AQFEDN |
| AD5CTY | APLB4C | AD200 | AQFEDO |
| AD5DST | APLB4D | AD20P | AQFEDP |
| AD6CTY | APLBORNC | AD20Q | AQFEDQ |
| AD6DST | APLBORND | AD20R | AQFEDR |
| AD7 | AYR2UK | AD20S | AQFEDS |
| AD8M | ADOBM | AD21A | ANQFEDB |
| AD8Y | ADOBY | AD21B | ANQFEDC |
| AD9 | ASEX | AD21C | ANQFEDD |
| AD10A | APASOC | AD21D | ANQFEDE |
| AD10ANA | . APAJU | AD21E | ANQFEDF |
| AD10B | APASEMP | AD21F | ANQFEDG |
| AD10C | APABOSS | AD21G | ANQFEDH |
| AD10D | APAMNGR | AD21H | ANQFEDI |
| AD11A | AMASOC | AD21I | ANQFEDJ |
| AD11ANA | AMAJU | AD21J | ANQFEDA |
| AD11B | AMASEMP | AD21K | ANQFEDK |
| AD11C | . AMABOSS | AD21L | ANQFEDL |
| AD11D | AMAMNGR | AD21M . | ANQFEDM |
| AD12 | AMLSTAT | AD21N | ANQFEDN |
| AD13 | ASCEND | AD21O | ANQFEDO |
| AD13NA | ASCHOOL | AD21P | ANQFEDP |
| AD14A | ASCTYPE | AD21Q . | ANQFEDQ |
| AD14B | ASCNOW | AD21R | ANQFEDR |
| AD15 | AFETYPE | AD21S | ANQFEDS |
| AD16 | AFEEND | AD22B | AEAAGE |
| AD16NA | AFENOW | AD23A | AEDNEW |
| AD17 | AQFHAS | AD23B1 | AEDNEW1 |
| AD18A | . AQFA | AD23B2 | AEDNEW2 |
| AD18B | . AQFB | AD23B3 | AEDNEW3 |
| AD18C | . AQFC | AD23B4 | AEDNEW4 |
| AD18D | . AQFD | AD23C | AEDNEWD |
| AD18E | . . AQFE | AD24A | APAPERR |
| AD18F | . . AQFF | AD24B1 | APAPER1 |
| AD18G | . AQFG | AD24B2 | APAPER2 |
| AD18H | . AQFH | AD24C | APAPERM |
| AD18I | AQFI | AD25 | APAPERP |
| AD18J | . AQPFJ | AD26A | . AIVDA |
| AD18K | . AQFK | AD26B | . AIVDB |
| AD18L | AQFL | AD26C | . AIVDC |
| AD18M | . AQFM | AD26D . | . AIVDD |
| AD18N | . AQFN | AE1 | AJBHAS |
| AD19 | AQFED | AE2 | AJBOFF |
| AD20A | AQFEDB | AE3 | AJBOFFY |
| AD20B | AQFEDC | AE4 | AJBTERM |
| AD20C | AQFEDD | AE5 | AJBSOC |
| AD20D | AQFEDE | AE6 | . AJBSIC |
| AD20E | . AQFEDF | AE7 | AJBSEMP |
| AD20F | AQFEDG | AE8B | AJBMNGR |
| AD20G | AQFEDH | AE9 | AJBSECT |
| AD20H | . AQFEDI | AE10 | AJBSIZE |


| AE11 | AJBMIX |
| :---: | :---: |
| AE12A | AJBHRS |
| AE12B | AJBOT |
| AE12C | AJBOTPD |
| AE13 | . AJBHRLK |
| AE14 | AJBTIME |
| AE15A | AJBONUS |
| AE15B | AJBRISE |
| AE16A | ATUJBPL |
| AE16B | ATUIN1 |
| AE16C | ATUIN2 |
| AE17A | AJBOPPS |
| AE17B | AJBED |
| AE17C1 | AJBED1 |
| AE17C2 | AJBED2 |
| AE17C3 | AJBED3 |
| AE17C4 | AJBED4 |
| AE17C5 | AJBED5 |
| AE17D | AJBEDD |
| AE18 | AJBPEN |
| AE19 | AJBPENM |
| AE20 | AJBPL |
| AE21A | AJBTTWT |
| AE21B | AJBTTWM |
| AE22A1 | AJBSAT1 |
| AE22A2 | AJBSAT2 |
| AE22A3 | AJBSAT3 |
| AE22A4 | AJBSAT4 |
| AE22A5 | AJBSAT5 |
| AE22A6 | AJBSAT6 |
| AE22A7 | AJBSAT7 |
| AE22B | AJBSAT |
| AE23A | APAYGL |
| AE23B | APAYGW |
| AE23C | APAYNL |
| AE23D | APAYNW |
| AE23E | APAYSLP |
| AE24A | APAYUSL |
| AE24B | . APAYU |
| AE24C | . APAYUW |
| AE24D | APAYUG |
| AE24E1 | APAYDF1 |
| AE24E2 | APAYDF2 |
| AE24E3 | APAYDF3 |
| AE24E4 | APAYDF4 |
| AE24E5 | APAYDF5 |
| AE24E6 | APAYDF6 |
| AE24E7 | APAYDF7 |
| AE24E8 | APAYDF8 |
| AE25D | AJBBGD |
| AE25M | AJBBGM |
| AE25Y | AJBBGY |
| AE26 | . AJBBGLY |
| AE27 | APAYLY |
| AE28 | APAYLW |
| AE28 | APAYLYW |


| AE29 | APAYLG | AE61 | AJBLKY1 |
| :---: | :---: | :---: | :---: |
| AE29 | APAYLYG | AE62 | AJBLKY2 |
| AE30 | . AJBHRLY | AE64 | AJBUB |
| AE31 | AJBOTLY | AE65 | AJBUBY |
| AE32 | APAYS | AE66 | AJ2HAS |
| AE33 | APAYSW | AE67 | AJ2SOC |
| AE34 | APAYSG | AE68 | AJ2SEMP |
| AE35A | AJBHRBG | AE69 | AJ2HRS |
| AE35B | AJBOTBG | AE70 | AJ2PAY |
| AE36 | APAYGYR | AE72A | AJBHHA |
| AE36DK | APAYGYA | AE72B | AJBHHB |
| AE37A | AJSBOSS | AE72C | AJBHHC |
| AE37B | AJSSIZE | AE72D | AJBHHD |
| AE38 | AJSHRS | AE72E | AJBHHE |
| AE39A | . AJSHRLK | AE72F | AJBHHF |
| AE39B | AJSTIME | AE73 | AJBHH |
| AE40A | . AJSTYPE | AE74A | AIVEA |
| AE40B | AJSACCS | AE74B | AIVEB |
| AE40C | AJSPRF | AE74C | AIVEC |
| AE40DBM | AJSPRBM | AE74D | AIVED |
| AE40DBY | . AJSPRBY | AF2 | ANF1 |
| AE40DEM | AJSPREM | AF3A | AFICODE |
| AE40DEY | . AJSPREY | AF3B01 | AFR01 |
| AE40E | AJSPAYL | AF3B02 | AFR02 |
| AE40FBM | AJSPYBM | AF3B03 | AFR03 |
| AE40FBY | . AJSPYBY | AF3B04 | AFR04 |
| AE40FEM | AJSPYEM | AF3B05 | AFR05 |
| AE40FEY | AJSPYEY | AF3B06 | AFR06 |
| AE41A | AJSPL | AF3B07 | AFR07 |
| AE41B | AJSTTWT | AF3B08 | AFR08 |
| AE41C | AJSTTWM | AF3B09 | AFR09 |
| AE42A1 | AJSSAT1 | AF3B10 | AFR10 |
| AE42A2 | AJSSAT2 | AF3B11 | AFR11 |
| AE42A3 | AJSSAT3 | AF3B12 | AFR12 |
| AE42A4 | AJSSAT4 | AF3B13 | AFR13 |
| AE42A5 | AJSSAT5 | AF3B14 | AFR14 |
| AE42B | . AJSSAT | AF3B15 | AFR15 |
| AE43D | . AJSBGD | AF3B16 | . AFR16 |
| AE43M | AJSBGM | AF3BAL | AFRALL |
| AE43Y | AJSBGY | AF3C | AFRNOW |
| AE44 | ARACH12 | AF3D | AFRVAL |
| AE45M1 | AJBCHC1 | AF3EOC | AFRW |
| AE45M2 | AJBCHC2 | AF3F | AFRJT |
| AE45M3 | AJBCHC3 | AF3FPN | AFRJTPN |
| AE47 | AXPCHCF | AF3GM | AFISBM |
| AE48 | AXPCHC | AF3GY | AFISBY |
| AE49 | AHUXPCH | AF3SEQ | AFISEQ |
| AE50 | AHUNURS | AF4 | AFISIT |
| AE51 | . AJULK1 | AF5 | AFISITC |
| AE52 | . AJULK4 | AF6 | AFISITX |
| AE53 | AJULKJB | AF8 | AFIYRDI |
| AE54 | AJUSPEC | AF9 | ASAVE |
| AE55 | AJUSOC | AF10 | ASAVED |
| AE56 | AJUPAYX | AF11 | ASAVEY |
| AE57 | AJUHRSX | AF12 | ABANKAC |
| AE58A | . AJUPAYL | AF14 | . ABANKJT |
| AE58B | AJUHRSL | AF15P1 | ABANKJ1 |
| AE59 | AJBASP1 | AF15P2 | ABANKJ2 |
| AE60 | . AJBASP2 | AF16 | AHUDRAW |


| , |  |
| :---: | :---: |
| AF18A1 | AFTHH1 |
| AF18A2 | AFTHH2 |
| AF18A3 | AFTHH3 |
| AF18B11 | AFTHH11 |
| AF18B12 | AFTHH21 |
| AF18B13 | AFTHH31 |
| AF18B21 | AFTHH12 |
| AF18B22 | AFTHH22 |
| AF18B23 | AFTHH32 |
| AF18B31 | AFTHH13 |
| AF18B32 | AFTHH23 |
| AF18B33 | AFTHH33 |
| AF18B41 | AFTHH14 |
| AF18B42 | AFTHH24 |
| AF18B43 | AFTHH34 |
| AF18B51 | AFTHH15 |
| AF18B52 | AFTHH25 |
| AF18B53 | AFTHH35 |
| AF18B61 | AFTHH16 |
| AF18B62 | AFTHH26 |
| AF18B63 | AFTHH36 |
| AF18C1 | AFTHH1V |
| AF18C2 | AFTHH2V |
| AF18C3 | AFTHH3V |
| AF18DOC1 | AFTHH1W |
| AF18DOC2 | AFTHH2W |
| AF18DOC3 | AFTHH3W |
| AF19 | AFTEXHH |
| AF20A | AFTEXA |
| AF20B | AFTEXB |
| AF20C | AFTEXC |
| AF21A1 | AFTEXA1 |
| AF21A2 | AFTEXA2 |
| AF21A3 | AFTEXA3 |
| AF21A4 | AFTEXA4 |
| AF21A5 | AFTEXA5 |
| AF21A6 | AFTEXA6 |
| AF21B1 | AFTEXB1 |
| AF21B2 | AFTEXB2 |
| AF21B3 | AFTEXB3 |
| AF21B4 | AFTEXB4 |
| AF21B5 | AFTEXB5 |
| AF21B6 | AFTEXB6 |
| AF21C1 | AFTEXC1 |
| AF21C2 | AFTEXC2 |
| AF21C3 | AFTEXC3 |
| AF21C4 | AFTEXC4 |
| AF21C5 | AFTEXC5 |
| AF21C6 | AFTEXC6 |
| AF22 | AXPSELF |
| AF24 | ASPINHH |
| AF25A | AHUBUYS |
| AF25B | AHUFRYS |
| AF25C | AHUMOPS |
| AF25D | AHUIRON |
| AF26 | AHHCH12 |
| AF27 | AHUSITS |
| AF28 | HU |


| AF29 | AHUBOSS | AH4 | AMGHAVE | AH24A3 | ACD3USE |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AF30 | . AHUPAYS | AH5 | AMGYNOT | AH24A4 | ACD4USE |
| AF31 | AHUKEEP | AH6A | AHSSNIP | AH24A5 | ACD5USE |
| AF32 | AHUASKS | AH6B | AHSVNDR | AH24A6 | ACD6USE |
| AF33A | AHUSHOP | AH7A | AHSCOST | AH24A7 | ACD7USE |
| AF33B | AHUCOOK | AH7B | AMGYR0 | AH24A8 | ACD8USE |
| AF33C | AHUDUST | AH8A | AHSSNIP | AH24A9 | ACD9USE |
| AF33D | AHUWASH | AH8B | AHSVNDR | AH24B1. | ACD1OWN |
| AF34 | ADRIVER | AH8C | AHSCOST | AH24B2. | ACD2OWN |
| AF35 | ACARUSE | AH9 | AHSYR0 | AH24B3 | ACD3OWN |
| AF36 | . ACAROWR | AH10A | AMGYRO | AH24B4. | ACD4OWN |
| AF37 | ACAROWRP | AH10B | . AHSSNIP | AH24B5 | ACD5OWN |
| AF38 | ACARJOB | AH10C | AHSVNDR | AH24B6 | ACD6OWN |
| AF39 | ACARVAL | AH10D | AHSCOST | AH24B7. | ACD70WN |
| AF40 | . AIVFOIM | AH11A | . AMGOLD | AH24B8. | ACD80WN |
| AF40 | AIVFOIH | AH11B | . AMGLIFE | AH24B9 . | ACD90WN |
| AF40A | AIVFA | AH11C | AMGTYPE | AH24C1 | ACD1NEW |
| AF40B | AIVFB | AH12A | AMGXTRA | AH24C2 | ACD2NEW |
| AF40C | AIVFC | AH12B | AMGNEW | AH24C3 | ACD3NEW |
| AF40D | . AIVFD | AH12C1 | AMGXTY1 | AH24C4 | ACD4NEW |
| AF41 | AIVSC | AH12C2 | AMGXTY2 | AH24C5 | ACD5NEW |
| AF101 | . AF101 | AH12C3 | AMGXTY3 | AH24C6 | ACD6NEW |
| AF102 | . AF102 | AH12C4 | AMGXTY4 | AH24C7 | ACD7NEW |
| AF103 | . AF103 | AH12C5 | AMGXTY5 | AH24C8 | ACD8NEW |
| AF104 | . AF104 | AH13A | AXPMG | AH24C9 | ACD9NEW |
| AF105 | . AF105 | AH13B1 | AXPMG1 | AH25 | AHEATCH |
| AF106 | . AF106 | AH13B2 | AXPMG2 | AH26 | AHEATYP |
| AF116 | . AF116 | AH13B3 | AXPMG3 | AH27 | AXPOILY |
| AF117 | . AF117 | AH13B4. | AXPMG4 | AH28 | AGASUSE |
| AF118 | . AF118 | AH14 | AHSVAL | AH29 | AGASWAY |
| AF119 | . AF119 | AH16 | AHSJB | AH30A | AXPGASL |
| AF120 | . AF120 | AH17M1 | . ARENTP1 | AH30B | AXPGASW |
| AF121 | . AF121 | AH17M2 | . ARENTP2 | AH30C | AXPGASLW |
| AF122 | . AF122 | AH18 | ARENTLL | AH31 | ALECWAY |
| AF131 | . AF133 | AH19 | ARENTF | AH32A | AXPLECL |
| AF132 | . AF132 | AH20B | . ARENT | AH32B | AXPLECW |
| AF133 | . AF131 | AH20C | ARENTW | AH32C | AXPLECLW |
| AF134 | . AF134 | AH20D1. | . ARENT1 | AH33 | AXPFOOD |
| AF135 | . AF135 | AH20D2. | ARENT2 | AH34 | ANCARS |
| AF136 | . AF136 | AH20D3. | ARENT3 | AH37M1 | AIVH1 |
| AF137 | . AF137 | AH20D4. | ARENT4 | AH37M2 | AIVH2 |
| AF138 | . AF138 | AH20D5. | . ARENT5 | AH37M3 | AIVH3 |
| AF139 | . AF139 | AH20D6. | . ARENT6 | AH38M1 | AIVHC1 |
| AF140 | . AF140 | AH21A | ARENTHB | AH38M2 | AIVHC2 |
| AF141 | . AF141 | AH21B | ARENTG | AH38M3 | AIVHC3 |
| AF151 | . AF151 | AH21C | ARENTG | AHC2 | AHHJND |
| AF152 | . AF152 | AH21D | ARENTGW | AHC5AY | AHHAB1Y |
| AF153 | . AF153 | AH22A | AXPHSDF | AHC5BY | AHHAB2Y |
| AF154 | . AF154 | AH22B1. | AXPHSD1 | AI1 | AIV1 |
| AF155 | . AF155 | AH22B2. | AXPHSD2 | AI2 | . AIV2 |
| AF156 | . AF156 | AH22C | AXPHSDB | AI4 | . AIV4 |
| AF157 | . AF157 | AH23A | AHSPRBA | AI5 | AIV5 |
| AF158 | . AF158 | AH23B | AHSPRBB | AI6A | AIV6A |
| AF159 | AF159 | AH23C | AHSPRBC | Al6B | AIV6B |
| AH1A | . AHSROOM | AH23D | AHSPRBD | Al6C | . AIV6C |
| AH1B | AHSBEDS | AH23E | AHSPRBE | Al6D | AIV6D |
| AH2 | . AHSOWND | AH23F | AHSPRBF | Al6E | AIV6E |
| AH3M1 | . AHSOWR1 | AH24A1. | ACD1USE | Al6F | AIV6F |
| AH3M2 | AHSOWR2 | AH24A2 | ACD2USE | Al7 | . AIV7 |


| AJ2 | AJBSTAT | AM13AM | AXDT1M | AM23E . | AHLCKEN |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AJ3D | ACJSBGD | AM13AY . | . AXDT1Y | AM23F | AHLCKFN |
| AJ3M | ACJSBGM | AM13BM | AXDT2M | AM23G | AHLCKGN |
| AJ3Y | ACJSBGY | AM13BY. | AXDT2Y | AM23H . | AHLCKHN |
| AJ4 | ACJSBLY | AM13CM | AXDT3M | AM24 | ASMOKER |
| AJ5A | AJHSTAT | AM13CY | AXDT3Y | AM25 | ANCIGS |
| AJ5BD | AJHBGD | AM14M1 | AXDT1PL | AM26A . | AOPHLA |
| AJ5BM | AJHBGM | AM14M2 | AXDT2PL | AM26B . | AOPHLB |
| AJ5BY | AJHBGY | AM14M3 | AXDT3PL | AM26C . | AOPHLC |
| AJ5D | ANJBS | AM15 | AHOSP | AM27 | ARACH16 |
| AJ6B | AJHSOC | AM16 | AHOSPD | AM28 | AHLCH |
| AJ8 | AJHPLDF | AM17A | AHOSPCH | AM29P1 | AHLCH1 |
| AJ9A | AJHSIC | AM18 | . AHOSPNHS | AM29P2 | AHLCH2 |
| AJ9B | AJHSIZE | AM19A | . AHLSV | AM29P3 | AHLCH3 |
| AJ10 | . AJHMNGR | AM19BA. | . AHLSVA | AM29P4 | AHLCH4 |
| AJ11B | AJHSEMP | AM19bB . | . AHLSVB | AM31 | AAIDHH |
| AJ11C | AJHBOSS | AM19BC | AHLSVC | AM32P1 | AAIDHUA |
| AJ13 | AJHSECT | AM19BD | AHLSVD | AM32P2 | AAIDHUB |
| AJ15 | . AJHA9LY | AM19BE. | . AHLSVE | AM32P3 | AAIDHUC |
| AJ16A | AJHPAYL | AM19BF . | AHLSVF | AM33A . | AAIDXHH |
| AJ16B | AJHPYLW | AM19BG | AHLSVG | AM34 | ANAIDXHH |
| AJ16C | AJHPYLG | AM19BH | AHLSVH | AM35D1 | AAIDHU1 |
| AJ17A | AJHPAYS | AM19BI | AHLSVI | AM35D2 | AAIDHU2 |
| AJ17B | AJHPYSW | AM19BJ1 | AHLSVJ | AM36D1 | AAIDPL1 |
| AJ17C | AJHPYSG | AM19BJ2 | AHLSVK | AM36D2 | AAIDPL2 |
| AJ18 | AJHSTPY | AM20A | AHLSVAN | AM37 | AAIDHRS |
| AJ19 | AJBLKY | AM20B | AHLSVBN | AM38A . | AIVMA |
| AJ91 | . AJBhad | AM20C | AHLSVCN | AM38B. | AIVMB |
| AJ92 | AJLEND | AM20D | AHLSVDN | AM38C. | AIVMC |
| AJ93 | . AJLSOC | AM20E | AHLSVEN | AM38D . | AIVMD |
| AJ94 | AJLSIC | AM20F | AHLSVFN | AP13 | APRFEHQ |
| AJ95 | AJLSEMP | AM20G | AHLSVGN | AP15 | APRSEHQ |
| AJ96 | AJLBOSS | AM20H | AHLSVHN | AP51 | APRJBFT |
| AJ97 | AJLMNGR | AM201 | AHLSVIN | AP63 | APRFITB |
| AJ98 | . AJLSIZE | AM20J1 | AHLSVJN | APB | APRRS21 |
| AJ99A | AIVJA | AM20J2 | AHLSVKN | APC | APRIPN |
| AJ99B | AIVJB | AM21A | . AHLSVAF | APD | APRWHY |
| AJ99C | AIVJC | AM21B | . AHLSVBF | AS1A | AGHQA |
| AJ99D | AIVJD | AM21C | AHLSVCF | AS1B | AGHQB |
| AM1 | AHLSTAT | AM21D | AHLSVDF | AS1C | AGHQC |
| AM2 | AHLZEST | AM21E | AHLSVEF | AS1D | AGHQD |
| AM3 | AHLDSBL | AM21F | AHLSVFF | AS1E | AGHQE |
| AM4M0 | AHLPRB | AM21G | AHLSVGF | AS1F | AGHQF |
| AM4M1 | AHLPRB1 | AM21H | AHLSVHF | AS1G | AGHQG |
| AM4M2 | AHLPRB2 | AM211 | AHLSVIF | AS1H | AGHQH |
| AM4M3 | AHLPRB3 | AM21J1 | AHLSVJF | AS1I | AGHQI |
| AM4M4 | AHLPRB4 | AM21J2 | . AHLSVKF | AS1J | AGHQJ |
| AM5 | . AHLLT | AM22A | . AHLCKA | AS1K | AGHQK |
| AM6A | . AHLLTA | AM22B | . AHLCKB | AS1L | AGHQL |
| AM6B | . AHLLTB | AM22C | AHLCKC | AS2A | . AOPFAMA |
| AM6C | AHLLTC | AM22D | AHLCKD | AS2B | AOPFAMB |
| AM6D | . AHLLTD | AM22E | AHLCKE | AS2C | . AOPFAMC |
| AM6E | . Ahllte | AM22F | AHLCKF | AS2D | . AOPFAMD |
| AM7 | . AHLLTW | AM22G | AHLCKG | AS2E | AOPFAME |
| AM8 | AHLENDW | AM22H. | AHLCKH | AS2F | AOPFAMF |
| AM9 | AHLLTWA | AM23A | AHLCKAN | AS2G | AOPFAMG |
| AM10 | . AHL2GP | AM23B | AHLCKBN | AS2H | . AOPFAMH |
| AM11 | . AXDTS | AM23C | AHLCKCN | AS21 | AOPFAMI |
| AM12 | ANXDTS | AM23D . | AHLCKDN | AS3A | ASSUPA |


| AS3B | ASSUPB | AV22D | AIVVD | BD20J | BQFEDXJ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AS3C | ASSUPC | BD2 | BLKNBRD | BD20K | BQFEDXK |
| AS3D | ASSUPD | BD3 | BLKMOVE | BD21A | BNQFEXA |
| AS3E | ASSUPE | BD4 | BLKMOVY | BD21B | BNQFEXB |
| AS4A | ASSUP1 | BD5 | BPLNEW | BD21C | BNQFEXC |
| AV1A | AOPSOCA | BD6 | . BPLNOWM | BD21E | BNQFEXE |
| AV1B | AOPSOCB | BD6 | BPLNOWY | BD21F | BNQFEXF |
| AV1C | AOPSOCC | BD7 | BMOVJB | BD21G | BNQFEXG |
| AV1D | AOPSOCD | BD8A | BMOVJBA | BD21H | BNQFEXH |
| AV1E | AOPSOCE | BD8B | BMOVJBB | BD211 | BNQFEXI |
| AV1F | AOPSOCF | BD8C | BMOVJBC | BD21J | BNQFEXJ |
| AV2 | AOPCLS1 | BD8D | BMOVJBD | BD21K | BNQFEXK |
| AV3 | AOPCLS2 | BD8E | Bmovjbe | BD22CTY | BPLBORNC |
| AV4 | AOPCLS3 | BD8F | BMOVJBF | BD22DST | BPLBORND |
| AV5 | AVOTE1 | BD8G | BMOVJBG | BD23 | BYR2UK |
| AV6 | AVOTE2 | BD8H | BMOVJBH | BD24 | BRACE |
| AV7 | AVOTE3 | BD81 | BMOVJBI | BD26 | BSCEND |
| AV8 | AVOTE4 | BD9M1 | BMOVY1 | BD26NA | BSCHOOL |
| AV9 | AVOTE5 | BD9M2 | BMOVY2 | BD27 | BSCTYPE |
| AV10 | AVOTE6 | BD10M | BDOBM | BD28 | BSCNOW |
| AV11 | AOPRLG1 | BD10Y | BDOBY | BD29 | BFETYPE |
| AV12 | AOPRLG2 | BD11 | BSEX | BD30 | BFEEND |
| AV13 | AOPRLG3 | BD11 | BSEX | BD30NA | BFENOW |
| AV14 | ARACE | BD12 | BIVLYR | BD31 | BQFHAS |
| AV15 | AORGM | BD13 | BJBSTAT | BD32A | BQFA |
| AV16A | AORGMA | BD14 | BEDLYR | BD32B | BQFB |
| AV16B | AORGMB | BD15M | BEDENDM | BD32C | BQFC |
| AV16C | . AORGMC | BD15Y | BEDENDY | BD32D | BQFD |
| AV16D | . AORGMD | BD16 | BEDTYPE | BD32E | BQFE |
| AV16E | AORGME | BD17 | BQFX | BD32F | BQFF |
| AV16F | AORGMF | BD18A. | BQFXA | BD32G | BQFG |
| AV16G | AORGMG | BD18B | BQFXB | BD32H | BQFH |
| AV16H | AORGMH | BD18C | BQFXC | BD321 | BQFI |
| AV161 | AORGMI | BD18D | BQFXD | BD32J | BQFJ |
| AV16J | . AORGMJ | BD18E . | BQFXE | BD32K | BQFK |
| AV16K | . AORGMK | BD18F | BQFXF | BD32L | BQFL |
| AV16L | AORGML | BD18G | BQFXG | BD32M | BQFM |
| AV16M. | . AORGMM | BD18H | BQFXH | BD32N | BQFN |
| AV17 | AORGA | BD181 | BQFXI | BD33 | BQFED |
| AV18A | AORGAA | BD18J | BQFXJ | BD34A | BQFEDB |
| AV18B | AORGAB | BD18K . | .BQFXK | BD34B | BQFEDC |
| AV18C | Aorgac | BD18L | BQFXL | BD34C | BQFEDD |
| AV18D | AORGAD | BD18M | BQFXM | BD34D | BQFEDE |
| AV18E | AORGAE | BD18N | BQFXN | BD34E | BQFEDF |
| AV18F | AORGAF | BD19 | BQFEDX | BD34F | BQFEDG |
| AV18G | AORGAG | BD1AD | BDOID | BD34G | BQFEDH |
| AV18H | AORGAH | BD1AM | BDOIM | BD34H | BQFEDI |
| AV181 | AORGAI | BD1AY | BDOIY | BD341 | BQFEDJ |
| AV18J | AORGAJ | BD1BH | BIVSOIH | BD34J | BQFEDA |
| AV18K | AORGAK | BD1BM | BIVSOIM | BD34K | BQFEDK |
| AV18L | AORGAL | BD20A | BQFEDXA | BD34L | BQFEDL |
| AV18M . | AORGAM | BD20B | BQFEDXB | BD34M | BQFEDM |
| AV19M1 | AOPPOL1 | BD20C | BQFEDXC | BD34N | BQFEDN |
| AV19M2 | AOPPOL2 | BD20D | BQFEDXD | BD340 | BQFEDO |
| AV20 | AOPPOL3 | BD20E | BQFEDXE | BD34P | BQFEDP |
| AV21 | AOPPOL4 | BD20F | BQFEDXF | BD34Q | BQFEDQ |
| AV22A | AIVVA | BD20G | BQFEDXG | BD34R | BQFEDR |
| AV22B | AIVVB | BD20H | BQFEDXH | BD34S | BQFEDS |
| AV22C | . . AIVVC | BD201 | BQFEDXI | BD35A | BNQFEDB |


| BD35B | BNQFEDC | BE23 | BPAYSLP | BE79E | BJSSAT5 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| BD35C | BNQFEDD | BE25 | BPAYUSL | BE80 | BJSSAT |
| BD35D | BNQFEDE | BE26 | BPAYU | BE81D | BJSBGD |
| BD35E | BNQFEDF | BE27OC | BPAYUW | BE81M | BJSBGM |
| BD35F | BNQFEDG | BE28 | BPAYUG | BE81Y | BJSBGY |
| BD35G | BNQFEDH | BE29A | BPAYDF1 | BE82 | BJBED |
| BD35H | BNQFEDI | BE29B | BPAYDF2 | BE83A | BJBED1 |
| BD35I | BNQFEDJ | BE29C | BPAYDF3 | BE83B | BJBED2 |
| BD35J | BNQFEDA | BE29D | BPAYDF4 | BE83C | BJBED3 |
| BD35K | BNQFEDK | BE29E | BPAYDF5 | BE83D | BJBED4 |
| BD35L | BNQFEDL | BE29F | BPAYDF6 | BE83E | BJBED5 |
| BD35M | BNQFEDM | BE29G | BPAYDF7 | BE84H | BJBEDH |
| BD35N | BNQFEDN | BE29H | BPAYDF8 | BE84W | BJBEDW |
| BD350 | BNQFEDO | BE31D | BJBBGD | BE85 | BRACH12 |
| BD35P | BNQFEDP | BE31M | BJBBGM | BE86M1 | BJBCHC1 |
| BD35Q | BNQFEDQ | BE31Y | BJBBGY | BE86M2 | BJBCHC2 |
| BD35R | BNQFEDR | BE32 | BJBBGLY | BE86M3 | BJBCHC3 |
| BD35S | BNQFEDS | BE33 | BJBSECT | BE88 | BXPCHCF |
| BD36 | BPAPERR | BE34 | BJBONUS | BE89 | BXPCHC |
| BD37 | BPAPER1 | BE35 | BJBRISE | BE90 | BHUXPCH |
| BD37 | BPAPER2 | BE36 | BTUJBPL | BE91 | BHUNURS |
| BD38 | BPAPERM | BE37 | BTUIN1 | BE92 | BJULK1 |
| BD39 | BPAPERP | BE38 | BTUIN2 | BE93 | BJULK4 |
| BD40A | BOPSOCG | BE39 | BJBOPPS | BE94 | BJULKJB |
| BD40B | BOPSOCH | BE40 | BJBTIME | BE95 | BJUSPEC |
| BD40C | BOPSOCI | BE41 | BPAYS | BE96 | BJUSOC |
| BD40D | BOPSOCJ | BE42 | BPAYSW | BE97 | BJUHRSX |
| BD41A | . BIVDA | BE43 | BPAYSG | BE98 | BJUPAYX |
| BD41B | BIVDB | BE44 | BJBPEN | BE99 | BJUPAYL |
| BD41C | BIVDC | BE45 | BJBPENM | BE100 | BJUHRSL |
| BD41D | BIVDD | BE58 | BPAYLY | BE102 | BJBUB |
| BE1 | BJBHAS | BE590C | BPAYLYW | BE103 | BJBUBY |
| BE2 | BJBOFF | BE60 | BPAYLYG | BE104 | BJ2HAS |
| BE3 | BJBOFFY | BE64 | BPAYGYR | BE105 | BJ2SOC |
| BE4 | BJBTERM | BE64DK | BPAYGYA | BE106 | BJ2SEMP |
| BE5 | BJBSOC | BE65 | BJSBOSS | BE107 | BJ2HRS |
| BE6 | BJBSIC | BE66 | BJSSIZE | BE108 | BJ2PAY |
| BE7 | BJBSEMP | BE67 | BJSHRS | BE110A | BJBHHA |
| BE8 | BJBMNGR | BE68 | BJSHRLK | BE110B | ВJBHHB |
| BE9 | BJBSIZE | BE69 | BJSTIME | BE110C | BJBHHC |
| BE10 | BJBHRS | BE70 | BJSTYPE | BE110D | BJBHHD |
| BE11 | BJBOT | BE71 | BJSACCS | BE110E | BJBHHE |
| BE12 | BJBOTPD | BE72 | BJSPRF | BE110F | BJBHHF |
| BE13 | BJBHRLK | BE73BM | BJSPRBM | BE111A | BIVEA |
| BE14 | . . BJBPL | BE73BY | BJSPRBY | BE111B | BIVEB |
| BE15 | BJBTTWT | BE73EM | BJSPREM | BE111C | BIVEC |
| BE16 | BJBTTWM | BE73EY | BJSPREY | BE111D | BIVED |
| BE17A | BJBSAT1 | BE74 | BJSPAYL | BEG7 | BIVIOW1 |
| BE17B | BJBSAT2 | BE75BM | BJSPYBM | BEG7 | BIVIOW1 |
| BE17C | BJBSAT3 | BE75BY | . BJSPYBY | BEG7 | BIVIOW1 |
| BE17D | BJBSAT4 | BE75EM | BJSPYEM | BEG8 | BIVELIG |
| BE17E | BJBSAT5 | BE75EY | BJSPYEY | BEG8 | BIVELIG |
| BE17F | BJBSAT6 | BE76 | BJSPL | BEG9 | BHHMEM |
| BE17G | BJBSAT7 | BE77 | BJSTTWT | BEG9 | BHHMEM |
| BE18 | . BJBSAT | BE78 | BJSTTWM | BEG9 | BHHMEM |
| BE19 | BPAYGL | BE79A | BJSSAT1 | BEG10 | BNELYR |
| BE200C | BPAYGW | BE79B | BJSSAT2 | BEG10 | BNELYR |
| BE21 | . BPAYNL | BE79C | BJSSAT3 | BEG10 | BNELYR |
| BE22OC | BPAYNW | BE79D | BJSSAT4 | BEG11 | BNEWHY |


| BEG11 | BNEWHY | BF11 | BPPPEN | BF24C1 | BFTEXAV |
| :---: | :---: | :---: | :---: | :---: | :---: |
| BEG11 | BNEWHY | BF12 | BPENB4 | BF24C2 | BFTEXBV |
| BEG12M | BNEMNJN | BF13 | BPENB4YR | BF24C3 | BFTEXCV |
| BEG12M | BNEMNJN | BF14 | BPENB4V | BF24DOC1 | BFTEXAW |
| BEG12M | BNEMNJN | BF15 | BPENB4W | BF24DOC2 | BFTEXBW |
| BEG12Y | BNEYRJN | BF16 | BPENYR | BF24DOC3 | BFTEXCW |
| BEG12Y | BNEYRJN | BF17 | BPENADD | BF25 | BSPINHH |
| BEG12Y | BNEJNYR | BF18 | BPENADV | BF26 | BHURUNS |
| BEG12Y | BNEYRJN | BF19 | BPENADW | BF27 | BHUBOSS |
| BEG13 | . BLEAVER | BF21 | BFTHH | BF28 | BHUDOES |
| BEG14 | BLVWHY | BF22A1 | BFTHH1 | BF29 | BFAIR1 |
| BEG15M | BLVMN | BF22A2 | BFTHH2 | BF30 | BHHCH12 |
| BEG15Y | BLVYR | BF22A3 | BFTHH3 | BF31 | BHUSITS |
| BEG16 | BLVLOC | BF22B11 | BFTHH11 | BF32 | BFAIR2 |
| BEG17 | BIVFIO | BF22B12 | BFTHH21 | BF33 | BHOWLNG |
| BEG17 | BIVFIO | BF22B13 | BFTHH31 | BF34 | . BEVENT3S |
| BEG17 | BIVFIO | BF22B21 | BFTHH12 | BF34 | BEVENT4 |
| BEG18 | BIVRREF | BF22B22 | BFTHH22 | BF34 | . BEVENT4S |
| BEG18 | BIVRREF | BF22B23 | BFTHH32 | BF34 | BEVENT3 |
| BEG20 | BIVCOOP | BF22B31 | BFTHH13 | BF34 | BEVENT2 |
| BEG20 | BIVCOOP | BF22B32 | BFTHH23 | BF34 | . BEVENT1S |
| BEG20 | BIVCOOP | BF22B33 | BFTHH33 | BF34 | BEVENT1 |
| BEG21 | BIODC | BF22B41 | BFTHH14 | BF34 | . BEVENT2S |
| BEG21 | BIODC | BF22B42 | BFTHH24 | BF35A | BIVFA |
| BEG22 | BIVMVST | BF22B43 | BFTHH34 | BF35B | BIVFB |
| BF2 | BNF1 | BF22B51 | BFTHH15 | BF35C | BIVFC |
| BF3A | BFICODE | BF22B52 | BFTHH25 | BF35D | BIVFD |
| BF3ANO | BNFR | BF22B53 | BFTHH35 | BF36 | BIVSC |
| BF3B01 | BFR01 | BF22B61 | BFTHH16 | BF101 | BF101 |
| BF3B02 | BFR02 | BF22B62 | BFTHH26 | BF102 | BF102 |
| BF3B03 | BFR03 | BF22B63 | BFTHH36 | BF103 | BF103 |
| BF3B04 | BFR04 | BF22C1 | BFTHH1V | BF104 | BF104 |
| BF3B05 | BFR05 | BF22C2 | BFTHH2V | BF105 | BF105 |
| BF3B06 | BFR06 | BF22C3 | BFTHH3V | BF106 | BF106 |
| BF3B07 | BFR07 | BF22DOC1 | BFTHH1W | BF116 | BF116 |
| BF3B08 | BFR08 | BF22DOC2 | BFTHH2W | BF117 | BF117 |
| BF3B09 | BFR09 | BF22DOC3 | BFTHH3W | BF118 | BF118 |
| BF3B10 | BFR10 | BF23 | BFTEXHH | BF119 | BF119 |
| BF3B11 | BFR11 | BF24A1 | BFTEXA | BF120 | BF120 |
| BF3B12 | BFR12 | BF24A2 | . BFTEXB | BF121 | BF121 |
| BF3B13 | BFR13 | BF24A3 | BFTEXC | BF122 | BF122 |
| BF3B14 | BFR14 | BF24B11 | BFTEXA1 | BF123 | BF123 |
| BF3B15 | BFR15 | BF24B12 | BFTEXB1 | BF124 | BF124 |
| BF3B16 | BFR16 | BF24B13 | BFTEXC1 | BF131 | BF131 |
| BF3B17 | BFR17 | BF24B21 | . BFTEXA2 | BF132 | BF132 |
| BF3BAL | BFRALL | BF24B22 | . BFTEXB2 | BF133 | BF133 |
| BF3C | BFRNOW | BF24B23 | . BFTEXC2 | BF134 | BF134 |
| BF3D | BFRVAL | BF24B31 | BFTEXA3 | BF135 | BF135 |
| BF3EOC | BFRW | BF24B32 | BFTEXB3 | BF136 | BF136 |
| BF3F | . BFRJT | BF24B33 | . BFTEXC3 | BF137 | BF137 |
| BF3FPN | BFRJTPN | BF24B41 | BFTEXA4 | BF138 | BF138 |
| BF3SEQ | BFISEQ | BF24B42 | BFTEXB4 | BF139 | BF139 |
| BF4 | BFISIT | BF24B43 | . BFTEXC4 | BF140 | BF140 |
| BF5 | BFISITC | BF24B51 | BFTEXA5 | BF141 | BF141 |
| BF6 | BFISITX | BF24B52 | BFTEXB5 | BF151 | BF151 |
| BF7 | BFIYRDI | BF24B53 | . BFTEXC5 | BF152 | BF152 |
| BF8 | BSAVE | BF24B61 | BFTEXA6 | BF153 | BF153 |
| BF9 | BSAVED | BF24B62 | BFTEXB6 | BF154 | BF154 |
| BF10 | . BSAVEY | BF24B63 | . BFTEXC6 | BF155 | . BF155 |


| BF156 $\ldots \ldots . . . .$. BF156 | BH45A . . . . . . . BRENT1 |
| :--- | :--- |
| BF157 . . . . . . . BF157 | BH45B . . . . . . BRENT2 | BHG4Y . . . . . . . BHG7 BHGBY


| BJ38 | BJLSEMP | BL48C | BIVLC | BM21G | BHLSVG |
| :---: | :---: | :---: | :---: | :---: | :---: |
| BJ39 | BJLBOSS | BL48D | BIVLD | BM21H | BHLSVH |
| BJ40 | BJLMNGR | BL49M | BLEDENDM | BM21I | BHLSVI |
| BJ41 | BJLSIZE | BL49NL | BLEDNOW | BM21J1 | BHLSVJ |
| BJ42A | BIVJA | BL49Y | BLEDENDY | BM21J2 | BHLSVK |
| BJ42B | BIVJB | BL50 | BLESHST | BM21J2 | BHLSVJ |
| BJ42C | BIVJC | BL50SPNO | BLESHNO | BM22A | BHLSVAN |
| BJ42D | BIVJD | BL51M | BLESHEM | BM22B | BHLSVBN |
| BL10M | BLMSPM | BL51NE | BLESHNE | BM22C | BHLSVCN |
| BL10Y | BLMSPY | BL51Y | BLESHEY | BM22D | BHLSVDN |
| BL2 | BMLSTAT | BM1 | BHLSTAT | BM22E | BHLSVEN |
| BL3 | BNMAR | BM2 | BHLZEST | BM22F | BHLSVFN |
| BL4M | BLMARM | BM3 | BHLDSBL | BM22G | BHLSVGN |
| BL4Y | BLMARY | BM4A | BHLPRBA | BM22H | BHLSVHN |
| BL5 | BLMCOH | BM4B | BHLPRBB | BM22I | BHLSVIN |
| BL6M | BLMCBM | BM4C | BHLPRBC | BM22J1 | BHLSVJN |
| BL6Y | BLMCBY | BM4D | BHLPRBD | BM22J2 | BHLSVKN |
| BL7 | BLMEND | BM4M0 | BHLPRB | BM23A | BHLSVAF |
| BL8M | BLMWWM | BM4ME | BHLPRBE | BM23B | BHLSVBF |
| BL8Y | BLMWWY | BM4MF | BHLPRBF | BM23C | BHLSVCF |
| BL9M | BLMDVM | BM4MG | BHLPRBG | BM23D | BHLSVDF |
| BL9Y | BLMDVY | BM4MH | BHLPRBH | BM23E | BHLSVEF |
| BL28 | BMPNO | BM4MI | BHLPRBI | BM23F | BHLSVFF |
| BL35 | BLCOH | BM4MJ | BHLPRBJ | BM23G | BHLSVGF |
| BL36 | BLNCOH | BM4MK | BHLPRBK | BM23H | BHLSVHF |
| BL37 | BLCSBM | BM4ML | BHLPRBL | BM23I | BHLSVIF |
| BL37M | BLCHSM | BM4MM | BHLPRBM | BM23J1 | BHLSVJF |
| BL37SPNO | BLCSNO | BM5 | . BHLLT | BM23J2 | BHLSVKF |
| BL37Y | BLCSBY | BM6A | . BHLLTA | BM24 | BHLCK |
| BL38M | BLCSEM | BM6B | . BHLLTB | BM25A | BHLCKA |
| BL38NE | BLCSNE | BM6C | BHLLTC | BM25B | BHLCKB |
| BL38Y | BLCSEY | BM6D | BHLLTD | BM25C | BHLCKC |
| BL39 | BLADOPT | BM6E | BHLLTE | BM25D | BHLCKD |
| BL40 | . BLNADPT | BM7 | BHLLTW | BM25E | BHLCKE |
| BL41 | BLACNO | BM8 | BHLENDW | BM25F | BHLCKF |
| BL41AM | BLACBM | BM9 | BHLLTWA | BM25G | BHLCKG |
| BL41AY | BLACBY | BM10 | . BHL2GP | BM25H | BHLCKH |
| BL41B | BLACSX | BM11 | BXDTS | BM26A | BHLCKAN |
| BL41C | . BLACST | BM12 | BNXDTS | BM26B | BHLCKBN |
| BL41D | BLACYB | BM13AM | BXDT1M | BM26C | BHLCKCN |
| BL41E | BLACLV | BM13AY | BXDT1Y | BM26D | BHLCKDN |
| BL41F | . BLACYD | BM13BM | BXDT2M | BM26E | BHLCKEN |
| BL41G | BLACAL | BM13BY | . BXDT2Y | BM26F | BHLCKFN |
| BL42 | . BLPRNT | BM13CM | BXDT3M | BM26G | BHLCKGN |
| BL43 | BLNPRNT | BM13CY | BXDT3Y | BM26H . | BHLCKHN |
| BL44AM | BLCHBM | BM14M1 | BXDT1PL | BM27 | BSMOKER |
| BL44AY | BLCHBY | BM14M2 | BXDT2PL | BM28 | BNCIGS |
| BL44B | BLCHSX | BM14M3 | BXDT3PL | BM30 | BAIDHH |
| BL44C | . BLCHLV | BM15 | BHOSP | BM31P1 | BAIDHUA |
| BL44CNO | BLNCNO | BM16 | BHOSPD | BM31P2 | BAIDHUB |
| BL44CNO | BLNCNO | BM18 | BHOSPCH | BM31P3 | BAIDHUC |
| BL44D | BLCHYD | BM19 | BHOSPNHS | BM32 | BAIDXHH |
| BL44E | BLCHAL | BM20 | . . .BHLSV | BM34 | BNAIDXHH |
| BL45 | BEAAGE | BM21A | . BHLSVA | BM35 | BAIDHU2 |
| BL45 | BCBAGE | BM21B | . BHLSVB | BM35 | BAIDHU1 |
| BL46 | BLCHMOR | BM21C | BHLSVC | BM36 | BAIDPL1 |
| BL47 | BLCHMORN | BM21D | BHLSVD | BM36 | BAIDPL2 |
| BL48A | . BIVLA | BM21E | . .BHLSVE | BM37 | BAIDHRS |
| BL48B | . . BIVLB | BM21F | . BHLSVF | BM38A | BIVMA |


| BM38B | BIVMB | BV1C | BOPPOLC | CD3 | CLKMOVE |
| :---: | :---: | :---: | :---: | :---: | :---: |
| BM38C | BIVMC | BV1D | BOPPOLD | CD4 | CLKMOVY |
| BM38D | BIVMD | BV2 | BVOTE1 | CD5 | CPLNEW |
| BP2B | BPRRS2I | BV3 | BVOTE2 | CD6M | CPLNOWM |
| BP2C | BPRIPN | BV4 | BVOTE4 | CD6Y | CPLNOWY |
| BP2D | BPRWHY | BV5 | BVOTE5 | CD7 | CMOVJB |
| BP3 | BP3M | BV6 | BVOTE7 | CD8A | CMOVJBA |
| BP3 | BP3AL | BV7 | BVOTE8 | CD8B | CMOVJBB |
| BP3 | BP3Y | BV8 | BVOTE6 | CD8C | CMOVJBC |
| BP13 | BPRFEHQ | BV9A | BOPISS1 | CD8D | CMOVJBD |
| BP15 | BPRSEHQ | BV9B | BOPISS2 | CD8E | CMOVJBE |
| BP49 | . BPRJBFT | BV9C | BOPISS3 | CD8F | CMOVJBF |
| BP61 | BPRFITB | BV9D | BOPISS4 | CD8G | CMOVJBG |
| BPI1 | BPIM2 | BV9E | BOPISS5 | CD8H | CMOVJBH |
| BPI1 | BPIM1 | BV10 | BOPPOL1 | CD8I | CMOVJBI |
| BS1A | BGHQA | BV11 | BOPPOL2 | CD9M1 | CMOVY1 |
| BS1B | BGHQB | BV12 | BORGM | CD9M2 | CMOVY2 |
| BS1C | BGHQC | BV13A | BORGMA | CD10M | CDOBM |
| BS1D | BGHQD | BV13B | BORGMB | CD10Y | CDOBY |
| BS1E | . BGHQE | BV13C | BORGMC | CD11 | CSEX |
| BS1F | . BGHQF | BV13D | BORGMD | CD11 | CSEX |
| BS1G | BGHQG | BV13E | BORGME | CD13 | CJBSTAT |
| BS1H | BGHQH | BV13F | BORGMF | CD15M | CEDENDM |
| BS1I | BGHQI | BV13G | BORGMG | CD15Y | CEDENDY |
| BS1J | BGHQJ | BV13H | BORGMH | CD16 | CEDTYPE |
| BS1K | BGHQK | BV13I | BORGMI | CD17 | CQFX |
| BS1L | . BGHQL | BV13J | BORGMJ | CD18A | CQFXA |
| BS2A | BOPFAMJ | BV13K | BORGMK | CD18B | CQFXB |
| BS2B | BOPFAMK | BV13L | BORGML | CD18C. | CQFXC |
| BS2C | BOPFAML | BV13M | BORGMM | CD18D . | CQFXD |
| BS2D | BOPFAMM | BV14 | BORGA | CD18E | CQFXE |
| BS2E | BOPFAMN | BV15A | BORGAA | CD18F | CQFXF |
| BS3A | BNETSX3 | BV15B | BORGAB | CD18G | CQFXG |
| BS3A | . BNETSX2 | BV15C | BORGAC | CD18H. | CQFXH |
| BS3A | BNETSX1 | BV15D | BORGAD | CD18I | CQFXI |
| BS3B | BNET2RL | BV15E | BORGAE | CD18J | CQFXJ |
| BS3B | BNET1RL | BV15F | BORGAF | CD18K | CQFXK |
| BS3B | BNET3RL | BV15G | BORGAG | CD18L | CQFXL |
| BS3B | BNET2WR | BV15H | BORGAH | CD18M | CQFXM |
| BS3B | BNET3WR | BV15I | BORGAI | CD18N . | CQFXN |
| BS3B | BNET1WR | BV15J | BORGAJ | CD19 | CQFEDX |
| BS3C | BNET1AG | BV15K | BORGAK | CD20A | CQFEDXA |
| BS3C | BNET3AG | BV15L | BORGAL | CD20B | CQFEDXB |
| BS3C | BNET2AG | BV15M | BORGAM | CD20C . | CQFEDXC |
| BS3D | . BNET3KN | BV16 | BDRIVER | CD20D . | CQFEDXD |
| BS3D | . BNET1KN | BV17 | BCARUSE | CD20E | CQFEDXE |
| BS3D | . BNET2KN | BV18A | BIVVA | CD20F | CQFEDXF |
| BS3E | . BNET3PH | BV18B | BIVVB | CD20G | CQFEDXG |
| BS3E | . BNET1PH | BV18C | BIVVC | CD20H . | CQFEDXH |
| BS3E | . BNET2PH | BV18D | . BIVVD | CD20I | CQFEDXI |
| BS3F | BNET2LV | CDOAD | CDOID | CD20J | CQFEDXJ |
| BS3F | BNET3LV | CDOAM | CDOIM | CD20K | CQFEDXK |
| BS3F | BNET1LV | CDOAY | . CDOIY | CD21A | CNQFEXA |
| BS3G | BNET3JB | CDOB | CIVLYR | CD21B | CNQFEXB |
| BS3G | BNET2JB | CDOC | CIVIEVR | CD21C. | CNQFEXC |
| BS3G | BNET1JB | CDOD | CRACH16 | CD21E | CNQFEXE |
| BS4A | BNETSOC | CD1H | CIVSOIH | CD21F | CNQFEXF |
| BV1A | BOPPOLA | CD1M | CIVSOIM | CD21G | CNQFEXG |
| BV1B | BOPPOLB | CD2 | CLKNBRD | CD21H . | CNQFEXH |


| CD21I | CNQFEXI | CD39G | CNQFEDH | CE34 | CJBONUS |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CD21J | CNQFEXJ | CD39H | CNQFEDI | CE35 | CJBRISE |
| CD21K | CNQFEXK | CD391 | CNQFEDJ | CE36 | CTUJBPL |
| CD22 | CMLSTAT | CD39J | CNQFEDA | CE37 | CTUIN1 |
| CD23 | CMLCHNG | CD39K | CNQFEDK | CE38 | CTUIN2 |
| CD24M | CMLCHM | CD39L | CNQFEDL | CE39 | CJBOPPS |
| CD24Y | CMLCHY | CD39M | CNQFEDM | CE40 | CJBTIME |
| CD25DST | CPLBORND | CD39N | CNQFEDN | CE41 | CPAYS |
| CD250S | CPLBORNC | CD390 | CNQFEDO | CE42OC | CPAYSW |
| CD26 | CYR2UK | CD39P | CNQFEDP | CE43 | CPAYSG |
| CD28 | CRACE | CD39Q | CNQFEDQ | CE44 | CJBPEN |
| CD30 | CSCEND | CD39R | CNQFEDR | CE45 | CJBPENM |
| CD30NA | CSCHOOL | CD39S | CNQFEDS | CE57 | CPAYLY |
| CD31 | CSCTYPE | CE1 | CJBHAS | CE580C | CPAYLYW |
| CD32 | CSCNOW | CE2 | . CJBOFF | CE59 | CPAYLYG |
| CD33 | CFETYPE | CE3 | CJBOFFY | CE63 | CJSBOSS |
| CD34 | CFEEND | CE4 | CJBTERM | CE64 | CJSSIZE |
| CD34NA | CFENOW | CE5 | CJBSOC | CE65 | CJSHRS |
| CD35 | CQFHAS | CE6 | CJBSIC | CE66 | CJSHRLK |
| CD36A | CQFA | CE7 | CJBSEMP | CE67 | CJSTIME |
| CD36B | CQFB | CE8 | CJBMNGR | CE68 | CJSTYPE |
| CD36C | CQFC | CE9 | CJBSECT | CE69 | CJSACCS |
| CD36D | CQFD | CE10 | CJBSIZE | CE70 | CJSPRF |
| CD36E | CQFE | CE11 | CJBHRS | CE71BM | CJSPRBM |
| CD36F | . CQFF | CE12 | CJBOT | CE71BY | CJSPRBY |
| CD36G | CQFG | CE13 | CJBOTPD | CE71EM | CJSPREM |
| CD36H | CQFH | CE14 | CJBHRLK | CE71EY | CJSPREY |
| CD36I | CQFI | CE15 | CJBPL | CE72 | CJSPAYL |
| CD36J | CQFJ | CE16 | CJBTTWT | CE73BM | CJSPYBM |
| CD36K | CQFK | CE17 | CJBTTWM | CE73BY | CJSPYBY |
| CD36L | CQFL | CE18A | CJBSAT1 | CE73EM | CJSPYEM |
| CD36M | CQFM | CE18B | CJBSAT2 | CE73EY | CJSPYEY |
| CD36N | CQFN | CE18C | CJBSAT3 | CE74 | CJSPL |
| CD37 | CQFED | CE18D | CJBSAT4 | CE75 | CJSTTWT |
| CD38A | CQFEDB | CE18E | CJBSAT5 | CE76 | CJSTTWM |
| CD38B | CQFEDC | CE18F | CJBSAT6 | CE77A | CJSSAT1 |
| CD38C | CQFEDD | CE18G | CJBSAT7 | CE77B | CJSSAT2 |
| CD38D | CQFEDE | CE19 | CJBSAT | CE77C | CJSSAT3 |
| CD38E | CQFEDF | CE20 | CPAYGL | CE77D | CJSSAT4 |
| CD38F | . CQFEDG | CE21OC | CPAYGW | CE77E | CJSSAT5 |
| CD38G | CQFEDH | CE22 | CPAYNL | CE78 | CJSSAT |
| CD38H | . CQFEDI | CE230C | CPAYNW | CE79D | CJSBGD |
| CD38I | CQFEDJ | CE24 | CPAYSLP | CE79M | CJSBGM |
| CD38J | CQFEDA | CE26 | CPAYUSL | CE79Y | CJSBGY |
| CD38K | CQFEDK | CE27 | CPAYU | CE80 | CJBED |
| CD38L | CQFEDL | CE280C | CPAYUW | CE81A | CJBED1 |
| CD38M | CQFEDM | CE29 | CPAYUG | CE81B | CJBED2 |
| CD38N | . CQFEDN | CE30A | CPAYDF1 | CE81C | CJBED3 |
| CD380 | . CQFEDO | CE30B | CPAYDF2 | CE81D | CJBED4 |
| CD38P | . CQFEDP | CE30C | CPAYDF3 | CE81E | CJBED5 |
| CD38Q | . CQFEDQ | CE30D | CPAYDF4 | CE82A | CJBEDQ |
| CD38R | CQFEDR | CE30E | CPAYDF5 | CE82B | CJBEDP1 |
| CD38S | . CQFEDS | CE30F | CPAYDF6 | CE82B | CJBEDP2 |
| CD39A | CNQFEDB | CE30G | CPAYDF7 | CE83 | CRACH12 |
| CD39B | . CNQFEDC | CE30H | CPAYDF8 | CE84M1 | CJBCHC1 |
| CD39C | . CNQFEDD | CE32D | CJBBGD | CE84M2 | CJBCHC2 |
| CD39D | CNQFEDE | CE32M | CJBBGM | CE84M3 | . CJBCHC3 |
| CD39E | . CNQFEDF | CE32Y | . CJBBGY | CE86 | CXPCHCF |
| CD39F | . CNQFEDG | CE33 | CJBBGLY | CE87 | CXPCHC |


| CE88 | CHUXPCH | CEG14 | CIVFIO | CF25B23 | CFTHH32 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CE89 | CHUNURS | CEG14 | CIVFIO | CF25B32 | CFTHH23 |
| CE90 | CJULK1 | CEG14 | CIVFIO | CF25B33 | CFTHH33 |
| CE91 | CJULK4 | CEG15 | CIVTEL | CF25B42 | CFTHH24 |
| CE92 | CJULKJB | CEG15 | CIVTEL | CF25B43 | CFTHH34 |
| CE93 | CJUSPEC | CF2 | CNF1 | CF25B52 | CFTHH25 |
| CE94 | CJUSOC | CF3A | CFICODE | CF25B53 | CFTHH35 |
| CE95 | CJUHRSX | CF3ANO | CNFR | CF25B62 | CFTHH26 |
| CE96 | CJUPAYX | CF3B01 | CFR01 | CF25B63 | CFTHH36 |
| CE97 | CJUPAYL | CF3B02 | CFR02 | CF25C2 | CFTHH2V |
| CE98 | CJUHRSL | CF3B03 | . CFR03 | CF25C3 | CFTHH3V |
| CE99 | CEAAGE | CF3B04 | CFR04 | CF25DOC2 | CFTHH2W |
| CE100A | CJBHHA | CF3B05 | CFR05 | CF25DOC3 | CFTHH3W |
| CE100B | CJBHHB | CF3B06 | CFR06 | CF26A1 | CFTHH1 |
| CE100C | CJBHHC | CF3B07 | CFR07 | CF26B1 | CFTHH11 |
| CE100D | CJBHHD | CF3B08 | . CFR08 | CF26B2 | CFTHH12 |
| CE100E | CJBHHE | CF3B09 | CFR09 | CF26B3 | CFTHH13 |
| CE100F | CJBHHF | CF3B10 | . CFR10 | CF26B4 | CFTHH14 |
| CE101 | CJBUB | CF3B11 | CFR11 | CF26B5 | CFTHH15 |
| CE102 | CJBUBY | CF3B12 | CFR12 | CF26B6 | CFTHH16 |
| CE103 | CJ2HAS | CF3B13 | CFR13 | CF26C | CFTHH1V |
| CE104 | CJ2SOC | CF3B14 | CFR14 | CF26DOC | CFTHH1W |
| CE105 | CJ2SEMP | CF3B15 | CFR15 | CF27 | CFTEXHH |
| CE106 | CJ2HRS | CF3B16 | CFR16 | CF28A1 | CFTEXA |
| CE107 | CJ2PAY | CF3B17 | . . CFR17 | CF28A2 | CFTEXB |
| CE108A | CIVEA | CF3BAL | CFRALL | CF28A3 | CFTEXC |
| CE108B | CIVEB | CF3C | . CFRNOW | CF28B11 | CFTEXA1 |
| CE108C | CIVEC | CF3D | CFRVAL | CF28B12 | CFTEXB1 |
| CE108D | CIVED | CF3EOC | CFRW | CF28B13 | CFTEXC1 |
| CE108E | CIVEE | CF3F | CFRJT | CF28B21 | CFTEXA2 |
| CEG4 | CHGSEX | CF3FPN . | CFRJTPN | CF28B22 | CFTEXB2 |
| CEG4 | CHGSEX | CF3SEQ | CFISEQ | CF28B23 | CFTEXC2 |
| CEG5M | CHGBM | CF4 | CFISIT | CF28B31 | CFTEXA3 |
| CEG5M | CHGBM | CF5 | CFISITC | CF28B32 | CFTEXB3 |
| CEG5Y | CHGBY | CF6 | CFISITY | CF28B33 | CFTEXC3 |
| CEG5Y | CHGBY | CF7 | CFISITX | CF28B41 | CFTEXA4 |
| CEG6 | CIVIOW2 | CF8 | COPXPSV | CF28B42 | CFTEXB4 |
| CEG6 | CIVIOW2 | CF9 | COPXPCR | CF28B43 | CFTEXC4 |
| CEG7 | CIVIEVR | CF10 | CFIYRDI | CF28B51 | CFTEXA5 |
| CEG7 | CIVIEVR | CF11 | CFIYRDIU | CF28B52 | CFTEXB5 |
| CEG7 | CIVIEVR | CF12 | CSAVE | CF28B53 | CFTEXC5 |
| CEG8 | CIVELIG | CF13 | CSAVED | CF28B61 | CFTEXA6 |
| CEG8 | CIVELIG | CF14 | CSAVEY2 | CF28B62 | CFTEXB6 |
| CEG9 | CHHMEM | CF14 | CSAVEY1 | CF28B63 | CFTEXC6 |
| CEG9 | . CHHMEM | CF15 | CPPPEN | CF28C1 | CFTEXAV |
| CEG9 | CHHMEM | CF16 | CPENB4 | CF28C2 | CFTEXBV |
| CEG10 | CNEWHY | CF17 | CPENB4YR | CF28C3 | CFTEXCV |
| CEG10 | CNEWHY | CF18 | CPENB4V | CF28DOC1 | CFTEXAW |
| CEG10 | CNEWHY | CF190C . | CPENB4W | CF28DOC2 | CFTEXBW |
| CEG11 | CLVWHY | CF20 | CPENYR | CF28DOC3 | CFTEXCW |
| CEG12M | . CLVMN | CF21 | CPENADD | CF29 | CSPINHH |
| CEG12M | CNEMNJN | CF22 | CPENADV | CF30 | CHURUNS |
| CEG12M | CNEMNJN | CF230C . | CPENADW | CF31 | CHUBOSS |
| CEG12M | CNEMNJN | CF25 | CFTHH | CF32 | CHOWLNG |
| CEG12Y . | CNEYRJN | CF25A2 | . CFTHH2 | CF33 | CEVENT4 |
| CEG12Y . | CNEYRJN | CF25A3 | . CFTHH3 | CF33 | CEVENT3S |
| CEG12Y . | . CLVYR | CF25B12 | CFTHH21 | CF33 | CEVENT3 |
| CEG12Y . | CNEYRJN | CF25B13 | CFTHH31 | CF33 | CEVENT2S |
| CEG13 | CLVLOC | CF25B22 | CFTHH22 | CF33 | CEVENT2 |


| CF33 | CEVENT1S | CH12 | CMGYRO | CH 47 H . | CCD8NEW |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CF33 | CEVENT1 | CH13 | CMGLY | CH471 | CCD9NEW |
| CF33 | CEVENT4S | CH14 | CHSIVW2 | CH48 | CCDNUXP |
| CF34A | CIVFA | CH17 | CMGOLD | CH49 | CHSIP |
| CF34B | CIVFB | CH18 | CMGLIFE | CH50 | CHSIPXP |
| CF34C | CIVFC | CH19 | CMGTYPE | CH51 | CHEATCH |
| CF34D | CIVFD | CH20 | CMGXTRA | CH52 | CHEATYP |
| CF34E | CIVFE | CH21 | CMGNEW | CH53 | CXPOILY |
| CF35 | CIVSC | CH22A | CMGXTY1 | CH54 | CGASUSE |
| CF101 | CF101 | CH22B | CMGXTY2 | CH55 | CGASWAY |
| CF102 | CF102 | CH22C | CMGXTY3 | CH56 | CXPGASL |
| CF103 | CF103 | CH22D | CMGXTY4 | CH57 | CXPGASW |
| CF104 | . CF104 | CH22E | CMGXTY5 | CH58 | CXPGASLW |
| CF105 | CF105 | CH23 | CXPMG | CH59 | CLECWAY |
| CF106 | CF106 | CH24A | CXPMG1 | CH60 | CXPLECL |
| CF116 | CF116 | CH24B | CXPMG2 | CH61 | CXPLECW |
| CF117 | CF117 | CH24C | CXPMG3 | CH62 | CXPLECLW |
| CF118 | CF118 | CH24D | . CXPMG4 | CH63 | CXPFOOD |
| CF119 | CF119 | CH25 | CHSJB | CH64 | CNCARS |
| CF120 | CF120 | CH26M1 | CRENTP1 | CH65 | CCAROWN |
| CF121 | CF121 | CH26M2 | . CRENTP2 | CH66 | CCARVAL |
| CF122 | CF122 | CH27 | . CRENTLL | CH67M1 | CIVH1 |
| CF123 | CF123 | CH28 | CRENTF | CH67M2 | CIVH2 |
| CF124 | CF124 | CH30 | CRENT | CH67M3 | CIVH3 |
| CF131 | CF131 | CH31 | CRENTW | CHG2 | CHGR2R |
| CF132 | CF132 | CH32A | . CRENT1 | CHG2 | CHGR2R |
| CF133 | CF133 | CH32B | .CRENT2 | CHG7 | CAGE |
| CF134 | CF134 | CH32C | CRENT3 | CHG8 | CMASTAT |
| CF135 | CF135 | CH32D | CRENT4 | CHG8 | CMASTAT |
| CF136 | CF136 | CH32E | . CRENT5 | CHG9 | CHGSPN |
| CF137 | . CF137 | CH32F | CRENT6 | CHG9 | CHGSPN |
| CF138 | . CF138 | CH33 | CRENTHB | CHG10 | CHGEMP |
| CF139 | CF139 | CH34 | CRENTG | CHG10 | CHGEMP |
| CF140 | CF140 | CH36 | CRENTGW | CHG11 | CHGFNO |
| CF141 | CF141 | CH37 | CXPHSDF | CHG11 | CHGFNO |
| CF151 | CF151 | CH38A | CXPHSD1 | CHG12 | CHGMNO |
| CF152 | CF152 | CH38B | CXPHSD2 | CHG12 | CHGMNO |
| CF153 | CF153 | CH39 | CXPHSDB | CHG13 | CHGRA |
| CF154 | CF154 | CH40 | CHS2OWND | CHG13 | CHGRA |
| CF155 | . CF155 | CH41 | . CHS2VAL | CI1 | CIV1 |
| CF156 | . CF156 | CH43 | . CMGTOT | CI2 | CIV2 |
| CF157 | CF157 | CH 44 | CCDHAVE | Cl 4 | CIV4 |
| CF158 | CF158 | CH45A | CCD1USE | CI5 | CIV5 |
| CF159 | CF159 | CH45B | CCD2USE | CI6A | CIV6A |
| CHOAD | . CHHDOI | CH45C | CCD3USE | CI6B | CIV6B |
| CHOAM | CHHMOI | CH45D | . CCD4USE | CI6C | CIV6C |
| CHOAY | . CHHYOI | CH45E | CCD5USE | CI6D | CIV6D |
| CHOC | CHSTYPE | CH45F | CCD6USE | CI6E | CIV6E |
| CH1B | CHSRINS | CH45G | CCD7USE | CI6F | CIV6F |
| CH2 | . CHSROOM | CH45H | . CCD8USE | CI7 | CIV7 |
| CH3 | CHSOWND | CH45I | CCD9USE | CJ2 | CEDNEW |
| CH4M1 | CHSOWR1 | CH46 | CCDBGHT | CJ3A | CEDNEW1 |
| CH4M2 | CHSOWR2 | CH47A | CCD1NEW | CJ3B | CEDNEW2 |
| CH5 | . CHSVAL | CH47B | . CCD2NEW | CJ3C | CEDNEW3 |
| CH6 | . CMGHAVE | CH47C | . CCD3NEW | CJ3D | CEDNEW4 |
| CH7 | . CHSOWRP | CH47D | CCD4NEW | CJ4A | .CEDNEWQ |
| CH8 | . CMGYNOT | CH47E | . CCD5NEW | CJ4B | CEDNEWP1 |
| CH9 | CHSCOST | CH47F | CCD6NEW | CJ4B | CEDNEWP2 |
| CH10 | . CHSYRO | CH47G | CCD7NEW | CJ8 | CCJSBGD |


| CJ8M | CCJSBGM | CM2 | CHLZEST | CM22G | CHLSVGN |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CJ8Y | CCJSBGY | CM3 | CHLDSBL | CM22H | CHLSVHN |
| CJ9 | CNEMST | CM4A | CHLPRBA | CM22I | CHLSVIN |
| CJ10D | CCJSBGD | CM4B | CHLPRBB | CM22J1 | CHLSVJN |
| CJ11 | CCJSBLY | CM4C | CHLPRBC | CM22J2 | CHLSVKN |
| CJ12 | CJHSTAT | CM4D | CHLPRBD | CM23A | CHLSVAF |
| CJ13D | CJHBGD | CM4E | CHLPRBE | CM23B | CHLSVBF |
| CJ13M | CJHBGM | CM4F | CHLPRBF | CM23C | CHLSVCF |
| CJ13Y | CJHBGY | CM4G | CHLPRBG | CM23D | CHLSVDF |
| CJ15 | CNJBS | CM4H | CHLPRBH | CM23E | CHLSVEF |
| CJ17 | CJHSOC | CM4I | CHLPRBI | CM23F | CHLSVFF |
| CJ19 | CJHSEMP | CM4J | CHLPRBJ | CM23G | CHLSVGF |
| CJ20 | CJHBOSS | CM4K | CHLPRBK | CM23H | CHLSVHF |
| CJ21 | CJHSECT | CM4L | CHLPRBL | CM23I | CHLSVIF |
| CJ22 | CJHMNGR | CM4M | CHLPRBM | CM23J1 | CHLSVJF |
| CJ24 | CJHPLDF | CM4M0 | CHLPRB | CM23J2 | CHLSVKF |
| CJ25 | CJHSIC | CM5 | CHLLT | CM24 | CHLCK |
| CJ26 | CJHSIZE | CM6A | . CHLLTA | CM25A | CHLCKA |
| CJ27 | CJHPAYL | CM6B | . CHLLTB | CM25B | CHLCKB |
| CJ28OC | CJHPYLW | CM6C | CHLLTC | CM25C | CHLCKC |
| CJ29 | . CJHPYLG | CM6D | CHLLTD | CM25D | CHLCKD |
| CJ30 | CJHSTPY | CM6E | . CHLLTE | CM25E | CHLCKE |
| CJ31 | CJBLKY | CM7 | CHLLTW | CM25F | CHLCKF |
| CJ34 | CJBHAD | CM8 | CHLENDW | CM25G | CHLCKG |
| CJ35 | CJLEND | CM9 | CHLLTWA | CM25H | CHLCKH |
| CJ36 | . CJLSOC | CM10 | CHL2GP | CM26A | CHLCKAN |
| CJ37 | CJLSIC | CM11 | CXDTS | CM26B | CHLCKBN |
| CJ38 | CJLSEMP | CM12 | CNXDTS | CM26C | CHLCKCN |
| CJ39 | CJLBOSS | CM13AY | CXDT1Y | CM26D | CHLCKDN |
| CJ40 | CJLMNGR | CM13BY | . CXDT2Y | CM26E | CHLCKEN |
| CJ41 | CJLSIZE | CM13CY | . CXDT3Y | CM26F | CHLCKFN |
| CJ42A | CIVJA | CM13MAM | CXDT1M | CM26G | CHLCKGN |
| CJ42B | CIVJB | CM13MBM | CXDT2M | CM26H | CHLCKHN |
| CJ42C | . CIVJC | CM13MCM | CXDT3M | CM27 | CSMOKER |
| CJ42D | CIVJD | CM14M1 | CXDT1PL | CM28 | CNCIGS |
| CJ42E | CIVJE | CM14M2 | CXDT2PL | CM29A | COPHLA |
| CL1H | CLJBH | CM14M3 | CXDT3PL | CM29B | COPHLB |
| CL1M | CLJBM | CM15 | CHOSP | CM29C | COPHLC |
| CL3 | CLJHAD | CM16 | CHOSPD | CM31 | CAIDHH |
| CL4 | . CLJESFV | CM18 | CHOSPCH | CM32P1 | CAIDHUA |
| CL5 | CLJESFN | CM19 | CHOSPNHS | CM32P2 | CAIDHUB |
| CL6 | CLJSEMP | CM20 | CHLSV | CM32P3 | CAIDHUC |
| CL7M | CLJBGM | CM21A | CHLSVA | CM33 | CAIDXHH |
| CL7Y | CLJBGY | CM21B | CHLSVB | CM34 | . CNAIDXHH |
| CL8OC1 | . CLJSOC | CM21C | . CHLSVC | CM35 | CAIDHU1 |
| CL8OC2 | . CLJSIC | CM21D | CHLSVD | CM35 | CAIDHU2 |
| CL9 | CLJMNGR | CM21E | CHLSVE | CM37 | CAIDHRS |
| CL10 | CLJTERM | CM21F | . CHLSVF | CM38A | CIVMA |
| CL11M | CLJLFTM | CM21G | CHLSVG | CM38B | CIVMB |
| CL11Y | CLJLFTY | CM21H | CHLSVH | CM38C | CIVMC |
| CL12 | CLJYLFT | CM21I | CHLSVI | CM38D | CIVMD |
| CL13 | CLJOTHJ | CM21J1 | . CHLSVJ | CM38E | CIVME |
| CL14D | CJCEBGD | CM21J2 | CHLSVK | CP2B | CPRRS21 |
| CL14M | CJCEBGM | CM22A | CHLSVAN | CP2C | CPRIPN |
| CL14Y | CJCEBGY | CM22B | CHLSVBN | CP2D | CPRWHY |
| CL15 | CJCESOC | CM22C | CHLSVCN | CP3 | CPPLEVR |
| CL16 | CJCESEMP | CM22D | CHLSVDN | CP10M | CPRESBGM |
| CL17 | CJCEMNGR | CM22E | CHLSVEN | CP10Y | CPRESBGY |
| CM1 | CHLSTAT | CM22F | CHLSVFN | CP11 | CPRESLY |


| CP12 | CEDLYR | CV2 | CVOTE1 | DDOC | VIEVR |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CP23 | CPRFEHQ | CV3 | CVOTE2 | DD0D | DRACH12 |
| CP25 | CPRSEHQ | CV4 | CVOTE3 | DD1H | DIVSOIH |
| CP51 | CPRJBFT | CV5 | CVOTE4 | DD1M | DIVSOIM |
| CP52M | CPRJBBGM | CV6 | CVOTE5 | DD2 | DLKNBRD |
| CP52Y | CPRJBBGY | CV7 | CVOTE6 | DD3 | DLKMOVE |
| CP53 | CPRJBLY | CV8 | COPPOL1 | DD4 | DLKMOVY |
| CP54 | CPREARN | CV9 | COPPOL2 | DD5 | DPLNEW |
| CP63A | . CPRF101 | CV10 | COPPOL3 | DD6M | DPLNOWM |
| CP63B | CPRF102 | CV11 | COPPOL4 | DD6Y | DPLNOWY |
| CP63C | CPRF116 | CV12 | COPCHD1 | DD7 | DMOVJB |
| CP63D | CPRF131 | CV13 | COPCHD2 | DD8A | DMOVJBA |
| CP63E | . CPRF134 | CV14 | COPCHD3 | DD8B | DMOVJBB |
| CP63F | CPRF135 | CV15 | COPCHD4 | DD8C | DMOVJBC |
| CP63G | CPRF137 | CV16 | CORGM | DD8D | DMOVJBD |
| CP63H | CPRF139 | CV17A | CORGMA | DD8E | DMOVJBE |
| CP63I | . CPRF141 | CV17B | CORGMB | DD8F | DMOVJBF |
| CP63NONE | . CPRFIRN | CV17C | CORGMC | DD8G | DMOVJBG |
| CP64 | CPRFITB | CV17D | CORGMD | DD8H | DMOVJBH |
| CPI1A | . CIVPA | CV17E | CORGME | DD81 | DMOVJBI |
| CPI1B | . CIVPB | CV17F | CORGMF | DD9M1 | DMOVY1 |
| CPI1C | CIVPC | CV17G | CORGMG | DD9M2 | DMOVY2 |
| CPI1D | . CIVPD | CV17H | CORGMH | DD10M | DDOBM |
| CPI1E | . CIVPE | CV17I | CORGMI | DD10Y | DDOBY |
| CS1A | . CGHQA | CV17J | CORGMJ | DD11 | DSEX |
| CS1B | CGHQB | CV17K | CORGMK | DD11 | DSEX |
| CS1C | . CGHQC | CV17L | CORGML | DD13 | DJBSTAT |
| CS1D | . CGHQD | CV17M | CORGMM | DD14 | DEDLYR |
| CS1E | CGHQE | CV170 | CORGMO | DD15M | DEDENDM |
| CS1F | . CGHQF | CV17P | CORGMP | DD15Y | DEDENDY |
| CS1G | . CGHQG | CV17Q | CORGMQ | DD16 | DEDTYPE |
| CS1H | . CGHQH | CV18A | CORGAA | DD17 | DQFX |
| CS1I | CGHQI | CV18B | CORGAB | DD18A | DQFXA |
| CS1J | CGHQJ | CV18C | CORGAC | DD18B | DQFXB |
| CS1K | . CGHQK | CV18D | CORGAD | DD18C | DQFXC |
| CS1L | CGHQL | CV18E | CORGAE | DD18D | DQFXD |
| CS2A | COPFAMA | CV18F | CORGAF | DD18E | DQFXE |
| CS2B | COPFAMB | CV18G | CORGAG | DD18F | DQFXF |
| CS2C | COPFAMC | CV18H | CORGAH | DD18G | DQFXG |
| CS2D | COPFAMD | CV18I | CORGAI | DD18H | DQFXH |
| CS2E | COPFAME | CV18J | CORGAJ | DD18I | DQFXI |
| CS2F | COPFAMF | CV18K | CORGAK | DD18J | DQFXJ |
| CS2G | COPFAMG | CV18L | CORGAL | DD18K | DQFXK |
| CS2H | COPFAMH | CV18M | CORGAM | DD18L | DQFXL |
| CS2I | COPFAMI | CV18N | CORGA | DD18M | DQFXM |
| CS3A | CSSUPA | CV180 | CORGAO | DD18N | DQFXN |
| CS3B | . CSSUPB | CV18P | CORGAP | DD19 | DQFEDX |
| CS3C | . CSSUPC | CV18Q | CORGAQ | DD20A | DQFEDXA |
| CS3D | . CSSUPD | CV19 | COPRLG2 | DD20B | DQFEDXB |
| CS3E | . CSSUPE | CV20 | CCARUSE | DD20C | DQFEDXC |
| CS4A | . CSSUP1 | CV21A | CIVVA | DD20D | DQFEDXD |
| CS4B | CSSUPR2R | CV21B | CIVVB | DD20E | DQFEDXE |
| CT2B | CTELWHY | CV21C | CIVVC | DD20F | DQFEDXF |
| CV1A | COPSOCA | CV21D | CIVVD | DD20G | DQFEDXG |
| CV1B | COPSOCB | CV21E | CIVVE | DD20H | DQFEDXH |
| CV1C | . COPSOCC | DDOAD | DDOID | DD20I | DQFEDXI |
| CV1D | COPSOCD | DDOAM | DDOIM | DD20J | DQFEDXJ |
| CV1E | COPSOCE | DDOAY | . DDOIY | DD20K | DQFEDXK |
| CV1F | . COPSOCF | DDOB | DIVLYR | DD21A | DNQFEXA |


| DD21B | DNQFEXB | DD39A | DNQFEDA | DE30F | DPAYDF6 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DD21C | DNQFEXC | DD39B | DNQFEDB | DE30G | DPAYDF7 |
| DD21E | DNQFEXE | DD39C | DNQFEDC | DE30H | DPAYDF8 |
| DD21F | DNQFEXF | DD39D | DNQFEDD | DE32D | DJBBGD |
| DD21G | DNQFEXG | DD39E | DNQFEDE | DE32M | DJBBGM |
| DD21H | DNQFEXH | DD39F | DNQFEDF | DE32Y | DJBBGY |
| DD21I | . DNQFEXI | DD39G | DNQFEDG | DE33 | DJBBGLY |
| DD21J | DNQFEXJ | DD39H | DNQFEDH | DE34 | DJBONUS |
| DD21K | DNQFEXK | DD391 | . DNQFEDI | DE35 | DJBRISE |
| DD22 | DMLSTAT | DD39J | DNQFEDJ | DE36 | DTUJBPL |
| DD23 | DMLCHNG | DD39K | DNQFEDK | DE37 | DTUIN1 |
| DD24M | DMLCHM | DD39L | DNQFEDL | DE38 | DTUIN2 |
| DD24Y | DMLCHY | DD39M | DNQFEDM | DE39 | DJBOPPS |
| DD25DST | DPLBORND | DD39N | DNQFEDN | DE40 | DJBTIME |
| DD250S | DPLBORNC | DD390 | DNQFEDO | DE41 | DPAYS |
| DD26 | DYR2UK | DD39P | DNQFEDP | DE42OC | DPAYSW |
| DD28 | DRACE | DD39Q | DNQFEDQ | DE43 | DPAYSG |
| DD30 | DSCEND | DD39R | DNQFEDR | DE44 | DJBPEN |
| DD30NA | DSCHOOL | DD39S | DNQFEDS | DE45 | DJBPENM |
| DD31 | DSCTYPE | DE1 | . DJBHAS | DE57 | DPAYLY |
| DD32 | DSCNOW | DE2 | . DJBOFF | DE580C | DPAYLYW |
| DD33 | DFETYPE | DE3 | DJBOFFY | DE59 | DPAYLYG |
| DD34 | DFEEND | DE4 | DJBTERM | DE63 | DJSBOSS |
| DD34NA | DFENOW | DE5 | DJBSOC | DE64 | DJSSIZE |
| DD35 | DQFHAS | DE6 | . DJBSIC | DE65 | DJSHRS |
| DD36A | DQFA | DE6 | DJBSIC92 | DE66 | DJSHRLK |
| DD36B | DQFB | DE7 | DJBSEMP | DE67 | DJSTIME |
| DD36C | . DQFC | DE8 | . DJBMNGR | DE68 | DJSTYPE |
| DD36D | . DQFD | DE9 | DJBSECT | DE69 | DJSACCS |
| DD36E | DQFE | DE10 | DJBSIZE | DE70 | DJSPRF |
| DD36F | DQFF | DE11 | DJBHRS | DE71BM | DJSPRBM |
| DD36G | DQFG | DE12 | DJBOT | DE71BY | DJSPRBY |
| DD36H | . DQFH | DE13 | DJBOTPD | DE71EM | DJSPREM |
| DD36I | . . DQFI | DE14 | DJBHRLK | DE71EY | DJSPREY |
| DD36J | DQFJ | DE15 | DJBPL | DE72 | DJSPAYL |
| DD36K | DQFK | DE16 | DJBTTWT | DE73BM | DJSPYBM |
| DD36L | DQFL | DE17 | DJBTTWM | DE73BY | DJSPYBY |
| DD36M | DQFM | DE18A | DJBSAT1 | DE73EM | DJSPYEM |
| DD36N | . DQFN | DE18B | DJBSAT2 | DE73EY | DJSPYEY |
| DD37 | . DQFED | DE18C | DJBSAT3 | DE74 | DJSPL |
| DD38A | DQFEDA | DE18D | DJBSAT4 | DE75 | DJSTTWT |
| DD38B | DQFEDB | DE18E | DJBSAT5 | DE76 | DJSTTWM |
| DD38C | DQFEDC | DE18F | DJBSAT6 | DE77A | DJSSAT1 |
| DD38D | DQFEDD | DE18G | DJBSAT7 | DE77B | DJSSAT2 |
| DD38E | . DQFEDE | DE19 | DJBSAT | DE77C | DJSSAT3 |
| DD38F | DQFEDF | DE20 | DPAYGL | DE77D | DJSSAT4 |
| DD38G | DQFEDG | DE210C | DPAYGW | DE77E | DJSSAT5 |
| DD38H | DQFEDH | DE22 | DPAYNL | DE78 | DJSSAT |
| DD381 | . DQFEDI | DE230C | DPAYNW | DE79D | DJSBGD |
| DD38J | DQFEDJ | DE24 | DPAYSLP | DE79M | DJSBGM |
| DD38K | DQFEDK | DE26 | DPAYUSL | DE79Y | DJSBGY |
| DD38L | DQFEDL | DE27 | DPAYU | DE80 | DJBED |
| DD38M | DQFEDM | DE280C | DPAYUW | DE81A | DJBED1 |
| DD38N | . DQFEDN | DE29 | DPAYUG | DE81B | DJBED2 |
| DD380 | . DQFEDO | DE30A | DPAYDF1 | DE81C | DJBED3 |
| DD38P | DQFEDP | DE30B | DPAYDF2 | DE81D | DJBED4 |
| DD38Q | DQFEDQ | DE30C | DPAYDF3 | DE81E | DJBED5 |
| DD38R . | . DQFEDR | DE30D | DPAYDF4 | DE82A | DJBEDQ |
| DD38S | . DQFEDS | DE30E | DPAYDF5 | DE82B | DJBEDP1 |


| DE84M1 | D |
| :---: | :---: |
| DE84M2 | DJBCHC2 |
| DE84M3 | DJBCHC3 |
| DE86 | DXPCHCF |
| DE87 | DXPCHC |
| DE88 | DHUXPCH |
| DE89 | DHUNURS |
| DE90 | DJULK1 |
| DE91 | DJULK4 |
| DE92 | DJULKJB |
| DE93 | DJUSPEC |
| DE94 | DJUSOC |
| DE95 | DJUHRSX |
| DE96 | DJUPAYX |
| DE97 | DJUPAYL |
| DE98 | DJUHRSL |
| DE99 | DEAAGE |
| DE100A | DJBHHA |
| DE100B | DJBHHB |
| DE100C | DJBHHC |
| DE100D | DJBHHD |
| DE100E | DJBHHE |
| DE100F | DJBHHF |
| DE101 | DJBUB |
| DE102 | DJBUBY |
| DE103 | DJ2HAS |
| DE104 | DJ2SOC |
| DE105 | DJ2SEMP |
| DE106 | DJ2HRS |
| DE107 | DJ2PAY |
| DE108A | DIVEA |
| DE108B | DIVEB |
| DE108C | DIVEC |
| DE108D | DIVED |
| DE108E | DIVEE |
| DEG3 | PID |
| DEG3 | PID |
| DEG4 | DHGSEX |
| DEG4M | DHGBM |
| DEG4Y | DHGBY |
| DEG6 | DIVIOW3 |
| DEG6 | DIVIOW3 |
| DEG6 | DIVIOW3 |
| DEG7 | DIVIEVR |
| DEG7 | DIVIEVR |
| DEG7 | DIVIEVR |
| DEG8 | DIVELIG |
| DEG9 | DHHMEM |
| DEG9 | . DHHMEM |
| DEG9 | DHHMEM |
| DEG10 | DNEWHY |
| DEG10 | DNEWHY |
| DEG10 | DNEWHY |
| DEG11 | DLVWHY |
| DEG12M | DNEMNJN |
| DEG12M | DNEMNJN |
| DEG12M | DNEMNJN |
| DEG12M | DLVMN |
| DEG12Y | DLVYR |


| EG12Y . | DNEYRJN |
| :---: | :---: |
| DEG12Y . | DNEYRJN |
| DEG12Y . | DNEYRJN |
| DEG13 | DLVLOC |
| DEG14 | DIVFIO |
| DEG14 | DIVFIO |
| DEG14 | DIVFIO |
| DEG15 | DIVRREF |
| DEG16 | DIVIREIS |
| DF2 | DNFR |
| DF2 | DNF1 |
| DF3A | DFICODE |
| DF3B01 | DFR01 |
| DF3B02 | DFR02 |
| DF3B03 | DFR03 |
| DF3B04 | DFR04 |
| DF3B05 | DFR05 |
| DF3B06 | DFR06 |
| DF3B07 | DFR07 |
| DF3B08 | DFR08 |
| DF3B09 | DFR09 |
| DF3B10 | DFR10 |
| DF3B11 | DFR11 |
| DF3B12 | DFR12 |
| DF3B13 | DFR13 |
| DF3B14 | DFR14 |
| DF3B15 | DFR15 |
| DF3B16 | DFR16 |
| DF3B17 | DFR17 |
| DF3BAL | DFRALL |
| DF3C | DFRNOW |
| DF3D | DFRVAL |
| DF3EOC | DFRW |
| DF3F | DFRJT |
| DF3FPN . | DFRJTPN |
| DF3SEQ | DFISEQ |
| DF4 | DFISIT |
| DF5 | DFISITC |
| DF6 | DFISITY |
| DF7 | DFISITX |
| DF8 | DOPXPSV |
| DF9 | DOPXPCR |
| DF10 | DFIYRDI |
| DF11 | DFIYRDIU |
| DF12 | DSAVE |
| DF13 | DSAVED |
| DF14 | DSAVEY1 |
| DF14 | DSAVEY2 |
| DF15 | DPPPEN |
| DF16 | DPENB4 |
| DF17 | DPENB4YR |
| DF18 | DPENB4V |
| DF190C . | DPENB4W |
| DF20 | DPENYR |
| DF21 | DPENADD |
| DF22 | DPENADV |
| DF230C | DPENADW |
| DF25 | DFTHH |
| DF26A1 | DFTHH |


| 6A2 | 2 |
| :---: | :---: |
| DF26A3 | DFTHH3 |
| DF26B1 | DFTHH11 |
| DF26B12 | DFTHH21 |
| DF26B13 | DFTHH31 |
| DF26B2 | DFTHH12 |
| DF26B22 | DFTHH22 |
| DF26B23 | DFTHH32 |
| DF26B3 | DFTHH13 |
| DF26B32 | DFTHH23 |
| DF26B33 | DFTHH33 |
| DF26B4 | DFTHH14 |
| DF26B42 | DFTHH24 |
| DF26B43 | DFTHH34 |
| DF26B5 | DFTHH15 |
| DF26B52 | DFTHH25 |
| DF26B53 | DFTHH35 |
| DF26B6 | DFTHH16 |
| DF26B62 | DFTHH26 |
| DF26B63 | DFTHH36 |
| DF26C | DFTHH1V |
| DF26C2 | . DFTHH2V |
| DF26C3 | DFTHH3V |
| DF26DOC | DFTHH1W |
| DF26DOC2 | DFTHH2W |
| DF26DOC3 | DFTHH3W |
| DF27 | DFTEXHH |
| DF28A1 | DFTEXA |
| DF28A2 | DFTEXB |
| DF28A3 | DFTEXC |
| DF28B11 | DFTEXA1 |
| DF28B12 | DFTEXB1 |
| DF28B13 | DFTEXC1 |
| DF28B21 | DFTEXA2 |
| DF28B22 | DFTEXB2 |
| DF28B23 | DFTEXC2 |
| DF28B31 | DFTEXA3 |
| DF28B32 | DFTEXB3 |
| DF28B33 | DFTEXC3 |
| DF28B41 | DFTEXA4 |
| DF28B42 | DFTEXB4 |
| DF28B43 | DFTEXC4 |
| DF28B51 | DFTEXA5 |
| DF28B52 | DFTEXB5 |
| DF28B53 | DFTEXC5 |
| DF28B61 | DFTEXA6 |
| DF28B62 | DFTEXB6 |
| DF28B63 | DFTEXC6 |
| DF28C1 | DFTEXAV |
| DF28C2 | DFTEXBV |
| DF28C3 | DFTEXCV |
| DF28DOC1 | DFTEXAW |
| DF28DOC2 | DFTEXBW |
| DF28DOC3 | DFTEXCW |
| DF29 | . DSPINHH |
| DF30 | DHURUNS |
| DF31 | DHUBOSS |
| DF32A | DHUBUYS |
| DF32B | DHUFRYS |


| DF32C | DHUMOPS | DHOC | DHSTYPE | DH45F | DCD6USE |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DF32D | DHUIRON | DH2 | DHSROOM | DH45G | DCD7USE |
| DF33 | DHHCH12 | DH3 | DHSOWND | DH45H | DCD8USE |
| DF34 | DHUSITS | DH5 | DHSVAL | DH45I | DCD9USE |
| DF35 | DHOWLNG | DH6 | DMGHAVE | DH46 | DCDBGHT |
| DF36 | DEVENT2S | DH7 | DHSOWRP | DH47A | DCD1NEW |
| DF36 | DEVENT1S | DH8 | DMGYNOT | DH47B | DCD2NEW |
| DF36 | DEVENT1 | DH9 | DHSCOST | DH47C | DCD3NEW |
| DF36 | DEVENT2 | DH10 | DHSYRO | DH47D | DCD4NEW |
| DF36 | DEVENT4S | DH12 | DMGYRO | DH47E | DCD5NEW |
| DF36 | DEVENT4 | DH13 | DMGLY | DH47F | DCD6NEW |
| DF36 | DEVENT3S | DH14 | DHSIVW3 | DH47G | DCD7NEW |
| DF36 | DEVENT3 | DH17 | DMGOLD | DH47H | DCD8NEW |
| DF37A | DIVFA | DH18 | DMGLIFE | DH471 | DCD9NEW |
| DF37B | DIVFB | DH19 | DMGTYPE | DH48 | DCDNUXP |
| DF37C | DIVFC | DH1B | DHSRINS | DH49 | DHSIP |
| DF37D | DIVFD | DH20 | DMGXTRA | DH50 | DHSIPXP |
| DF37E | DIVFE | DH21 | DMGNEW | DH51 | DHEATCH |
| DF38H | DIVFOIH | DH4M1 | DHSOWR1 | DH52 | DHEATYP |
| DF38M | DIVFOIM | DH4M2 | DHSOWR2 | DH53 | DXPOILY |
| DF39 | DIVSC | DH22A | DMGXTY1 | DH54 | DGASUSE |
| DF101 | DF101 | DH22B | DMGXTY2 | DH55 | DGASWAY |
| DF102 | DF102 | DH22C | DMGXTY3 | DH56 | DXPGASL |
| DF103 | DF103 | DH22D | DMGXTY4 | DH57 | DXPGASW |
| DF104 | DF104 | DH22E | DMGXTY5 | DH58 | DXPGASLW |
| DF105 | DF105 | DH23 | DXPMG | DH59 | DLECWAY |
| DF106 | DF106 | DH24A | DXPMG1 | DH60 | DXPLECL |
| DF116 | DF116 | DH24B | DXPMG2 | DH61 | DXPLECW |
| DF117 | DF117 | DH24C | DXPMG3 | DH62 | DXPLECLW |
| DF118 | DF118 | DH24D | DXPMG4 | DH63 | DXPFOOD |
| DF119 | DF119 | DH25 | DHSJB | DH64 | DNCARS |
| DF120 | DF120 | DH26M1 | DRENTP1 | DH65 | DCAROWN |
| DF121 | DF121 | DH26M2 | DRENTP2 | DH66 | DCARVAL |
| DF122 | DF122 | DH27 | DRENTLL | DH67M1 | DIVH1 |
| DF123 | DF123 | DH28 | DRENTF | DH67M2 | DIVH2 |
| DF124 | DF124 | DH30 | DRENT | DH67M3 | DIVH3 |
| DF131 | DF131 | DH31 | DRENTW | DHG2 | DHGR2R |
| DF132 | DF132 | DH32A | . DRENT1 | DHG2 | DHGR2R |
| DF133 | DF133 | DH32B | DRENT2 | DHG3 | DHGSEX |
| DF134 | DF134 | DH32C | DRENT3 | DHG3 | DHGSEX |
| DF135 | DF135 | DH32D | DRENT4 | DHG4M | DHGBM |
| DF136 | DF136 | DH32E | DRENT5 | DHG4Y | DHGBY |
| DF137 | DF137 | DH32F | DRENT6 | DHG8 | DMASTAT |
| DF138 | DF138 | DH33 | DRENTHB | DHG8 | DMASTAT |
| DF139 | DF139 | DH34 | DRENTG | DHG9 | DHGSPN |
| DF140 | DF140 | DH36 | DRENTGW | DHG9 | DHGSPN |
| DF141 | DF141 | DH37 | DXPHSDF | DHG10 | DHGEMP |
| DF151 | DF151 | DH38A | DXPHSD1 | DHG10 | DHGEMP |
| DF152 | DF152 | DH38B | DXPHSD2 | DHG11 | DHGFNO |
| DF153 | DF153 | DH39 | DXPHSDB | DHG11 | DHGFNO |
| DF154 | DF154 | DH40 | DHS2OWND | DHG12 | DHGMNO |
| DF155 | . DF155 | DH41 | DHS2VAL | DHG12 | DHGMNO |
| DF156 | DF156 | DH43 | DMGTOT | DHG13 | DHGRA |
| DF157 | DF157 | DH44 | DCDHAVE | DHG13 | DHGRA |
| DF158 | DF158 | DH45A | DCD1USE | DI1 | . . DIV1 |
| DF159 | . DF159 | DH45B | DCD2USE | DI2 | . DIV2 |
| DH0AD | . DHHDOI | DH45C | DCD3USE | DI4 | . DIV4 |
| DHOAM | DHHMOI | DH45D | DCD4USE | DI5 | DIV5 |
| DHOAY | . DHHYOI | DH45E | DCD5USE | DI6A | DIV6A |


| DI6B | DIV6B | DM4D | DHLPRBD | DM23A | DHLSVAF |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DI6C | DIV6C | DM4E | DHLPRBE | DM23B | DHLSVBF |
| DI6D | DIV6D | DM4F | DHLPRBF | DM23C | DHLSVCF |
| DI6E | DIV6E | DM4G | DHLPRBG | DM23D | DHLSVDF |
| DI6F | DIV6F | DM4H | DHLPRBH | DM23E | DHLSVEF |
| DI7 | DIV7 | DM4I | DHLPRBI | DM23F | DHLSVFF |
| DJ2 | DEDNEW | DM4J | DHLPRBJ | DM23G | DHLSVGF |
| DJ3A | DEDNEW1 | DM4K | DHLPRBK | DM23H | DHLSVHF |
| DJ3B | DEDNEW2 | DM4L | DHLPRBL | DM23I | DHLSVIF |
| DJ3C | DEDNEW3 | DM4M | DHLPRBM | DM23J1 | DHLSVJF |
| DJ3D | DEDNEW4 | DM4M0 | DHLPRB | DM23J2 | DHLSVKF |
| DJ4A | DEDNEWQ | DM5 | DHLLT | DM24 | DHLCK |
| DJ4B | DEDNEWP1 | DM6A | DHLLTA | DM25A | DHLCKA |
| DJ8 | DCJSBGD | DM6B | DHLLTB | DM25B | DHLCKB |
| DJ8M | DCJSBGM | DM6C | DHLLTC | DM25C | DHLCKC |
| DJ8Y | DCJSBGY | DM6D | DHLLTD | DM25D | DHLCKD |
| DJ9 | DNEMST | DM6E | DHLLTE | DM25E | DHLCKE |
| DJ10D | DCJSBGD | DM7 | DHLLTW | DM25F | DHLCKF |
| DJ10M | DCJSBGM | DM8 | DHLENDW | DM25G | DHLCKG |
| DJ10Y | DCJSBGY | DM9 | DHLLTWA | DM25H | DHLCKH |
| DJ11 | DCJSBLY | DM10 | DHL2GP | DM26A | DHLCKAN |
| DJ12 | DJHSTAT | DM11 | DXDTS | DM26B | DHLCKBN |
| DJ13D | DJHBGD | DM12 | DNXDTS | DM26C | DHLCKCN |
| DJ13M | DJHBGM | DM13AM | DXDT1M | DM26D | DHLCKDN |
| DJ13Y | DJHBGY | DM13AY | DXDT1Y | DM26E | DHLCKEN |
| DJ15 | DNJBS | DM13BM | DXDT2M | DM26F | DHLCKFN |
| DJ17 | DJHSOC | DM13BY | DXDT2Y | DM26G | DHLCKGN |
| DJ19 | DJHSEMP | DM13CM | DXDT3M | DM26H | DHLCKHN |
| DJ20 | DJHBOSS | DM13CY | DXDT3Y | DM27 | DSMOKER |
| DJ21 | . DJHSECT | DM14M1 | DXDT1PL | DM28 | DNCIGS |
| DJ22 | DJHMNGR | DM14M2 | DXDT2PL | DM29A | DOPHLA |
| DJ24 | DJHPLDF | DM14M3 | DXDT3PL | DM29B | DOPHLB |
| DJ25 | DJHSIC | DM15 | DHOSP | DM29C | DOPHLC |
| DJ26 | DJHSIZE | DM16 | DHOSPD | DM31 | DAIDHH |
| DJ27 | DJHPAYL | DM18 | DHOSPCH | DM32P1 | DAIDHUA |
| DJ280C | DJHPYLW | DM19 | DHOSPNHS | DM32P2 | DAIDHUB |
| DJ29 | . DJHPYLG | DM20 | DHLSV | DM32P3 | DAIDHUC |
| DJ30 | DJHSTPY | DM21A | DHLSVA | DM33 | DAIDXHH |
| DJ31 | DJBLKY | DM21B | DHLSVB | DM34 | . DNAIDXHH |
| DJ34 | DJBHAD | DM21C | DHLSVC | DM35 | DAIDHU2 |
| DJ35 | DJLEND | DM21D | DHLSVD | DM35 | DAIDHU1 |
| DJ36 | DJLSOC | DM21E | DHLSVE | DM37 | DAIDHRS |
| DJ37 | DJLSIC | DM21F | DHLSVF | DM38A | DIVMA |
| DJ38 | . DJLSEMP | DM21G | DHLSVG | DM38B | DIVMB |
| DJ39 | . DJLBOSS | DM21H | DHLSVH | DM38C | DIVMC |
| DJ40 | DJLMNGR | DM21I | DHLSVI | DM38D | DIVMD |
| DJ41 | DJLSIZE | DM21J1 | DHLSVJ | DM38E | DIVME |
| DJ42A | DIVJA | DM21J2 | DHLSVK | DP2B | DPRRS21 |
| DJ42B | DIVJB | DM22A | DHLSVAN | DP2C | DPRIPN |
| DJ42C | . DIVJC | DM22B | DHLSVBN | DP2D | DPRWHY |
| DJ42D | DIVJD | DM22C | DHLSVCN | DP3 | DPPLEVR |
| DJ42E | DIVJE | DM22D | DHLSVDN | DP10M | DPRESBGM |
| DJSPNO | DJSPNO | DM22E | DHLSVEN | DP10Y | DPRESBGY |
| DM1 | DHLSTAT | DM22F | DHLSVFN | DP11 | DPRESLY |
| DM2 | DHLZEST | DM22G | DHLSVGN | DP23 | DPRFEHQ |
| DM3 | DHLDSBL | DM22H | DHLSVHN | DP25 | DPRSEHQ |
| DM4A | DHLPRBA | DM22I | DHLSVIN | DP51 | DPRJBFT |
| DM4B | DHLPRBB | DM22J1 | . DHLSVJN | DP52M | DPRJBBGM |
| DM4C | . DHLPRBC | DM22J2 | . DHLSVKN | DP52Y | DPRJBBGY |


| DP53 | DPRJBLY | DS4A | DNETSOC | DV18Q | DORGAQ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DP54 | DPREARN | DT2B | DTELWHY | DV19 | DOPRLG2 |
| DP63A | DPRF101 | DT45 | DTLFIYRL | DV20 | DCARUSE |
| DP63B | DPRF102 | DT50 | DTLFIYR | DV21 | DYPPAR |
| DP63C | DPRF116 | DV1A | DOPPOLA | DV22 | DPYRULE |
| DP63D | DPRF131 | DV1B | DOPPOLB | DV23 | DPYENRL |
| DP63E | DPRF134 | DV1C | DOPPOLC | DV24 | DPYTVRL |
| DP63F | DPRF135 | DV1D | DOPPOLD | DV25A | DPYSTM |
| DP63G | DPRF137 | DV2 | DVOTE1 | DV25B | DPYSWR |
| DP63H | DPRF139 | DV3 | DVOTE2 | DV25C | DPYSMOK |
| DP63I | DPRF141 | DV4 | DVOTE3 | DV25D | DPYLIE |
| DP63NONE | DPRFIRN | DV5 | DVOTE4 | DV25E | DPYDRUG |
| DP64 | DPRFITB | DV6 | DVOTE5 | DV25F | DPYBUNK |
| DPI1A | DIVPA | DV7 | DVOTE6 | DV26 | DPYSER |
| DPI1B | DIVPB | DV8 | DOPPOL1 | DV27 | DPYNYP |
| DPI1C | DIVPC | DV9 | DOPPOL2 | DV270C | DPYPNO2 |
| DPI1D | DIVPD | DV9A | DOPISS1 | DV270C | DPYPNO3 |
| DPI1E | DIVPE | DV9B | DOPISS2 | DV27OC | DPYPNO1 |
| DS1A | DGHQA | DV9C | DOPISS3 | DV28Y1 | DPYWHR1 |
| DS1B | DGHQB | DV9D | DOPISS4 | DV28Y2 | DPYWHR2 |
| DS1C | DGHQC | DV9E | DOPISS5 | DV28Y3 | DPYWHR3 |
| DS1D | DGHQD | DV10 | DOPPOL3 | DV29Y1 | DPYARG1 |
| DS1E | DGHQE | DV12 | DOPCHD1 | DV29Y2 | DPYARG2 |
| DS1F | DGHQF | DV13 | DOPCHD2 | DV29Y3 | DPYARG3 |
| DS1G | . DGHQG | DV14 | DOPCHD3 | DV30Y | DPYTLK2 |
| DS1H | DGHQH | DV15 | DOPCHD4 | DV30Y1 | DPYTLK1 |
| DS11 | DGHQI | DV16 | DORGM | DV30Y3 | DPYTLK3 |
| DS1J | DGHQJ | DV17A | DORGMA | DV31Y1 | DPYASM1 |
| DS1K | DGHQK | DV17B | DORGMB | DV31Y2 | DPYASM2 |
| DS1L | DGHQL | DV17C | DORGMC | DV31Y3 | DPYASM3 |
| DS2A | DOPFAMJ | DV17D | DORGMD | DV32Y1 | DPYTHH1 |
| DS2B | DOPFAMK | DV17E | DORGME | DV32Y2 | DPYTHH2 |
| DS2C | DOPFAML | DV17F | DORGMF | DV32Y3 | DPYTHH3 |
| DS2D | DOPFAMM | DV17G | DORGMG | DV33Y1 | DPYESM1 |
| DS2E | DOPFAMN | DV17H | DORGMH | DV33Y2 | DPYESM2 |
| DS3A | DNETSX1 | DV17I | DORGMI | DV33Y3 | DPYESM3 |
| DS3A | DNETSX2 | DV17J | DORGMJ | DV34Y1 | DPYTDR1 |
| DS3A | . DNETSX3 | DV17K | DORGMK | DV34Y2 | DPYTDR2 |
| DS3B | DNET1WR | DV17L | DORGML | DV34Y3 | DPYTDR3 |
| DS3B | DNET2WR | DV17M | DORGMM | DV35Y1 | DPYSAD1 |
| DS3B | DNET3WR | DV170 | DORGMO | DV35Y2 | DPYSAD2 |
| DS3B | DNET1RL | DV17P | DORGMP | DV35Y3 | DPYSAD3 |
| DS3B | DNET3RL | DV17Q | DORGMQ | DV36Y1 | DPYWOR1 |
| DS3B | DNET2RL | DV18A | DORGAA | DV36Y2 | DPYWOR2 |
| DS3C | DNET3AG | DV18B | DORGAB | DV36Y3 | DPYWOR3 |
| DS3C | DNET1AG | DV18C | DORGAC | DV37AY1 | DPYHSW1 |
| DS3C | DNET2AG | DV18D | DORGAD | DV37AY2 | DPYHSW2 |
| DS3D | DNET3KN | DV18E | DORGAE | DV37AY3 | DPYHSW3 |
| DS3D | DNET1KN | DV18F | DORGAF | DV37BY1 | DPYHAP1 |
| DS3D | DNET2KN | DV18G | DORGAG | DV37BY2 | DPYHAP2 |
| DS3E | DNET1PH | DV18H | DORGAH | DV37BY3 | DPYHAP3 |
| DS3E | DNET2PH | DV18I | DORGAI | DV37CY1 | DPYHFM1 |
| DS3E | DNET3PH | DV18J | DORGAJ | DV37CY2 | DPYHFM2 |
| DS3F | DNET3LV | DV18K | DORGAK | DV37CY3 | DPYHFM3 |
| DS3F | DNET1LV | DV18L | DORGAL | DV37DY1 | DPYHFR1 |
| DS3F | DNET2LV | DV18M | DORGAM | DV37DY2 | DPYHFR2 |
| DS3G | . DNET3JB | DV18N | DORGA | DV37DY3 | DPYHFR3 |
| DS3G | . DNET1JB | DV18O | DORGAO | DV37EY1 | DPYHLF1 |
| DS3G | . DNET2JB | DV18P | DORGAP | DV37EY2 | DPYHLF2 |


| DV37EY3 | DPYHLF3 | DY58 | DYPHFR | ED15M | EEDENDM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DY1 | DYPNTV | DY59 | DYPHLF | ED15Y | EEDENDY |
| DY2 | DYTVHRS | DY60 | DYPCOMA | ED16 | EEDTYPE |
| DY3 | DYTVLMT | DY61 | DYPCOMB | ED17 | EQFX |
| DY4 | DYTVSTP | DY62 | DYPCOMC | ED18A | EQFXA |
| DY5 | DYPCOMP | DY63 | DYPCOMD | ED18B | EQFXB |
| DY6 | DYPPALS | DY64 | DYPCOME | ED18C | EQFXC |
| DY7 | DYPUTEL | DY65 | DYPCOMF | ED18D | EQFXD |
| DY8 | DYPTELL | DY66 | DYPCOMG | ED18E | EQFXE |
| DY9 | DYPLATE | DY67 | DYPNBKS | ED18F | EQFXF |
| DY10 | DYPARGM | DY68 | DYPVTE6 | ED18G | EQFXG |
| DY11 | DYPARGF | DY69 | DYPVTE3 | ED18H | EQFXH |
| DY12 | DYPTLKM | DY70 | DYPLVSC | ED18I | EQFXI |
| DY13 | DYPTLKF | DY71 | DYPLVHM | ED18J | EQFXJ |
| DY14 | DYPNPAL | DY72 | DYPAMAR | ED18K | EQFXK |
| DY15 | DYPFGHT | DY73 | DYPAPAR | ED18L | EQFXL |
| DY16 | DYPASMK | DY74 | DYPWHRS | ED18M | EQFXM |
| DY17 | DYPEATN | DY75 | DYPPAY | ED18N | EQFXN |
| DY18 | DYPMENU | DY76 | DYPFSOC | ED19 | EQFEDX |
| DY19 | DYPTHHC | DY76N | DYPFJOB | ED20A | EQFEDXA |
| DY20 | DYPSHHC | DY77 | DYPSOC | ED20B | EQFEDXB |
| DY21L | DYPPKML | DY78 | DYPJBQA | ED20C | EQFEDXC |
| DY21P | DYPPKMP | DY79 | DYPJBQB | ED20D | EQFEDXD |
| DY22 | DYPSTM | DY80 | DYPJBQC | ED20E | EQFEDXE |
| DY23 | DYPSWR | DY81 | . DYPJBQD | ED20F | EQFEDXF |
| DY24 | DYPSMOK | DY82 | DYPJBQE | ED20G | EQFEDXG |
| DY25 | DYPLIE | DY83 | DYPJBQT | ED20H | EQFEDXH |
| DY26 | DYPDRUG | ED0AD | . EDOID | ED20I | EQFEDXI |
| DY27 | DYPBUNK | EDOAM | EDOIM | ED20J | EQFEDXJ |
| DY28 | DYPSER | EDOAY | EDOIY | ED20K | EQFEDXK |
| DY29 | DYPSMEV | EDOB | EIVLYR | ED21A | ENQFEXA |
| DY30 | DYPSMAG | EDOC | EIVIEVR | ED21B | ENQFEXB |
| DY31 | DYPSMOF | ED0D | ERACH12 | ED21C | ENQFEXC |
| DY32 | DYPSMLW | ED1H | EIVSOIH | ED21E | ENQFEXE |
| DY33 | DYPSMYR | ED1M | EIVSOIM | ED21F | ENQFEXF |
| DY34 | DYPSMOP | ED2 | ELKNBRD | ED21G | ENQFEXG |
| DY35 | DYPDGSC | ED3 | ELKMOVE | ED21H | ENQFEXH |
| DY36 | DYPDGPA | ED4 | ELKMOVY | ED21I | ENQFEXI |
| DY37 | DYPDGFR | ED5 | EPLNEW | ED21J | ENQFEXJ |
| DY38 | DYPDGYR | ED6M | EPLNOWM | ED21K | ENQFEXK |
| DY39 | DYPOPHA | ED6Y | EPLNOWY | ED22 | EMLSTAT |
| DY40 | DYPOPHB | ED7 | EMOVJB | ED23 | EMLCHNG |
| DY41 | DYPOPHC | ED8A | EMOVJBA | ED24M | EMLCHM |
| DY42 | DYPOPFJ | ED8B | EMOVJBB | ED24Y | EMLCHY |
| DY43 | DYPOPFL | ED8C | EMOVJBC | ED25DST | EPLBORND |
| DY44 | DYPOPFM | ED8D | EMOVJBD | ED25OS . | EPLBORNC |
| DY45 | DYPOPFN | ED8E | EMOVJBE | ED26 | EYR2UK |
| DY46 | DYPSAD | ED8F | EMOVJBF | ED28 | ERACE |
| DY47 | DYPWOR | ED8G | EMOVJBG | ED30 | ESCEND |
| DY48 | DYPESTA | ED8H | EMOVJBH | ED30NA. | ESCHOOL |
| DY49 | DYPESTB | ED8I | EMOVJBI | ED31 | ESCTYPE |
| DY50 | DYPESTC | ED9M1 | EMOVY1 | ED32 | ESCNOW |
| DY51 | DYPESTD | ED9M2 | EMOVY2 | ED33 | EFETYPE |
| DY52 | DYPESTE | ED10M | EDOBM | ED34 | EFEEND |
| DY53 | DYPESTF | ED10Y | EDOBY | ED34NA. | EFENOW |
| DY54 | DYPESTG | ED11 | ESEX | ED35 | EQFHAS |
| DY55 | . DYPHSW | ED11 | ESEX | ED36A | . EQFA |
| DY56 | DYPHAP | ED13 | EJBSTAT | ED36B | EQFB |
| DY57 | DYPHFM | ED14 | EEDLYR | ED36C | EQFC |


| ED36D | EQFD | EE10 | EJBSIZE | EE61 | EJSPRF |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ED36E | . EQFE | EE11 | EJBHRS | EE62BM | EJSPRBM |
| ED36F | EQFF | EE12 | EJBOT | EE62BY | EJSPRBY |
| ED36G | EQFG | EE13 | EJBOTPD | EE62EM | EJSPREM |
| ED36H | EQFH | EE14 | . EJBHRLK | EE62EY | EJSPREY |
| ED36I | EQFI | EE15 | EJBPL | EE63 | EJSPAYL |
| ED36J | . EQFJ | EE16 | EJBTTWT | EE64BM | EJSPYBM |
| ED36K. | EQFK | EE17 | EJBTTWM | EE64BY | . EJSPYBY |
| ED36L | EQFL | EE18A | EJBSAT1 | EE64EM | EJSPYEM |
| ED36M | EQFM | EE18B | EJBSAT2 | EE64EY | EJSPYEY |
| ED36N | EQFN | EE18C | EJBSAT3 | EE65 | EJSPL |
| ED37 | EQFED | EE18D | EJBSAT4 | EE66 | EJSTTWT |
| ED38A | EQFEDA | EE18E | EJBSAT5 | EE67 | EJSTTWM |
| ED38B | EQFEDB | EE18F | EJBSAT6 | EE68A | EJSSAT1 |
| ED38C | EQFEDC | EE18G | EJBSAT7 | EE68B | EJSSAT2 |
| ED38D | EQFEDD | EE19 | EJBSAT | EE68C | EJSSAT3 |
| ED38E | EQFEDE | EE20 | EPAYGL | EE68D | EJSSAT4 |
| ED38F | EQFEDF | EE21OC | EPAYGW | EE68E | EJSSAT5 |
| ED38G | EQFEDG | EE22 | EPAYNL | EE69 | EJSSAT |
| ED38H | EQFEDH | EE23OC | EPAYNW | EE70D | EJSBGD |
| ED381 | . EQFEDI | EE24 | EPAYSLP | EE70M | EJSBGM |
| ED38J | EQFEDJ | EE26 | EPAYUSL | EE70Y | EJSBGY |
| ED38K | EQFEDK | EE27 | EPAYU | EE71 | EJBED |
| ED38L | EQFEDL | EE28OC | EPAYUW | EE72A | EJBED1 |
| ED38M | EQFEDM | EE29 | EPAYUG | EE72B | EJBED2 |
| ED38N | EQFEDN | EE30A | EPAYDF1 | EE72C | EJBED3 |
| ED380 . | EQFEDO | EE30B | EPAYDF2 | EE72D | EJBED4 |
| ED38P | EQFEDP | EE30C | EPAYDF3 | EE72E | EJBED5 |
| ED38Q | EQFEDQ | EE30D | EPAYDF4 | EE73A | EJBEDQ |
| ED38R | EQFEDR | EE30E | EPAYDF5 | EE73B | EJBEDP1 |
| ED38S | EQFEDS | EE30F | . EPAYDF6 | EE75M1 | EJBCHC1 |
| ED39A | ENQFEDA | EE30G | EPAYDF7 | EE75M2 | EJBCHC2 |
| ED39B | ENQFEDB | EE30H | EPAYDF8 | EE75M3 | EJBCHC3 |
| ED39C | ENQFEDC | EE31 | EJBONUS | EE77 | EXPCHCF |
| ED39D | ENQFEDD | EE32 | EJBRISE | EE78 | EXPCHC |
| ED39E | ENQFEDE | EE33 | ETUJBPL | EE79 | EHUXPCH |
| ED39F | ENQFEDF | EE34 | ETUIN1 | EE80 | EHUNURS |
| ED39G | ENQFEDG | EE35 | ETUIN2 | EE81 | EJULK1 |
| ED39H | ENQFEDH | EE36 | EJBOPPS | EE82 | EJULK4 |
| ED391 | ENQFEDI | EE37 | EJBTIME | EE83 | EJULKJB |
| ED39J | ENQFEDJ | EE38 | EJBPEN | EE84 | EJUSPEC |
| ED39K | ENQFEDK | EE39 | EJBPENM | EE85 | EJUSOC |
| ED39L | ENQFEDL | EE41D | EJBBGD | EE86 | EJUHRSX |
| ED39M | ENQFEDM | EE41M | EJBBGM | EE87 | EJUPAYX |
| ED39N | ENQFEDN | EE41Y | EJBBGY | EE88 | EJUPAYL |
| ED390 . | ENQFEDO | EE42 | .EJBBGLY | EE89 | EJUHRSL |
| ED39P | ENQFEDP | EE43 | EPAYS | EE90 | EEAAGE |
| ED39Q | ENQFEDQ | EE44OC | EPAYSW | EE91A | EJBHHA |
| ED39R | ENQFEDR | EE45 | EPAYSG | EE91B | EJBHHB |
| ED39S | ENQFEDS | EE48 | EPAYLY | EE91C | EJBHHC |
| EE1 | EJBHAS | EE490C | EPAYLYW | EE91D | EJBHHD |
| EE2 | . EJBOFF | EE50 | EPAYLYG | EE91E | EJBHHE |
| EE3 | EJBOFFY | EE54 | EJSBOSS | EE91F | EJBHHF |
| EE4 | EJBTERM | EE55 | EJSSIZE | EE92 | EJBUB |
| EE5 | EJBSOC | EE56 | EJSHRS | EE93 | EJBUBY |
| EE6 | EJBSIC | EE57 | . EJSHRLK | EE94 | EJ2HAS |
| EE7 | EJBSEMP | EE58 | EJSTIME | EE95 | EJ2SOC |
| EE8 | EJBMNGR | EE59 | . EJSTYPE | EE96 | EJ2SEMP |
| EE9 | EJBSECT | EE60 | EJSACCS | EE97 | EJ2HRS |


| EE98 | EJ2PAY | EF3BAL | EFRALL | EF39 | EWINDF |
| :---: | :---: | :---: | :---: | :---: | :---: |
| EE99A | EIVEA | EF3C | EFRNOW | EF40A | EWINDFA |
| EE99B | EIVEB | EF3D | EFRVAL | EF40B | EWINDFB |
| EE99C | EIVEC | EF3EOC | EFRW | EF40C | EWINDFC |
| EE99D | EIVED | EF3F | EFRJT | EF40D | EWINDFD |
| EE99E | EIVEE | EF3FPN | EFRJTPN | EF40E | EWINDFE |
| EEG3 | PID | EF3SEQ | EFISEQ | EF40F | EWINDFF |
| EEG3 | PID | EF4 | EFISIT | EF40G | EWINDFG |
| EEG3 | PID | EF5 | EFISITC | EF40H | EWINDFH |
| EEG4 | EHGSEX | EF6 | EFISITY | EF40R | EWINDFR |
| EEG4M | EHGBM | EF7 | EFISITX | EF41 | EWINDFY |
| EEG4Y | EHGBY | EF8 | EOPXPSV | EF43 | EFTHH |
| EEG6 | EIVIOW4 | EF9 | EOPXPCR | EF44A1 | EFTHH1 |
| EEG6 | EIVIOW4 | EF10 | EFCCARD | EF44A2 | EFTHH2 |
| EEG6 | EIVIOW4 | EF11 | EFIYRDI | EF44A3 | EFTHH3 |
| EEG7 | EIVIEVR | EF12 | EFIYRDIU | EF44B1 | EFTHH11 |
| EEG7 | EIVIEVR | EF13 | ESAVE | EF44B12 | EFTHH21 |
| EEG8 | EIVELIG | EF14 | ESAVED | EF44B13 | EFTHH31 |
| EEG9 | . EHHMEM | EF15 | ESAVEY1 | EF44B2 | EFTHH12 |
| EEG9 | . EHHMEM | EF15 | ESAVEY2 | EF44B22 | EFTHH22 |
| EEG9 | . EHHMEM | EF16 | ESAVEK | EF44B23 | EFTHH32 |
| EEG10 | ENEWHY | EF17A | ESAVEKB1 | EF44B3 | EFTHH13 |
| EEG10 | ENEWHY | EF17B | ESAVEKB2 | EF44B32 | EFTHH23 |
| EEG10 | ENEWHY | EF17C | ESAVEKB3 | EF44B33 | EFTHH33 |
| EEG11 | ELVWHY | EF17D | ESAVEKB4 | EF44B4 | EFTHH14 |
| EEG12M | ENEMNJN | EF18 | ESAVEJ | EF44B42 | EFTHH24 |
| EEG12M | ENEMNJN | EF19 | EBANK | EF44B43 | EFTHH34 |
| EEG12M | ENEMNJN | EF20 | EBANKK | EF44B5 | EFTHH15 |
| EEG12M | ELVMN | EF21A | EBANKKB1 | EF44B52 | EFTHH25 |
| EEG12Y | ENEYRJN | EF21B | EBANKKB2 | EF44B53 | EFTHH35 |
| EEG12Y | ENEYRJN | EF21C | EBANKKB3 | EF44B6 | EFTHH16 |
| EEG12Y | ENEYRJN | EF21D | EBANKKB4 | EF44B62 | EFTHH26 |
| EEG12Y | ELVYR | EF22 | EBANKJ | EF44B63 | EFTHH36 |
| EEG13 | ELVLOC | EF23 | ENVEST | EF44C | EFTHH1V |
| EEG14 | EIVFIO | EF24A | ENVESTA | EF44C2 | EFTHH2V |
| EEG14 | EIVFIO | EF24B | ENVESTB | EF44C3 | EFTHH3V |
| EEG14 | EIVFIO | EF24C | ENVESTC | EF44DOC | EFTHH1W |
| EEG15 | EIVRREF | EF24D | ENVESTD | EF44DOC2 | EFTHH2W |
| EEG16 | EIVIREIS | EF24DK | ENVESTR | EF44DOC3 | EFTHH3W |
| EF2 | ENFR | EF24E | ENVESTE | EF45 | EFTEXHH |
| EF2 | ENF1 | EF24F | ENVESTF | EF46A1 | EFTEXA |
| EF3A | EFICODE | EF24G | ENVESTG | EF46A2 | EFTEXB |
| EF3B01 | EFR01 | EF25 | ENVESTN | EF46A3 | EFTEXC |
| EF3B02 | EFR02 | EF26 | ENVESTL | EF46B11 | EFTEXA1 |
| EF3B03 | EFR03 | EF27 | ENVESTK | EF46B12 | EFTEXB1 |
| EF3B04 | EFR04 | EF28A | ENVESTC1 | EF46B13 | EFTEXC1 |
| EF3B05 | EFR05 | EF28B | ENVESTC2 | EF46B21 | EFTEXA2 |
| EF3B06 | EFR06 | EF28C | ENVESTC3 | EF46B22 | EFTEXB2 |
| EF3B07 | EFR07 | EF28D | ENVESTC4 | EF46B23 | EFTEXC2 |
| EF3B08 | EFR08 | EF29 | ENVESTJ | EF46B31 | EFTEXA3 |
| EF3B09 | EFR09 | EF30 | EPPPEN | EF46B32 | EFTEXB3 |
| EF3B10 | EFR10 | EF31 | . EPENB4 | EF46B33 | EFTEXC3 |
| EF3B11 | EFR11 | EF32 | EPENB4YR | EF46B41 | EFTEXA4 |
| EF3B12 | EFR12 | EF33 | EPENB4V | EF46B42 | EFTEXB4 |
| EF3B13 | EFR13 | EF34OC | EPENB4W | EF46B43 | EFTEXC4 |
| EF3B14 | EFR14 | EF35 | EPENYR | EF46B51 | EFTEXA5 |
| EF3B15 | EFR15 | EF36 | EPENADD | EF46B52 | EFTEXB5 |
| EF3B16 | EFR16 | EF37 | EPENADV | EF46B53 | EFTEXC5 |
| EF3B17 | EFR17 | EF380C | EPENADW | EF46B61 | EFTEXA6 |


| EF46B62 | EFTEXB6 | EF117 | EF117 | EH24B | EXPMG2 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| EF46B63 | EFTEXC6 | EF118 | EF118 | EH24C | EXPMG3 |
| EF46C1 | EFTEXAV | EF119 | EF119 | EH24D | EXPMG4 |
| EF46C2 | EFTEXBV | EF120 | EF120 | EH25 | EHSJB |
| EF46C3 | EFTEXCV | EF121 | EF121 | EH26M1 | ERENTP1 |
| EF46DOC1 | EFTEXAW | EF122 | EF122 | EH26M2 | ERENTP2 |
| EF46DOC2 | EFTEXBW | EF123 | EF123 | EH27 | ERENTLL |
| EF46DOC3 | EFTEXCW | EF124 | EF124 | EH28 | ERENTF |
| EF47 | EDEBT | EF125 | EF125 | EH30 | ERENT |
| EF48A | EDEBTA | EF131 | EF131 | EH31 | ERENTW |
| EF48B | EDEBTB | EF132 | EF132 | EH32A | ERENT1 |
| EF48C | EDEBTC | EF133 | EF133 | EH32B | ERENT7 |
| EF48D | EDEBTD | EF134 | EF134 | EH32C | ERENT2 |
| EF48DK | EDEBTR | EF135 | EF135 | EH32D | ERENT3 |
| EF48E | EDEBTE | EF136 | EF136 | EH32E | ERENT4 |
| EF48F | EDEBTF | EF137 | EF137 | EH32F | ERENT5 |
| EF48G | EDEBTG | EF138 | EF138 | EH32G | ERENT8 |
| EF49 | EDEBTY | EF139 | EF139 | EH32H | ERENT6 |
| EF50A | EDEBTC1 | EF140 | EF140 | EH33 | ERENTHB |
| EF50B | EDEBTC2 | EF141 | EF141 | EH34 | ERENTG |
| EF50C | EDEBTC3 | EF151 | EF151 | EH35 | ERENTG |
| EF50D | EDEBTC4 | EF152 | EF152 | EH36 | ERENTGW |
| EF51 | EDEBTJ | EF153 | EF153 | EH37 | EXPHSDF |
| EF52 | ESPINHH | EF154 | EF154 | EH38A | EXPHSD1 |
| EF53 | EHURUNS | EF155 | EF155 | EH38B | EXPHSD2 |
| EF54 | EHUBOSS | EF156 | EF156 | EH39 | EXPHSDB |
| EF55A | EHUBUYS | EF157 | EF157 | EH40 | EHS2OWND |
| EF55B | EHUFRYS | EF158 | EF158 | EH41 | EHS2VAL |
| EF55C | EHUMOPS | EF159 | EF159 | EH43 | EMGTOT |
| EF55D | EHUIRON | EHOAD | EHHDOI | EH44 | ECDHAVE |
| EF56 | EHHCH12 | EHOAM | EHHMOI | EH45A | ECD1USE |
| EF57 | EHUSITS | EHOAY | EHHYOI | EH45B | ECD2USE |
| EF58 | EHOWLNG | EHOC | EHSTYPE | EH45C | ECD3USE |
| EF59 | EEVENT1S | EH1A | EHSRINS | EH45D | ECD4USE |
| EF59 | EEVENT2 | EH2 | EHSROOM | EH45E | ECD5USE |
| EF59 | EEVENT1 | EH3 | EHSOWND | EH45F | ECD6USE |
| EF59 | EEVENT4S | EH4M1 | EHSOWR1 | EH45G | ECD7USE |
| EF59 | EEVENT2S | EH4M2 | EHSOWR2 | EH45H | ECD8USE |
| EF59 | EEVENT4 | EH5 | EHSVAL | EH45I | ECD9USE |
| EF59 | EEVENT3S | EH6 | EMGHAVE | EH46 | ECDBGHT |
| EF59 | EEVENT3 | EH7 | EHSOWRP | EH47A | ECD1NEW |
| EF60A | EIVFA | EH8 | EMGYNOT | EH47B | ECD2NEW |
| EF60B | EIVFB | EH9 | EHSCOST | EH47C | ECD3NEW |
| EF60C | EIVFC | EH10 | EHSYRO | EH47D | ECD4NEW |
| EF60D | EIVFD | EH12 | EMGYRO | EH47E | ECD5NEW |
| EF60E | EIVFE | EH13 | EMGLY | EH47F | ECD6NEW |
| EF61H | EIVFOIH | EH14 | EHSIVW4 | EH47G | ECD7NEW |
| EF61M | EIVFOIM | EH17 | EMGOLD | EH47H | ECD8NEW |
| EF62 | EIVSC | EH18 | EMGLIFE | EH47I | ECD9NEW |
| EF63A | EMRSSCH | EH19 | EMGTYPE | EH48 | ECDNUXP |
| EF63B | EMRSSCI | EH20 | EMGXTRA | EH49 | EHSIP |
| EF63I | EPRF125 | EH21 | EMGNEW | EH50 | EHSIPXP |
| EF101 | EF101 | EH22A | EMGXTY1 | EH51 | EHEATCH |
| EF102 | EF102 | EH22B | EMGXTY2 | EH52 | EHEATYP |
| EF103 | EF103 | EH22C | EMGXTY3 | EH53 | EXPOILY |
| EF104 | EF104 | EH22D | EMGXTY4 | EH54 | EGASUSE |
| EF105 | EF105 | EH22E | EMGXTY5 | EH55 | EGASWAY |
| EF106 | . EF106 | EH23 | EXPMG | EH56 | EXPGASL |
| EF116 | . EF116 | EH24A | . EXPMG1 | EH57 | EXPGASW |


| EH58 | EXPGASLW | EJ17 | EJHSOC | EM13AM | EXDT1M |
| :---: | :---: | :---: | :---: | :---: | :---: |
| EH59 | ELECWAY | EJ19 | EJHSEMP | EM13AY | EXDT1Y |
| EH60 | EXPLECL | EJ20 | EJHBOSS | EM13BM | EXDT2M |
| EH61 | EXPLECW | EJ21 | EJHSECT | EM13BY | EXDT2Y |
| EH62 | EXPLECLW | EJ22 | EJHMNGR | EM13CM | EXDT3M |
| EH63 | EXPBLDF | EJ24 | EJHPLDF | EM13CY | EXDT3Y |
| EH64 | EXPHP | EJ25 | EJHSIC | EM14M1 | EXDT1PL |
| EH65 | EXPHPDF | EJ26 | EJHSIZE | EM14M2 | EXDT2PL |
| EH66 | EXPFOOD | EJ27 | EJHPAYL | EM14M3 | EXDT3PL |
| EH67 | ENCARS | EJ280C | EJHPYLW | EM15 | EHOSP |
| EH68 | ECAROWN | EJ29 | EJHPYLG | EM16 | EHOSPD |
| EH69 | ECARVAL | EJ30 | EJHSTPY | EM18 | EHOSPCH |
| EH70M1 | EIVH1 | EJ31 | EJBLKY | EM19 | EHOSPNHS |
| EH70M2 | EIVH2 | EJ34 | EJBHAD | EM20 | EHLSV |
| EH70M3 | EIVH3 | EJ35 | EJLEND | EM21A | EHLSVA |
| EHG2 | EHGR2R | EJ36 | EJLSOC | EM21B | EHLSVB |
| EHG2 | EHGR2R | EJ37 | EJLSIC | EM21C | EHLSVC |
| EHG3 | EHGSEX | EJ38 | EJLSEMP | EM21D | EHLSVD |
| EHG4M | EHGBM | EJ39 | EJLBOSS | EM21E | EHLSVE |
| EHG4Y | EHGBY | EJ3A | EEDNEW1 | EM21F | EHLSVF |
| EHG8 | EMASTAT | EJ3B | EEDNEW2 | EM21G | EHLSVG |
| EHG8 | EMASTAT | EJ3C | EEDNEW3 | EM21H | EHLSVH |
| EHG9 | EHGSPN | EJ3D | EEDNEW4 | EM21I | EHLSVI |
| EHG9 | EHGSPN | EJ40 | EJLMNGR | EM21J1 | EHLSVJ |
| EHG10 | EHGEMP | EJ41 | EJLSIZE | EM21J2 | EHLSVK |
| EHG10 | EHGEMP | EJ42A | EIVJA | EM21K | EHLSVL |
| EHG11 | EHGFNO | EJ42B | EIVJB | EM21L | EHLSVM |
| EHG11 | EHGFNO | EJ42C | EIVJC | EM22A | EHLSVAN |
| EHG12 | EHGMNO | EJ42D | EIVJD | EM22B | EHLSVBN |
| EHG12 | EHGMNO | EJ42E | EIVJE | EM22C | EHLSVCN |
| EHG13 | EHGRA | EM1 | EHLSTAT | EM22D | EHLSVDN |
| EHG13 | EHGRA | EM2 | EHLZEST | EM22E | EHLSVEN |
| El1 | EIV1 | EM3 | EHLDSBL | EM22F | EHLSVFN |
| El2 | EIV2 | EM4A | EHLPRBA | EM22G | EHLSVGN |
| El4 | EIV4 | EM4B | EHLPRBB | EM22H | EHLSVHN |
| EI5 | EIV5 | EM4C | EHLPRBC | EM22I | EHLSVIN |
| EI6A | EIV6A | EM4D | EHLPRBD | EM22J1 | EHLSVJN |
| El6B | EIV6B | EM4E | EHLPRBE | EM22J2 | EHLSVKN |
| EI6C | . EIV6C | EM4F | EHLPRBF | EM22K | EHLSVLN |
| EI6D | . EIV6D | EM4G | EHLPRBG | EM22L | EHLSVMN |
| El6E | EIV6E | EM4H | EHLPRBH | EM23A | EHLSVAF |
| El7 | EIV6F | EM4I | EHLPRBI | EM23B | EHLSVBF |
| El8 | EIV7 | EM4J | EHLPRBJ | EM23C | EHLSVCF |
| EJ2 | EEDNEW | EM4K | EHLPRBK | EM23D | EHLSVDF |
| EJ4A | . EEDNEWQ | EM4L | EHLPRBL | EM23E | EHLSVEF |
| EJ4B | EEDNEWP1 | EM4M | EHLPRBM | EM23F | EHLSVFF |
| EJ8D | ECJSBGD | EM4M0 | EHLPRB | EM23G | EHLSVGF |
| EJ8M | ECJSBGM | EM5 | EHLLT | EM23H | EHLSVHF |
| EJ8Y | ECJSBGY | EM6A | EHLLTA | EM23I | EHLSVIF |
| EJ9 | ENEMST | EM6B | EHLLTB | EM23J1 | EHLSVJF |
| EJ10D | ECJSBGD | EM6C | EHLLTC | EM23J2 | EHLSVKF |
| EJ10M | ECJSBGM | EM6D | EHLLTD | EM23K | EHLSVLF |
| EJ10Y | ECJSBGY | EM6E | EHLLTE | EM23L | EHLSVMF |
| EJ11 | ECJSBLY | EM7 | EHLLTW | EM24 | EHLCK |
| EJ12 | EJHSTAT | EM8 | EHLENDW | EM25A | EHLCKA |
| EJ13D | EJHBGD | EM9 | EHLLTWA | EM25B | EHLCKB |
| EJ13M | EJHBGM | EM10 | EHL2GP | EM25C | EHLCKC |
| EJ13Y | . EJHBGY | EM11 | EXDTS | EM25D | EHLCKD |
| EJ15 | . ENJBS | EM12 | ENXDTS | EM25E | EHLCKE |


| EM25F | EHLCKI | EPI1C | EIVPC | EV19C | EORGMC |
| :---: | :---: | :---: | :---: | :---: | :---: |
| EM25G | EHLCKF | EPI1D | EIVPD | EV19D | EORGMD |
| EM25H | EHLCKG | EPI1E | EIVPE | EV19E | EORGME |
| EM25I | EHLCKH | ES1A | EGHQA | EV19F | EORGMF |
| EM26A | EHLCKAN | ES1B | EGHQB | EV19G | EORGMG |
| EM26B | EHLCKBN | ES1C | EGHQC | EV19H | EORGMH |
| EM26C | EHLCKCN | ES1D | . EGHQD | EV191 | EORGMI |
| EM26D | EHLCKDN | ES1E | EGHQE | EV19J | EORGMJ |
| EM26E | EHLCKEN | ES1F | EGHQF | EV19K | EORGMK |
| EM26F | EHLCKIN | ES1G | EGHQG | EV19L | EORGML |
| EM26G | EHLCKFN | ES1H | EGHQH | EV19M | EORGMM |
| EM26H | EHLCKGN | ES1I | EGHQI | EV190 | EORGMO |
| EM26I | EHLCKHN | ES1J | EGHQJ | EV19P | EORGMP |
| EM27 | ESMOKER | ES1K | EGHQK | EV19Q | EORGMQ |
| EM28 | ENCIGS | ES1L | EGHQL | EV20 | EORGA |
| EM29A | EOPHLA | ES2A | EOPFAMA | EV20A | EORGAA |
| EM29B | EOPHLB | ES2B | EOPFAMB | EV20B | EORGAB |
| EM29C | EOPHLC | ES2C | EOPFAMC | EV20C | EORGAC |
| EM31 | EAIDHH | ES2D | EOPFAMD | EV20D | EORGAD |
| EM32P1 | EAIDHUA | ES2E | EOPFAME | EV20E | EORGAE |
| EM32P2 | EAIDHUB | ES2F | EOPFAMF | EV20F | EORGAF |
| EM32P3 | EAIDHUC | ES2G | EOPFAMG | EV20G | EORGAG |
| EM33 | EAIDXHH | ES2H | EOPFAMH | EV20H | EORGAH |
| EM34 | ENAIDXHH | ES21 | EOPFAMI | EV20I | EORGAI |
| EM35 | EAIDHU2 | ES3A | ESSUPA | EV20J | EORGAJ |
| EM35 | EAIDHU1 | ES3B | ESSUPB | EV20K | EORGAK |
| EM37 | EAIDHRS | ES3C | ESSUPC | EV20L | EORGAL |
| EM38A | EIVMA | ES3D | ESSUPD | EV20M | EORGAM |
| EM38B | EIVMB | ES3E | ESSUPE | EV200 | EORGAO |
| EM38C | EIVMC | ES4A | ESSUP1 | EV20P | EORGAP |
| EM38D | EIVMD | ES4B | ESSUPR2R | EV20Q | EORGAQ |
| EM38E | EIVME | ET2B | ETELWHY | EV21 | EOPRLG2 |
| EP2B | EPRRS2I | ET45 | ETLFIYRL | EV22 | ECARUSE |
| EP2C | EPRIPN | ET50 | ETLFIYR | EV23 | EYPPAR |
| EP2D | EPRWHY | EV1A | EOPSOCA | EV24 | EPYHLTH |
| EP3 | EPPLEVR | EV1B | EOPSOCB | EV25 | EPYHWRK |
| EP10M | EPRESBGM | EV1C | EOPSOCC | EV26 | EPYSXED |
| EP10Y | EPRESBGY | EV1D | EOPSOCD | EV27 | EPYSXAG |
| EP11 | EPRESLY | EV1E | EOPSOCE | EV28 | EPYNYP |
| EP23 | . EPRFEHQ | EV1F | EOPSOCF | EV28B1 | EPYAGE1 |
| EP25 | EPRSEHQ | EV2 | EVOTE1 | EV28B2 | EPYAGE2 |
| EP51 | EPRJBFT | EV3 | EVOTE2 | EV28B3 | EPYAGE3 |
| EP52M | EPRJBBGM | EV4 | EVOTE3 | EV28OC | EPYPNO1 |
| EP52Y | EPRJBBGY | EV5 | EVOTE4 | EV28OC | EPYPNO2 |
| EP53 | EPRJBLY | EV6 | EVOTE5 | EV28OC | EPYPNO3 |
| EP54 | EPREARN | EV7 | EVOTE7 | EV29Y1 | EPYWHR1 |
| EP63A | EPRF101 | EV8 | EVOTE8 | EV29Y2 | EPYWHR2 |
| EP63B | EPRF102 | EV9 | EVOTE6 | EV29Y3 | EPYWHR3 |
| EP63C | EPRF116 | EV10 | EOPPOL1 | EV30Y1 | EPYMAN1 |
| EP63D | EPRF131 | EV11 | EOPPOL2 | EV30Y2 | EPYMAN2 |
| EP63E | EPRF134 | EV12 | EOPPOL3 | EV30Y3 | EPYMAN3 |
| EP63F | EPRF135 | EV13 | EOPPOL4 | EV31Y1 | EPYARG1 |
| EP63G | EPRF137 | EV14 | EOPCHD1 | EV31Y2 | EPYARG2 |
| EP63H | . EPRF139 | EV15 | EOPCHD2 | EV31Y3 | EPYARG3 |
| EP63J | . EPRF141 | EV16 | EOPCHD3 | EV32Y | EPYTLK2 |
| EP63NONE | EPRFIRN | EV17 | EOPCHD4 | EV32Y1 | EPYTLK1 |
| EP64 | EPRFITB | EV18 | EORGM | EV32Y3 | EPYTLK3 |
| EPI1A | EIVPA | EV19A | EORGMA | EV33Y1 | EPYSMK1 |
| EPI1B | . . . EIVPB | EV19B | EORGMB | EV33Y2 | EPYSMK2 |


| EV33Y3 | EPYSMK3 | EY7 | EYPUTEL | EY65 | EYPOPRL |
| :---: | :---: | :---: | :---: | :---: | :---: |
| EV34Y1 | EPYSAD1 | EY8 | EYPLATE | EY66 | EYPNBKS |
| EV34Y2 | EPYSAD2 | EY9 | EYPARGM | EY67 | EYPOPSC |
| EV34Y3 | EPYSAD3 | EY10 | EYPARGF | EY68 | EYPPASC |
| EV35Y1 | EPYWOR1 | EY11 | EYPTLKM | EY69 | EYPLVSC |
| EV35Y2 | EPYWOR2 | EY12 | EYPTLKF | EY70 | EYPLVHM |
| EV35Y3 | EPYWOR3 | EY13 | EYPTLKP | EY71 | EYPAMAR |
| EV36AY1 | EPYHSW1 | EY14 | EYPNPAL | EY72 | EYPAPAR |
| EV36AY2 | EPYHSW2 | EY15 | EYPFGHT | EY73 | EYPWHRS |
| EV36AY3 | EPYHSW3 | EY16 | EYPEATN | EY74 | EYPPAY |
| EV36BY1 | EPYHAP1 | EY17L | EYPPKML | EY75 | EYPSOC |
| EV36BY2 | EPYHAP2 | EY17P | EYPPKMP | EY76 | EYPSOCY |
| EV36BY3 | EPYHAP3 | EY18 | EYPBEAU | EY77 | EYPJBQA |
| EV36CY1 | EPYHFM1 | EY19 | EYPDKLM | EY78 | EYPJBQB |
| EV36CY2 | EPYHFM2 | EY20 | EYPSMEV | EY79 | EYPJBQC |
| EV36CY3 | EPYHFM3 | EY21 | EYPSMAG | EY80 | EYPJBQD |
| EV36DY1 | EPYHFR1 | EY22 | EYPSMOF | EY81 | EYPJBQE |
| EV36DY2 | EPYHFR2 | EY23 | EYPSMLW | EY82 | EYPJBQT |
| EV36DY3 | EPYHFR3 | EY24 | EYPSMYR | EY83 | EYPEVNT1 |
| EV36EY1 | EPYHLF1 | EY25 | EYPSMPA | EY83 | EYPEVNT3 |
| EV36EY2 | EPYHLF2 | EY26 | EYPNOSM | EY83 | EYPEVNT4 |
| EV36EY3 | EPYHLF3 | EY27 | EYPEDSM | EY83 | EYPEVNT2 |
| EV37Y1 | EPYHLT1 | EY28 | EYPSMOP | FDOAD . | FDOID |
| EV37Y2 | EPYHLT2 | EY29 | EYPDGSC | FDOAM | FDOIM |
| EV37Y3 | EPYHLT3 | EY30 | EYPDGPA | FDOAY . | FDOIY |
| EV38 | EPYRA | EY31 | EYPDGWH | FDOB | FIVLYR |
| EV39Y1 | EPYSAT1 | EY32 | EYPDGFR | FDOC | FIVIEVR |
| EV39Y2 | EPYSAT2 | EY33 | EYPDGYR | FD0D | FRACH12 |
| EV39Y3 | EPYSAT3 | EY34 | EYPNODG | FD1H | FIVSOIH |
| EV40AY1 | EPYSTY1 | EY35 | EYPOPHD | FD1M | FIVSOIM |
| EV40AY2 | EPYSTY2 | EY36 | EYPOPHA | FD2 | FLKNBRD |
| EV40AY3 | EPYSTY3 | EY37 | EYPOPHE | FD3 | FLKMOVE |
| EV40B1Y1 | EPYTAE1 | EY38 | EYPOPHC | FD4 | FLKMOVY |
| EV40B1Y2 | EPYTAE2 | EY39 | EYPMENU | FD5 | FPLNEW |
| EV40B1Y3 | EPYTAE3 | EY40 | EYPHLTA | FD6M | FPLNOWM |
| EV40B2Y1 | EPYTAM1 | EY41 | EYPHLTB | FD6Y | FPLNOWY |
| EV40B2Y2 | EPYTAM2 | EY42 | EYPSAD | FD7 | FMOVJB |
| EV40B2Y3 | EPYTAM3 | EY43 | EYPWOR | FD8A | FMOVJBA |
| EV40B3Y1 | EPYTAS1 | EY44 | EYPBULL | FD8B | FMOVJBB |
| EV40B3Y2 | EPYTAS2 | EY45 | EYPLONE | FD8C | FMOVJBC |
| EV40B3Y3 | EPYTAS3 | EY46 | EYPESTA | FD8D | FMOVJBD |
| EV40C1Y1 | EPYSTE1 | EY47 | EYPESTB | FD8E | FMOVJBE |
| EV40C1Y2 | EPYSTE2 | EY48 | EYPESTC | FD8F | FMOVJBF |
| EV40C1Y3 | EPYSTE3 | EY49 | EYPESTD | FD8G | FMOVJBG |
| EV40C2Y1 | EPYSTM1 | EY50 | EYPESTE | FD8H | FMOVJBH |
| EV40C2Y2 | EPYSTM2 | EY51 | EYPESTF | FD8I | FMOVJBI |
| EV40C2Y3 | EPYSTM3 | EY52 | EYPESTG | FD9M1 | FMOVY1 |
| EV40C3Y1 | EPYSTS1 | EY53 | EYPHSW | FD9M2 . | FMOVY2 |
| EV40C3Y2 | EPYSTS2 | EY54 | EYPHAP | FD10M . | FDOBM |
| EV40C3Y3 | EPYSTS3 | EY55 | EYPHFM | FD10Y | FDOBY |
| EV40PNO | EPYSPN1 | EY56 | EYPHFR | FD11 | FSEX |
| EV40PNO | EPYSPN3 | EY57 | EYPHLF | FD11 | FSEX |
| EV40PNO | EPYSPN2 | EY58 | EYPOPLA | FD13 | FJBSTAT |
| EY1 | EYPTVBR | EY59 | EYPOPFF | FD14 | FEDLYR |
| EY2 | EYTVHRS | EY60 | EYPOPFB | FD15M . | FEDENDM |
| EY3 | EYTVLMT | EY61 | EYPOPLB | FD15Y | FEDENDY |
| EY4 | EYTVSTP | EY62 | EYPOPLC | FD16 | FEDTYPE |
| EY5 | EYPCOMP | EY63 | . EYPVTE6 | FD17 | FQFX |
| EY6 | EYPPALS | EY64 | . EYPVTE3 | FD18A | FQFXA |


| FD18B | FQFXB | FD36I | FQFI | FE9 | FJBSECT |
| :---: | :---: | :---: | :---: | :---: | :---: |
| FD18C | .FQFXC | FD36J | FQFJ | FE10 | FJBSIZE |
| FD18D | .FQFXD | FD36K | FQFK | FE11 | FJBMIX |
| FD18E | FQFXE | FD36L | FQFL | FE12 | FJBHRS |
| FD18F | FQFXF | FD36M | FQFM | FE13 | FJBOT |
| FD18G | FQFXG | FD36N | FQFN | FE14 | FJBOTPD |
| FD18H | . FQFXH | FD37 | FQFED | FE15 | FJBHRLK |
| FD18I | . FQFXI | FD38A | FQFEDA | FE16 | FJBPL |
| FD18J | FQFXJ | FD38B | FQFEDB | FE17 | FJBTTWT |
| FD18K | FQFXK | FD38C | FQFEDC | FE18 | FJBTTWM |
| FD18L | . FQFXL | FD38D | FQFEDD | FE19A | FJBSAT1 |
| FD18M | FQFXM | FD38E | FQFEDE | FE19B | FJBSAT2 |
| FD18N | FQFXN | FD38F | FQFEDF | FE19C | FJBSAT3 |
| FD19 | FQFEDX | FD38G | FQFEDG | FE19D | FJBSAT4 |
| FD20A | FQFEDXA | FD38H | FQFEDH | FE19E | FJBSAT5 |
| FD20B | FQFEDXB | FD381 | FQFEDI | FE19F | FJBSAT6 |
| FD20C | FQFEDXC | FD38J | FQFEDJ | FE19G | FJBSAT7 |
| FD20D | FQFEDXD | FD38K | FQFEDK | FE20 | FJBSAT |
| FD20E | . FQFEDXE | FD38L | .FQFEDL | FE21 | FPAYGL |
| FD20F | FQFEDXF | FD38M | FQFEDM | FE22OC | FPAYGW |
| FD20G | FQFEDXG | FD38N | FQFEDN | FE23 | FPAYNL |
| FD20H | FQFEDXH | FD380 | FQFEDO | FE24OC | FPAYNW |
| FD20I | . FQFEDXI | FD38P | FQFEDP | FE25 | FPAYSLP |
| FD20J | . FQFEDXJ | FD38Q | FQFEDQ | FE27 | .FPAYUSL |
| FD20K | FQFEDXK | FD38R | FQFEDR | FE28 | FPAYU |
| FD21A | . FNQFEXA | FD38S | FQFEDS | FE290C | FPAYUW |
| FD21B | FNQFEXB | FD39A | FNQFEDA | FE30 | FPAYUG |
| FD21C | . FNQFEXC | FD39B | FNQFEDB | FE31A | FPAYDF1 |
| FD21E | . FNQFEXE | FD39C | FNQFEDC | FE31B | FPAYDF2 |
| FD21F | FNQFEXF | FD39D | FNQFEDD | FE31C | FPAYDF3 |
| FD21G | FNQFEXG | FD39E | FNQFEDE | FE31D | FPAYDF4 |
| FD21H | FNQFEXH | FD39F | FNQFEDF | FE31E | FPAYDF5 |
| FD21I | . . FNQFEXI | FD39G | FNQFEDG | FE31F | FPAYDF6 |
| FD21J | . FNQFEXJ | FD39H | FNQFEDH | FE31G | FPAYDF7 |
| FD21K | FNQFEXK | FD391 | FNQFEDI | FE31H | FPAYDF8 |
| FD22 | FMLSTAT | FD39J | . FNQFEDJ | FE32 | FJBONUS |
| FD23 | FMLCHNG | FD39K | FNQFEDK | FE33 | FJBRISE |
| FD24M | FMLCHM | FD39L | FNQFEDL | FE34 | FTUJBPL |
| FD24Y | FMLCHY | FD39M | FNQFEDM | FE35 | FTUIN1 |
| FD25DST | FPLBORND | FD39N | FNQFEDN | FE36 | FTUIN2 |
| FD25OS | FPLBORNC | FD390 | FNQFEDO | FE37 | FJBOPPS |
| FD26 | FYR2UK | FD39P | FNQFEDP | FE38 | FJBTIME |
| FD28 | FRACE | FD39Q | FNQFEDQ | FE39 | FJBPEN |
| FD30 | FSCEND | FD39R | FNQFEDR | FE40 | FJBPENM |
| FD30NA | FSCHOOL | FD39S | FNQFEDS | FE42D | FJBBGD |
| FD31 | FSCTYPE | FD40 | FBPAR16 | FE42M | FJBBGM |
| FD32 | . . FSCNOW | FD41 | FLVHMAG | FE42Y | FJBBGY |
| FD33 | . .FFETYPE | FD42 | FWHR14 | FE43 | FJBBGLY |
| FD34 | FFEEND | FD43 | FPAPERR | FE44 | FPAYS |
| FD34NA | . FFENOW | FD44 | FPAPERM | FE45C | FPAYSW |
| FD35 | FQFHAS | FD45 | FPAPERP | FE46 | FPAYSG |
| FD36A | FQFA | FE1 | FJBHAS | FE49 | FPAYLY |
| FD36B | FQFB | FE2 | FJBOFF | FE500C | FPAYLYW |
| FD36C | . FQFC | FE3 | FJBOFFY | FE51 | FPAYLYG |
| FD36D | . . FQFD | FE4 | FJBTERM | FE55 | . FJSBOSS |
| FD36E | FQFE | FE5 | FJBSOC | FE56 | FJSSIZE |
| FD36F | FQFF | FE6 | FJBSIC | FE57 | . FJSHRS |
| FD36G | FQFG | FE7 | FJBSEMP | FE58 | FJSHRLK |
| FD36H | . . . FQFH | FE8 | FJBMNGR | FE59 | FJSTIME |


| FE60 | FJSTYPE | FE93 | FJUHRSL | FF3B08 | FFR08 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| FE61 | .FJSACCS | FE94A | FEPROSG | FF3B09 | FFR09 |
| FE62 | FJSPRF | FE94B | FEPROSH | FF3B10 | FFR10 |
| FE63BM | FJSPRBM | FE95 | FEAAGE | FF3B11 | FFR11 |
| FE63BY | . FJSPRBY | FE96A | FJBHHA | FF3B12 | FFR12 |
| FE63EM | FJSPREM | FE96B | FJBHHB | FF3B13 | FFR13 |
| FE63EY | . FJSPREY | FE96C | FJBHHC | FF3B14 | FFR14 |
| FE64 | FJSPAYL | FE96D | FJBHHD | FF3B15 | FFR15 |
| FE65BM | . FJSPYBM | FE96E | FJBHHE | FF3B16 | FFR16 |
| FE65BY | FJSPYBY | FE96F | FJBHHF | FF3B17 | FFR17 |
| FE65EM | . FJSPYEM | FE97 | FJBUB | FF3BAL | FFRALL |
| FE65EY | FJSPYEY | FE98 | FJBUBY | FF3C | FFRNOW |
| FE66 | FJSPL | FE99 | FJ2HAS | FF3D | FFRVAL |
| FE67 | FJSTTWT | FE100 | FJ2SOC | FF3EOC . | FFRW |
| FE68 | FJSTTWM | FE101 | FJ2SEMP | FF3F | FFRJT |
| FE69A | FJSSAT1 | FE102 | FJ2HRS | FF3FPN | FFRJTPN |
| FE69B | FJSSAT2 | FE103 | FJ2PAY | FF3SEQ . | FFISEQ |
| FE69C | FJSSAT3 | FE104A | FIVEA | FF4 | FFISIT |
| FE69D | FJSSAT4 | FE104B | FIVEB | FF5 | FFISITC |
| FE69E | FJSSAT5 | FE104C | FIVEC | FF6 | FFISITY |
| FE70 | FJSSAT | FE104D | FIVED | FF631 | FPRF125 |
| FE71D | FJSBGD | FE104E | FIVEE | FF7 | FFISITX |
| FE71M | FJSBGM | FEG3 | PID | FF8 | FFIYRDI |
| FE71Y | FJSBGY | FEG4 | FHGSEX | FF9 | FFIYRDIU |
| FE72 | FJBED | FEG4M | FHGBM | FF10 | FSAVE |
| FE73A | FJBED1 | FEG4Y | FHGBY | FF11 | FSAVED |
| FE73B | FJBED2 | FEG6 | FIVIOW5 | FF12 | FSAVEY1 |
| FE73C | FJBED3 | FEG6 | FIVLYR | FF12 | FSAVEY2 |
| FE73D | FJBED4 | FEG7 | FIVIEVR | FF13 | FPPPEN |
| FE73E | FJBED5 | FEG8 | FIVELIG | FF14 | FPENB4 |
| FE74A | FJBEDQ | FEG9 | FHHMEM | FF15 | FPENB4YR |
| FE74B | FJBEDP1 | FEG9 | FHHMEM | FF16 | FPENB4V |
| FE75 | FEPROSA | FEG9 | FHHMEM | FF17OC | FPENB4W |
| FE75 | FEPROSB | FEG10 | FNEWHY | FF18 | FPENYR |
| FE75 | FEPROSC | FEG10 | FNEWHY | FF19 | FPENADD |
| FE75 | FEPROSD | FEG10 | FNEWHY | FF20 | FPENADV |
| FE75 | FEPROSE | FEG11 | FLVWHY | FF210C | FPENADW |
| FE75 | FEPROSF | FEG12M | FLVMN | FF22 | FFTEXHH |
| FE77M1 | . FJBCHC1 | FEG12M | FNEMNJN | FF23A1 | FFTEXA |
| FE77M2 | . FJBCHC2 | FEG12M | FNEMNJN | FF23A2 | . FFTEXB |
| FE77M3 | . FJBCHC3 | FEG12M | FNEMNJN | FF23A3 | FFTEXC |
| FE79 | FXPCHCF | FEG12Y | FNEYRJN | FF23B11 | FFTEXA1 |
| FE80 | FXPCHC | FEG12Y | FLVYR | FF23B12 | FFTEXB1 |
| FE81 | FHUXPCH | FEG12Y | FNEYRJN | FF23B13 | FFTEXC1 |
| FE82 | FHUNURS | FEG12Y | FNEYRJN | FF23B21 | FFTEXA2 |
| FE83 | FJULK1 | FEG13 | FLVLOC | FF23B22 | FFTEXB2 |
| FE84 | FJULK4 | FEG14 | FIVFIO | FF23B23 | FFTEXC2 |
| FE85A | FJULKA | FEG15 | FIVRREF | FF23B31 | FFTEXA3 |
| FE85B | FJULKB | FEG16 | FIVIREIS | FF23B32 | FFTEXB3 |
| FE85C | . FJULKC | FF2 | FNFR | FF23B33 | FFTEXC3 |
| FE85D | . FJULKD | FF2 | FNF1 | FF23B41 | FFTEXA4 |
| FE85E | FJULKE | FF3A | . FFICODE | FF23B42 | FFTEXB4 |
| FE86 | FJULKJB | FF3B01 | FFR01 | FF23B43 | FFTEXC4 |
| FE87 | . FJUBGN | FF3B02 | FFR02 | FF23B51 | FFTEXA5 |
| FE88 | . FJUSPEC | FF3B03 | FFR03 | FF23B52 | FFTEXB5 |
| FE89 | FJUSOC | FF3B04 | FFR04 | FF23B53 | FFTEXC5 |
| FE90 | FJUHRSX | FF3B05 | FFR05 | FF23B61 | FFTEXA6 |
| FE91 | . FJUPAYX | FF3B06 | FFR06 | FF23B62 | FFTEXB6 |
| FE92 | . FJUPAYL | FF3B07 | . FFR07 | FF23B63 | FFTEXC6 |


| FF23C1 | FFTEXAV | FF155 | FF155 | FH39A | FXPHSD1 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| FF23C2 | FFTEXBV | FF156 | FF156 | FH39B | FXPHSD2 |
| FF23C3 | .FFTEXCV | FF157 | FF157 | FH40 | FXPHSDB |
| FF23DOC1 | FFTEXAW | FF158 | FF158 | FH41A | FHSTLT |
| FF23DOC2 | FFTEXBW | FF159 | FF159 | FH41A | FHSGDN |
| FF23DOC3 | FFTEXCW | FHOAD . | FHHDOI | FH41A | FHSKCH |
| FF24 | FSPINHH | FHOAM | FHHMOI | FH41A | FHSBTH |
| FF25A | FHUBUYS | FHOAY | FHHYOI | FH41B | FHSGDNS |
| FF25B | FHUFRYS | FHOC | FHSTYPE | FH41B | FHSTLTS |
| FF25C | FHUMOPS | FH1A | FHSRINS | FH41B | FHSKCHS |
| FF25D | . FHUIRON | FH2 | FHSROOM | FH41B | FHSBTHS |
| FF26 | . FHHCH12 | FH3 | FHSOWND | FH42 | FHEATCH |
| FF27 | FHUSITS | FH4M1. | FHSOWR1 | FH43 | FHEATYP |
| FF28 | FHOWLNG | FH4M2. | FHSOWR2 | FH44A | FHSPRBG |
| FF29 | FCARUSE | FH5 | FHSVAL | FH44B | FHSPRBH |
| FF30 | FDFWLD | FH6 | FMGHAVE | FH44C | FHSPRBI |
| FF31 | FDFWLD1 | FH7 | FHSOWRP | FH44D | FHSPRBJ |
| FF31 | FDFWLD2 | FH8 | . FMGYNOT | FH44E | FHSPRBK |
| FF31 | FDFWLD3 | FH9 | FHSCOST | FH44F | FHSPRBL |
| FF31 | FDFWLD4 | FH10 | FHSYR0 | FH44G | FHSPRBM |
| FF32A | FIVFA | FH12 | FMGYR0 | FH44H | FHSPRBN |
| FF32B | . FIVFB | FH13 | FMGLY | FH44I. | FHSPRBO |
| FF32C | . FIVFC | FH14 | FHSIVW5 | FH44J | FHSPRBP |
| FF32D | . FIVFD | FH17 | FMGOLD | FH44K | FHSPRBQ |
| FF32E | FIVFE | FH18 | FMGLIFE | FH45 | FHSCTAX |
| FF33H | FIVFOIH | FH19 | FMGTYPE | FH46 | FCDHAVE |
| FF33M | FIVFOIM | FH20 | FMGXTRA | FH47A | FCD1USE |
| FF34 | FIVSC | FH21 | FMGNEW | FH47B | FCD2USE |
| FF101 | FF101 | FH22A | FMGXTY1 | FH47D | FCD4USE |
| FF102 | FF102 | FH22B | FMGXTY2 | FH47F | FCD6USE |
| FF103 | FF103 | FH22C | FMGXTY3 | FH47G | FCD7USE |
| FF104 | FF104 | FH22D | FMGXTY4 | FH47H | FCD8USE |
| FF105 | FF105 | FH22E | FMGXTY5 | FH471 | FCD9USE |
| FF106 | FF106 | FH23 | FXPMG | FH48 | FCDBGHT |
| FF116 | FF116 | FH24A | FXPMG1 | FH49A | FCD1NEW |
| FF117 | FF117 | FH24B | FXPMG2 | FH49B | FCD2NEW |
| FF118 | FF118 | FH24C | FXPMG3 | FH49C | FCD10NEW |
| FF119 | . FF119 | FH24D | FXPMG4 | FH49C | FCD10USE |
| FF120 | FF120 | FH25 | FMGTOT | FH49D | FCD11NEW |
| FF121 | FF121 | FH26 | FHSJB | FH49D | FCD11USE |
| FF122 | FF122 | FH27M1 | FRENTP1 | FH49D | FCD4NEW |
| FF123 | . FF123 | FH27M2 | FRENTP2 | FH49F | FCD6NEW |
| FF124 | . FF124 | FH28 | FRENTLL | FH49G | FCD7NEW |
| FF125 | FF125 | FH29 | FRENTF | FH49H | FCD8NEW |
| FF131 | FF131 | FH31 | . FRENT | FH49I | FCD9NEW |
| FF132 | FF132 | FH32 | FRENTW | FH49J | FCD12NEW |
| FF133 | FF133 | FH33A | FRENT1 | FH49J | FCD12USE |
| FF135 | FF135 | FH33B | FRENT7 | FH50 | FCDNUXP |
| FF136 | FF136 | FH33C | FRENT2 | FH51 | FHSPC |
| FF137 | . FF137 | FH33D | . FRENT3 | FH52 | FHSWPC |
| FF138 | FF138 | FH33E | FRENT4 | FH53 | FPCWHEN |
| FF139 | FF139 | FH33F | . FRENT5 | FH54 | FPCMODM |
| FF140 | FF140 | FH33G | FRENT8 | FH55 | FPCNET |
| FF141 | FF141 | FH33H. | FRENT6 | FH56 | FPCUSR4 |
| FF142 | FF142 | FH34 | FRENTHB | FH56 | FPCUSR3 |
| FF151 | FF151 | FH35 | FRENTG | FH56 | FPCUSR5 |
| FF152 | FF152 | FH36 | FRENTG | FH56 | FPCUSR6 |
| FF153 | FF153 | FH37 | FRENTGW | FH56 | FPCUSR2 |
| FF154 | FF154 | FH38 | FXPHSDF | FH56 | FPCUSR1 |


| FH57A | FPCUSE1 | FJ8M | FCJSBGM | FM5E | FHLLTE |
| :---: | :---: | :---: | :---: | :---: | :---: |
| FH57B | FPCUSE2 | FJ8Y | . FCJSBGY | FM6 | FHLLTW |
| FH57C | FPCUSE3 | FJ9 | FNEMST | FM7 | FHLENDW |
| FH57D | FPCUSE4 | FJ10D | FCJSBGD | FM8 | FHLLTWA |
| FH57E | FPCUSE5 | FJ10M | FCJSBGM | FM9 | FHL2GP |
| FH57F | FPCUSE6 | FJ10Y | . FCJSBGY | FM10 | FXDTS |
| FH57G | FPCUSE7 | FJ11 | FCJSBLY | FM11 | FNXDTS |
| FH58 | FPCUSES | FJ12 | FJHSTAT | FM12 | FHOSP |
| FH59 | FXPHP | FJ13D | . FJHBGD | FM13 | FHOSPD |
| FH60 | FXPHPDF | FJ13M | FJHBGM | FM15 | FHOSPCH |
| FH61A | FHSCAND | FJ13Y | FJHBGY | FM16 | FHOSPNHS |
| FH61A | FHSCANA | FJ15 | FNJBS | FM17 | FHLCVR |
| FH61A | FHSCANC | FJ17 | FJHSOC | FM18 | FHLCVRH |
| FH61A | FHSCANB | FJ19 | FJHSEMP | FM19 | FHLCVRL |
| FH61A | FHSCANE | FJ20 | FJHBOSS | FM20 | FHLSV |
| FH61A | FHSCANF | FJ21 | FJHSECT | FM21A | FHLSVA |
| FH61B | FHSCNTA | FJ22 | FJHMNGR | FM21B | FHLSVB |
| FH61B | FHSCNTC | FJ24 | FJHPLDF | FM21C | FHLSVC |
| FH61B | FHSCNTF | FJ25 | FJHSIC | FM21D | FHLSVD |
| FH61B | FHSCNTE | FJ26 | FJHSIZE | FM21E | FHLSVE |
| FH61B | FHSCNTD | FJ27 | FJHPAYL | FM21F | FHLSVF |
| FH61B | FHSCNTB | FJ28OC | FJHPYLW | FM21G | FHLSVG |
| FH62 | FXPFOOD | FJ29 | FJHPYLG | FM21H | FHLSVH |
| FH63 | FNCARS | FJ30 | FJHSTPY | FM21I | FHLSVI |
| FH64 | FCAROWN | FJ31 | FJBLKY | FM21J | FHLSVL |
| FH65M1 | FIVH1 | FJ34 | FJBHAD | FM21K | FHLSVM |
| FH65M2 | FIVH2 | FJ35 | FJLEND | FM21L1 | FHLSVJ |
| FH65M3 | FIVH3 | FJ36 | FJLSOC | FM21L2 | FHLSVK |
| FHG2 | FHGR2R | FJ37 | FJLSIC | FM22A | FHLSVAN |
| FHG3 | FHGSEX | FJ38 | FJLSEMP | FM22B | FHLSVBN |
| FHG4M | FHGBM | FJ39 | FJLBOSS | FM22C | FHLSVCN |
| FHG4Y | FHGBY | FJ40 | FJLMNGR | FM22D | FHLSVDN |
| FHG8 | FMASTAT | FJ41 | FJLSIZE | FM22E | FHLSVEN |
| FHG8 | FMASTAT | FJ42A | FIVJA | FM22F | FHLSVFN |
| FHG9 | . FHGSPN | FJ42B | . FIVJB | FM22G | FHLSVGN |
| FHG9 | FHGSPN | FJ42C | FIVJC | FM22H | FHLSVHN |
| FHG10 | FHGEMP | FJ42D | FIVJD | FM22I | FHLSVIN |
| FHG11 | FHGFNO | FJ42E | . FIVJE | FM22J | FHLSVLN |
| FHG12 | FHGMNO | FM1 | FHLSTAT | FM22K | FHLSVMN |
| FHG13 | . FHGRA | FM2 | FHLDSBL | FM22L1 | FHLSVJN |
| FI1 | FIV1 | FM3A | FHLPRBA | FM22L2 | FHLSVKN |
| FI2 | FIV2 | FM3B | FHLPRBB | FM23A | FHLSVAF |
| FI4 | FIV4 | FM3C | FHLPRBC | FM23B | FHLSVBF |
| FI5 | . FIV5 | FM3D | FHLPRBD | FM23C | FHLSVCF |
| FI6A | . FIV6A | FM3E | FHLPRBE | FM23D | FHLSVDF |
| F16B | FIV6B | FM3F | FHLPRBF | FM23E | FHLSVEF |
| FI6C | FIV6C | FM3G | FHLPRBG | FM23F | FHLSVFF |
| FI6D | FIV6D | FM3H | FHLPRBH | FM23G | FHLSVGF |
| FI6E | . FIV6E | FM3I | FHLPRBI | FM23H | FHLSVHF |
| FI7 | FIV6F | FM3J | FHLPRBJ | FM23I | FHLSVIF |
| FI8 | . FIV7 | FM3K | FHLPRBK | FM23J | FHLSVLF |
| FJ2 | FEDNEW | FM3L | FHLPRBL | FM23K | FHLSVMF |
| FJ3A | . FEDNEW1 | FM3M | FHLPRBM | FM23L1 | FHLSVJF |
| FJ3B | FEDNEW2 | FM3M0 | . FHLPRB | FM23L2 | FHLSVKF |
| FJ3C | FEDNEW3 | FM4 | . FHLLT | FM24 | FHLCK |
| FJ3D | FEDNEW4 | FM5A | FHLLTA | FM25A | FHLCKA |
| FJ4A | FEDNEWQ | FM5B | FHLLTB | FM25B | FHLCKB |
| FJ4B | FEDNEWP1 | FM5C | . FHLLTC | FM25C | FHLCKC |
| FJ8D | FCJSBGD | FM5D | . . FHLLTD | FM25D | FHLCKD |


| FM25E | FHLCKE | FS1A | FGHQA | FV10 | FVOTE10A |
| :---: | :---: | :---: | :---: | :---: | :---: |
| FM25F | FHLCKI | FS1B | FGHQB | FV12 | FVOTE6 |
| FM25G | FHLCKF | FS1C | . FGHQC | FV13A | FOPISS1 |
| FM25H | FHLCKG | FS1D | FGHQD | FV13B | FOPISS2 |
| FM251 | FHLCKH | FS1E | FGHQE | FV13C | FOPISS3 |
| FM26A | FHLCKAN | FS1F | FGHQF | FV13D | FOPISS4 |
| FM26B | FHLCKBN | FS1G | FGHQG | FV13E | FOPISS5 |
| FM26C | FHLCKCN | FS1H | FGHQH | FV14A | FLACTA |
| FM26D | FHLCKDN | FS11. | FGHQI | FV14B | FLACTB |
| FM26E | FHLCKEN | FS1J | FGHQJ | FV14C | FLACTC |
| FM26F | FHLCKIN | FS1K | FGHQK | FV14D | FLACTD |
| FM26G | FHLCKFN | FS1L | FGHQL | FV14E | FLACTE |
| FM26H | FHLCKGN | FS2A | FOPFAMJ | FV14F | FLACTF |
| FM261 | FHLCKHN | FS2B | FOPFAMK | FV14G | FLACTG |
| FM27 | FSMOKER | FS2C | FOPFAML | FV14H | FLACTH |
| FM28 | FNCIGS | FS2D | FOPFAMM | FV141. | FLACTI |
| FM30 | FAIDHH | FS2E | FOPFAMN | FV14J | FLACTJ |
| FM31P1 | FAIDHUA | FS3A | FLFSAT1 | FV14K | FLACTK |
| FM31P2 | FAIDHUB | FS3B | FLFSAT2 | FV14L | FLACTL |
| FM31P3 | FAIDHUC | FS3C | FLFSAT3 | FV15 | FYPPAR |
| FM32 | FAIDXHH | FS3D | FLFSAT4 | FV16 | FPYHLTH |
| FM33 | FNAIDXHH | FS3E | FLFSAT5 | FV17 | FPYHWRK |
| FM35 | FAIDHU2 | FS3F | FLFSAT6 | FV18 | FPYSXED |
| FM35 | FAIDHU1 | FS3G | FLFSAT7 | FV19 | FPYSXAG |
| FM36 | FAIDHRS | FS3H | FLFSAT8 | FV20 | FPYNYP |
| FM37A | . FIVMA | FS4A | FLFSATO | FV20A1 | FPYPNO1 |
| FM37B | FIVMB | FS4B | FLFSATL | FV20A2 | FPYPNO2 |
| FM37C | FIVMC | FS5A | FNETSX1 | FV20A3 | FPYPNO3 |
| FM37D | FIVMD | FS5A | FNETSX2 | FV20B1 | FPYAGE1 |
| FM37E | FIVME | FS5A | FNETSX3 | FV20B2 | FPYAGE2 |
| FP2B | FPRRS21 | FS5B | FNET1WR | FV20B3 | FPYAGE3 |
| FP2C | FPRIPN | FS5B | FNET2WR | FV21Y1 | FPYWHR1 |
| FP2D | FPRWWH | FS5B | FNET3WR | FV21Y2 | FPYWHR2 |
| FP3 | FPPLEVR | FS5C | FNET1AG | FV21Y3 | FPYWHR3 |
| FP10M | FPRESBGM | FS5C | FNET2AG | FV22Y1 | FPYMAN1 |
| FP10Y | FPRESBGY | FS5C | FNET3AG | FV22Y2 | FPYMAN2 |
| FP11 | FPRESLY | FS5D | FNET1JB | FV22Y3 | FPYMAN3 |
| FP23 | FPRFEEHQ | FS5D | FNET2JB | FV23Y1 | FPYARG1 |
| FP25 | FPRSEHQ | FS5D | FNET3JB | FV23Y2 | FPYARG2 |
| FP51 | FPRJBFT | FS5E | FNET1PH | FV23Y3 | FPYARG3 |
| FP52M | FPRJBBGM | FS5E | FNET2PH | FV24Y1 | FPYTLK1 |
| FP52Y | FPRJBBGG | FS5E | FNET3PH | FV24Y2 | FPYTLK2 |
| FP53 | . FPRJBLY | FT2B | FTELWHY | FV24Y3 | FPYTLK3 |
| FP54 | FPREARN | FT45 | .FTLFIYRL | FV25Y1 | FPYSMK1 |
| FP63A | FPRF101 | FT50 | . FTLFIYR | FV25Y2 | FPYSMK2 |
| FP63B | FPRF102 | FV1A | FOPPOLA | FV25Y3 | FPYSMK3 |
| FP63C | FPRF116 | FV1B | FOPPOLB | FV26Y1 | FPYSAD1 |
| FP63D | FPRF131 | FV1C | FOPPOLC | FV26Y2 | FPYSAD2 |
| FP63F | FPRF135 | FV1D | FOPPOLD | FV26Y3 | FPYSAD3 |
| FP63G | FPRF137 | FV2 | FOPCLS1 | FV27Y1 | FPYWOR1 |
| FP63H | FPRF139 | FV3 | FOPCLS2 | FV27Y2 | FPYWOR2 |
| FP63J | FPRF141 | FV4 | . FVOTE3 | FV27Y3 | FPYWOR3 |
| FP63NONE | FPRFIRN | FV4 | FOPCLS3 | FV28AY1 | FPYHSW1 |
| FP64 | FPRFITB | FV5 | FVOTE1 | FV28AY2 | FPYHSW2 |
| FPI1A | FIVPA | FV6 | FVOTE2 | FV28AY3 | FPYHSW3 |
| FPI1B | FIVPB | FV7 | FVOTE4 | FV28BY1 | FPYHAP1 |
| FPI1C | FIVPC | FV8 | FVOTE5 | FV28BY2 | FPYHAP2 |
| FPI1D | FIVPD | FV9 | FVOTE9 | FV28BY3 | FPYHAP3 |
| FPI1E | FIVPE | FV10 | . FVOTE10B | FV28CY1 | FPYHFM1 |


| FV28CY2 | FPYHFM2 | FY20 | FYPSMEV | FY79 | FYPJBQC |
| :---: | :---: | :---: | :---: | :---: | :---: |
| FV28CY3 | FPYHFM3 | FY21 | FYPSMAG | FY80 | FYPJBQD |
| FV28DY1 | . FPYHFR1 | FY22 | FYPSMOF | FY81 | FYPJBQE |
| FV28DY2 | FPYHFR2 | FY23 | FYPSMLW | FY82 | FYPJBQT |
| FV28DY3 | FPYHFR3 | FY24 | FYPSMYR | FY83 | FYPEVNT3 |
| FV28EY1 | FPYHLF1 | FY25 | FYPSMPA | FY83 | FYPEVNT2 |
| FV28EY2 | FPYHLF2 | FY26 | FYPNOSM | FY83 | FYPEVNT4 |
| FV28EY3 | FPYHLF3 | FY27 | FYPEDSM | FY83 | FYPEVNT1 |
| FV28Y1 | FPYHLT1 | FY28 | FYPSMOP | GD0AD | GDOID |
| FV29Y2 | FPYHLT2 | FY29 | FYPDGSC | GDOAM | GDOIM |
| FV29Y3 | FPYHLT3 | FY30 | FYPDGPA | GDOAY | GDOIY |
| FV30 | FPYRA | FY31 | FYPDGWH | GD0B | GIVLYR |
| FV31Y1 | FPYSAT1 | FY32 | FYPDGFR | GD0C | GIVIEVR |
| FV31Y2 | FPYSAT2 | FY33 | FYPDGYR | GD0D | GRACH12 |
| FV31Y3 | FPYSAT3 | FY34 | FYPNODG | GD1H | GIVSOIH |
| FV32AY1 | FPYSTY1 | FY35 | FYPOPHD | GD1M | GIVSOIM |
| FV32AY2 | FPYSTY2 | FY36 | FYPOPHA | GD2 | GLKNBRD |
| FV32AY3 | FPYSTY3 | FY37 | FYPOPHE | GD3 | GLKMOVE |
| FV32B1Y1 | FPYTAE1 | FY38 | FYPOPHC | GD4 | GLKMOVY |
| FV32B1Y2 | FPYTAE2 | FY39 | FYPMENU | GD5 | GPLNEW |
| FV32B1Y3 | FPYTAE3 | FY40 | FYPHLTA | GD6M | GPLNOWM |
| FV32B2Y1 | FPYTAM1 | FY41 | FYPHLTB | GD6Y | GPLNOWY |
| FV32B2Y2 | FPYTAM2 | FY42 | FYPSAD | GD7 | GMOVJB |
| FV32B2Y3 | FPYTAM3 | FY43 | FYPWOR | GD8A | GMOVJBA |
| FV32B3Y1 | FPYTAS1 | FY44 | FYPBULL | GD8B | GMOVJBB |
| FV32B3Y2 | FPYTAS2 | FY45 | FYPLONE | GD8C | GMOVJBC |
| FV32B3Y3 | FPYTAS3 | FY46 | FYPESTA | GD8D | GMOVJBD |
| Fv32C1Y1 | FPYSTE1 | FY47 | FYPESTB | GD8E | GMOVJBE |
| FV32C1Y2 | FPYSTE2 | FY48 | FYPESTC | GD8F | GMOVJBF |
| FV32C1Y3 | FPYSTE3 | FY49 | FYPESTD | GD8G | GMOVJBG |
| FV32C2Y1 | . FPYSTM1 | FY50 | FYPESTE | GD8H | GMOVJBH |
| FV32C2Y2 | . FPYSTM2 | FY51 | FYPESTF | GD8I | GMOVJBI |
| FV32C2Y3 | FPYSTM3 | FY52 | FYPESTG | GD9M1 | GMOVY1 |
| FV32C3Y1 | FPYSTS1 | FY53 | FYPHSW | GD9M2 | GMOVY2 |
| FV32C3Y2 | FPYSTS2 | FY54 | FYPHAP | GD10M | GDOBM |
| FV32C3Y3 | FPYSTS3 | FY55 | FYPHFM | GD10Y | GDOBY |
| FV32PNO | FPYSPN1 | FY56 | FYPHFR | GD11 | GSEX |
| FV32PNO | FPYSPN2 | FY57 | FYPHLF | GD13M1 | GCITZN1 |
| FV32PNO | FPYSPN3 | FY58 | FYPOPLA | GD13M2 | GCITZN2 |
| FY1 | FYPTVBR | FY59 | FYPOPFF | GD14 | GJBSTAT |
| FY2 | FYTVHRS | FY60 | FYPOPFB | GD15 | GEDLYR |
| FY3 | FYTVLMT | FY61 | FYPOPLB | GD16M | GEDENDM |
| FY4 | FYTVSTP | FY62 | FYPOPLC | GD16Y | GEDENDY |
| FY5 | FYPCOMP | FY63 | FYPVTE6 | GD17 | GEDTYPE |
| FY6 | FYPPALS | FY64 | FYPVTE3 | GD18 | GQFX |
| FY7 | FYPUTEL | FY65 | FYPOPRL | GD19A | GQFXA |
| FY8 | FYPLATE | FY66 | FYPNBKS | GD19B | GQFXB |
| FY9 | FYPARGM | FY67 | FYPOPSC | GD19C | GQFXC |
| FY10 | FYPARGF | FY68 | FYPPASC | GD19D | GQFXD |
| FY11 | FYPTLKM | FY69 | FYPLVSC | GD19E | . GQFXE |
| FY12 | FYPTLKF | FY70 | FYPLVHM | GD19F | . GQFXF |
| FY13 | . FYPTLKP | FY71 | FYPAMAR | GD19G | GQFXG |
| FY14 | .FYPNPAL | FY72 | FYPAPAR | GD19H | GQFXH |
| FY15 | FYPFGHT | FY73 | FYPWHRS | GD19 | GQFXI |
| FY16 | FYPEATN | FY74 | FYPPAY | GD19J | GQFXJ |
| FY17L | FYPPKML | FY75 | FYPSOC | GD19K . | . GQFXK |
| FY17P | FYPPKMP | FY76 | FYPSOCY | GD19L . | . GQFXL |
| FY18 | FYPBEAU | FY77 | .FYPJBQA | GD19M | GQFXM |
| FY19 | FYPDKLM | FY78 | FYPJBQB | GD19N | GQFXN |


| 20 | X |
| :---: | :---: |
| GD21A | GQFEDXA |
| GD21B | GQFEDXB |
| GD21C | GQFEDXC |
| GD21D | GQFEDXD |
| GD21E | GQFEDXE |
| GD21F | GQFEDXF |
| GD21G | GQFEDXG |
| GD21H | GQFEDXH |
| GD21I | GQFEDXI |
| GD21J | GQFEDXJ |
| GD21K | GQFEDXK |
| GD22A | GNQFEXA |
| GD22B | GNQFEXB |
| GD22C | GNQFEXC |
| GD22E | GNQFEXE |
| GD22F | GNQFEXF |
| GD22G | GNQFEXG |
| GD22H | GNQFEXH |
| GD22I | GNQFEXI |
| GD22J | GNQFEXJ |
| GD22K | GNQFEXK |
| GD23 | GMLSTAT |
| GD24 | GMLCHNG |
| GD25M | GMLCHM |
| GD25Y | GMLCHY |
| GD26DST | GPLBORND |
| GD26OS | GPLBORNC |
| GD27 | GYR2UK |
| GD30 | GRACE |
| GD32NA | GSCHOOL |
| GD32 | GSCEND |
| GD33 | GSCTYPE |
| GD34 | GSCNOW |
| GD35 | GFETYPE |
| GD36NA | GFENOW |
| GD36 | GFEEND |
| GD37 | GQFHAS |
| GD38A | GQFA |
| GD38B | GQFB |
| GD38C | . GQFC |
| GD38D | GQFD |
| GD38E | GQFE |
| GD38F | GQFF |
| GD38G | GQFG |
| GD38H | GQFH |
| GD381 | GQFI |
| GD38J | GQFJ |
| GD38K | GQFK |
| GD38L | . GQFL |
| GD38M | GQFM |
| GD38N | . GQFN |
| GD39 | GQFED |
| GD40A | GQFEDA |
| GD40B | GQFEDB |
| GD40C | GQFEDC |
| GD40D | GQFEDD |
| GD40E | GQFEDE |
| GD40F | GQFEDF |


| GD40G | GQFEDG | GE2 | JBOFF |
| :---: | :---: | :---: | :---: |
| GD40H | GQFEDH | GE3 | GJBOFFY |
| GD401 | GQFEDI | GE4 | GJBTERM |
| GD40J | GQFEDJ | GE5 | GJBSOC |
| GD40K . | GQFEDK | GE6 | GJBSIC |
| GD40L | GQFEDL | GE6 | GJBSIC92 |
| GD40M | GQFEDM | GE7 | GJBSEMP |
| GD40N | GQFEDN | GE8 | GJBMNGR |
| GD400 | GQFEDO | GE10 | GJBSIZE |
| GD40P | GQFEDP | GE11 | GJBHRS |
| GD40Q | GQFEDQ | GE12 | GJBOT |
| GD40R | . GQFEDR | GE13 | GJBOTPD |
| GD40S | GQFEDS | GE14 | GJBHRLK |
| GD41A . | GNQFEDA | GE15 | GJBPL |
| GD41B | GNQFEDB | GE16 | GJBTTWT |
| GD41C | GNQFEDC | GE17 | GJBTTWM |
| GD41D | GNQFEDD | GE18A | GJBSAT1 |
| GD41E . | GNQFEDE | GE18B | GJBSAT2 |
| GD41F | . GNQFEDF | GE18C | GJBSAT3 |
| GD41G | GNQFEDG | GE18D | GJBSAT4 |
| GD41H | GNQFEDH | GE18E | GJBSAT5 |
| GD41I | GNQFEDI | GE18F | GJBSAT6 |
| GD41J | GNQFEDJ | GE18G | GJBSAT7 |
| GD41K. | GNQFEDK | GE19 | GJBSAT |
| GD41L | GNQFEDL | GE20 | GPAYGL |
| GD41M | GNQFEDM | GE21OC | GPAYGW |
| GD41N | GNQFEDN | GE22 | GPAYNL |
| GD41O | GNQFEDO | GE23OC | GPAYNW |
| GD41P . | GNQFEDP | GE24 | GPAYSLP |
| GD41Q | GNQFEDQ | GE26 | GPAYUSL |
| GD41R | GNQFEDR | GE27 | GPAYU |
| GD41S . | GNQFEDS | GE28OC | GPAYUW |
| GD42 | GCRWORA | GE29 | GPAYUG |
| GD43 | GCRWORB | GE30A | GPAYDF1 |
| GD44 | GCRDARK | GE30B | GPAYDF2 |
| GD45A . | GCRGRAF | GE30C | GPAYDF3 |
| GD45B . | GCRTEEN | GE30D | GPAYDF4 |
| GD45C | GCRDRNK | GE30E | GPAYDF5 |
| GD45D | GCRVAND | GE30F | GPAYDF6 |
| GD45E . | GCRRACE | GE30G | GPAYDF7 |
| GD45F . | GCRBURG | GE30H | GPAYDF8 |
| GD45G | GCRCAR | GE44D | GJBBGD |
| GD45H | GCRMUGG | GE44M | GJBBGM |
| GD46 | . GPAPERR | GE44Y | GJBBGY |
| GD47 | GPAPERM | GE45 | GJBBGLY |
| GD48 | GPAPERP | GE9 | GJBSECT |
| GD49 | GPCUSE | GE32 | GJBONUS |
| GD50A . | GPCUSEA | GE32 | GJBONAM |
| GD50B | GPCUSEB | GE33 | GJBONG |
| GD50C | GPCUSEC | GE34 | GJBRISE |
| GD50D | GPCUSED | GE35 | GTUJBPL |
| GD50E . | GPCUSEE | GE36 | GTUIN1 |
| GD50F | GPCUSEF | GE37 | GTUIN2 |
| GD50G | GPCUSEG | GE38 | GJBOPPS |
| GD50H | GPCUSEH | GE39 | GJBOPCR |
| GD501 | . GPCUSEI | GE40 | GJBTIME |
| GD51 | GPCUSEM | GE41 | GJBPEN |
| GD52 | GPCOFTN | GE42 | GJBPENM |
| GE1 | GJBHAS | GE46 | GPAYS |


| GE47OC | GPAYSW | GE88C | GEPROSC | GEG12M | GLVMN |
| :---: | :---: | :---: | :---: | :---: | :---: |
| GE48 | GPAYSG | GE88D | GEPROSD | GEG12Y | GLVYR |
| GE51 | GPAYLY | GE88E | GEPROSE | GEG13 | GLVLOC |
| GE52OC | GPAYLYW | GE88F | GEPROSF | GEG14 | GIVFIO |
| GE53 | GPAYLYG | GE90M1 . | GJBCHC1 | GEG15 | GIVRREF |
| GE57 | GJSBOSS | GE90M2 . | GJBCHC2 | GEG16 | GIVIREIS |
| GE58 | GJSSIZE | GE90M3 . | GJBCHC3 | GF2 | GNF1 |
| GE59 | GJSHRS | GE92 | GXPCHCF | GF2 | GNFR |
| GE60 | GJSHRLK | GE93 | GXPCHC | GF3A | GFICODE |
| GE61 | GJSTIME | GE94 | . GHUXPCH | GF3BAL | GFRALL |
| GE62 | GJSTYPEB | GE95 | GHUNURS | GF3B01 | GFR01 |
| GE63 | GJSACCS | GE96 | GJULK1 | GF3B02 | GFR02 |
| GE64 | GJSPART | GE97 | GJULK4 | GF3B03 | GFR03 |
| GE65BM | GJSPRBM | GE98A | . GJULKA | GF3B04 | GFR04 |
| GE65BY | GJSPRBY | GE98B | GJULKB | GF3B05 | GFR05 |
| GE65EM | GJSPREM | GE98C | GJULKC | GF3B06 | GFR06 |
| GE65EY | GJSPREY | GE98D | . GJULKD | GF3B07 | GFR07 |
| GE66 | . GJSPRF | GE98E | GJULKE | GF3B08 | GFR08 |
| GE67 | GJSPRLS | GE99 | GJULKJB | GF3B09 | GFR09 |
| GE68 | GJSPRTX | GE100 | GJUBGN | GF3B10 | GFR10 |
| GE69 | GJSPRNI | GE101 | GJUSPEC | GF3B11 | GFR11 |
| GE70BM | GJSPRBM | GE102 | GJUSOC | GF3B12 | GFR12 |
| GE70BY | GJSPRBY | GE103 | GJUHRSX | GF3B13 | GFR13 |
| GE70EM | GJSPREM | GE104 | GJUPAYX | GF3B14 | GFR14 |
| GE70EY . | GJSPREY | GE105 | GJUPAYL | GF3B15 | GFR15 |
| GE71 | GJSPRF | GE106 | GJUHRSL | GF3B16 | GFR16 |
| GE72 | GJSPRLS | GE107A | GEPROSG | GF3B17 | GFR17 |
| GE73 | GJSPRTX | GE107B | GEPROSH | GF3C | GFRNOW |
| GE74 | GJSPRNI | GE108 | GEAAGE | GF3D | GFRVAL |
| GE71 | GJSPRF | GE109A | GJBHHA | GF3EOC | GFRW |
| GE72 | GJSPRLS | GE109B | GJBHHB | GF3F | GFRJT |
| GE73 | GJSPRTX | GE109C | GJBHHC | GF3FPN . | GFRJTPN |
| GE74 | GJSPRNI | GE109D | GJBHHD | GF3SEQ | GFISEQ |
| GE75 | GJSPAYU | GE109E | GJBHHE | GF4 | GFISIT |
| GE76 | GJSPAYW | GE109F | GJBHHF | GF5 | GFISITC |
| GE77 | GJSPYTX | GE110 | GJBUB | GF6 | GFISITY |
| GE78 | GJSPYNI | GE111 | GJBUBY | GF7 | GFISITX |
| GE79 | . GJSPL | GE112 | GJ2HAS | GF8 | GFIYRDI |
| GE80 | GJSTTWT | GE113 | GJ2SOC | GF9 | GFIYRDIU |
| GE81 | GJSTTWM | GE114 | GJ2SEMP | GF10 | GSAVE |
| GE82A | GJSSAT1 | GE115 | GJ2HRS | GF11 | GSAVED |
| GE82B | GJSSAT2 | GE116 | GJ2PAY | GF12 | GSAVEY1 |
| GE82C | GJSSAT3 | GE117A | GIVEA | GF12 | GSAVEY2 |
| GE82D | GJSSAT4 | GE117B | GIVEB | GF13 | GPPPEN |
| GE82E | GJSSAT5 | GE117C . | GIVEC | GF14 | GPENB4 |
| GE83 | GJSSAT | GE117D . | . GIVED | GF15 | GPENB4YR |
| GE84D | GJSBGD | GE117E | GIVEE | GF16 | GPENB4V |
| GE84M | GJSBGM | GEG3 | PID | GF17OC | GPENB4W |
| GE84Y | GJSBGY | GEG4 | GHGSEX | GF18 | GPENYR |
| GE85 | . GJBED | GEG4M | GHGBM | GF19 | GPENADD |
| GE86A | GJBED1 | GEG4Y | GHGBY | GF20 | GPENADV |
| GE86B | GJBED2 | GEG6 | GIVIOW6 | GF210C | GPENADW |
| GE86C | GJBED3 | GEG7 | GIVIEVR | GF22 | GWINDF |
| GE86D | . GJBED4 | GEG8 | GIVELIG | GF23A | GWINDFA |
| GE86E | . GJBED5 | GEG9 | . GHHMEM | GF23B | GWINDFB |
| GE87A | . . GJBEDQ | GEG10 | . GNEWHY | GF23C | GWINDFC |
| GE87B | . GJBEDP1 | GEG12M | GNEMNJN | GF23D | GWINDFD |
| GE88A | GEPROSA | GEG12Y | GNEYRJN | GF23F | GWINDFF |
| GE88B | GEPROSB | GEG11 | GLVWHY | GF23G | GWINDFG |


| GF23H | GWINDFH | GF41B | GIVFB | GH13 | GMGLY |
| :---: | :---: | :---: | :---: | :---: | :---: |
| GF231 | GWINDFI | GF41C . | GIVFC | GH14 | GHSIVW6 |
| GF24A | GWINDFAY | GF41D | GIVFD | GH17 | GMGOLD |
| GF24B | GWINDFBY | GF41E | GIVFE | GH18 | GMGLIFE |
| GF24C | GWINDFCY | GF42H | GIVFOIH | GH19 | GMGTYPE |
| GF24D | GWINDFDY | GF42M . | GIVFOIM | GH20 | GMGXTRA |
| GF24F | GWINDFFY | GF43 | GIVSC | GH21 | GMGNEW |
| GF24G | GWINDFGY | GF38 | GCARUSE | GH22A | GMGXTY1 |
| GF24H | GWINDFHY | GF101 | GF101 | GH22B | GMGXTY2 |
| GF24I | GWINDFIY | GF102 | GF102 | GH22C | GMGXTY3 |
| GF25 | GBSCON | GF103 | GF103 | GH22D | GMGXTY4 |
| GF26 | GBSCNSP | GF104 | GF104 | GH22E | GMGXTY5 |
| GF27M1 | GBSCNSP1 | GF105 | GF105 | GH23 | GXPMG |
| GF27M2 | GBSCNSP2 | GF106 | GF106 | GH24A | GXPMG1 |
| GF28A | GXPMEAL | GF116 | GF116 | GH24B | GXPMG2 |
| GF28B | GXPLEIS | GF118 | GF118 | GH24C | GXPMG3 |
| GF29 | GFTEXHH | GF119 | GF119 | GH24D | GXPMG4 |
| GF30A1 | GFTEXA | GF120 | GF120 | GH25 | GHSJB |
| GF30A2 | GFTEXB | GF121 | GF121 | GH26M1 | GRENTP1 |
| GF30A3 | GFTEXC | GF122 | GF122 | GH26M2 | GRENTP2 |
| GF30B11 | GFTEXA1 | GF123 | GF123 | GH27 | GRENTLL |
| GF30B12 | GFTEXB1 | GF124 | GF124 | GH28 | GRENTF |
| GF30B13 | GFTEXC1 | GF125 | GF125 | GH30 | GRENT |
| GF30B21 | GFTEXA2 | GF131 | GF131 | GH31 | GRENTW |
| GF30B22 | GFTEXB2 | GF132 | GF132 | GH32A | GRENT1 |
| GF30B23 | GFTEXC2 | GF133 | GF133 | GH32C | GRENT2 |
| GF30B31 | GFTEXA3 | GF142 | GF142 | GH32D | GRENT3 |
| GF30B32 | GFTEXB3 | GF135 | GF135 | GH32E | GRENT4 |
| GF30B33 | GFTEXC3 | GF136 | GF136 | GH32F | GRENT5 |
| GF30B41 | GFTEXA4 | GF137 | GF137 | GH32H | GRENT6 |
| GF30B42 | GFTEXB4 | GF138 | GF138 | GH32B | GRENT7 |
| GF30B43 | . GFTEXC4 | GF139 | GF139 | GH32G | GRENT8 |
| GF30B51 | GFTEXA5 | GF140 | GF140 | GH33 | GRENTHB |
| GF30B52 | GFTEXB5 | GF141 | GF141 | GH34 | GRENTG |
| GF30B53 | . GFTEXC5 | GF151 | GF151 | GH35 | GRENTG |
| GF30B61 | GFTEXA6 | GF152 | GF152 | GH36 | GRENTGW |
| GF30B62 | GFTEXB6 | GF153 | GF153 | GH37 | GXPHSDF |
| GF30B63 | GFTEXC6 | GF154 | GF154 | GH38A | GXPHSD1 |
| GF30C1 | GFTEXAV | GF155 | GF155 | GH38B | GXPHSD2 |
| GF30C2 | GFTEXBV | GF156 | GF156 | GH39 | GXPHSDB |
| GF30C3 | GFTEXCV | GF157 | GF157 | GH40A | GHSKCH |
| GF30DOC1 | GFTEXAW | GF158 | GF158 | GH40B | GHSKCHS |
| GF30DOC2 | GFTEXBW | GF159 | GF159 | GH40A | GHSBTH |
| GF30DOC3 | GFTEXCW | GHOAD | GHHDOI | GH40B | GHSBTHS |
| GF31 | GSPINHH | GHOAM | GHHMOI | GH40A | GHSTLT |
| GF32A | GHUBUYS | GHOAY | . GHHYOI | GH40B | GHSTLTS |
| GF32B | GHUFRYS | GHOC | GHSTYPE | GH40A | GHSGDN |
| GF32C | . GHUMOPS | GH1A | GHSRINS | GH40B | GHSGDNS |
| GF32D | GHUIRON | GH2 | GHSROOM | GH41 | GHEATCH |
| GF33 | GFAIR1 | GH3 | GHSOWND | GH42 | GHEATYP |
| GF34 | GHHCH12 | GH4M1 | GHSOWR1 | GH43A | GXPGASY |
| GF35 | GHUSITS | GH4M2 | GHSOWR2 | GH43B | GXPLECY |
| GF36 | GFAIR2 | GH5 | GHSVAL | GH43C | GXPOILY |
| GF37 | GHOWLNG | GH6 | . GMGHAVE | GH43D | GXPSFLY |
| GF40 | . GQALLIF1 | GH7 | GHSOWRP | GH44A | GHSPRBG |
| GF40 | GQALLIF2 | GH8 | . GMGYNOT | GH44B | GHSPRBH |
| GF40 | GQALLIF3 | GH9 | GHSCOST | GH44C | GHSPRBI |
| GF40 | GQALLIF4 | GH10 | GHSYR0 | GH44D | GHSPRBJ |
| GF41A | . . GIVFA | GH12 | . GMGYR0 | GH44E | GHSPRBK |


| GH44F | GHSPRBL | GH58D | GHSCNTD | GJ27 | GJHPAYL |
| :---: | :---: | :---: | :---: | :---: | :---: |
| GH44G | GHSPRBM | GH58E | GHSCNTE | GJ280C | GJHPYLW |
| GH44H . | GHSPRBN | GH58F | GHSCNTF | GJ29 | GJHPYLG |
| GH44I | GHSPRBO | GH59 | GXPFOOD | GJ30 | GJHSTPY |
| GH44J | GHSPRBP | GH60 | GNCARS | GJ31 | GJBLKY |
| GH44K. | GHSPRBQ | GH61 | GCAROWN | GJ34 | GJBHAD |
| GH45 | GHSCTAX | GH62 | GCARVAL | GJ35 | GJLEND |
| GH46 | GHS2OWND | GH63M1 | GIVH1 | GJ36 | GJLSOC |
| GH47 | . GHS2VAL | GH63M2 | GIVH2 | GJ37 | GJLSIC |
| GH49 | GMGTOT | GH63M3 | GIVH3 | GJ38 | GJLSEMP |
| GH50 | GCDHAVE | GHG2 | GHGR2R | GJ39 | GJLBOSS |
| GH52 | GCDBGHT | GHG3 | GHSSEX | GJ40 | GJLMNGR |
| GH51A | GCD1USE | GHG4M | GHGBM | GJ41 | GJLSIZE |
| GH51B | GCD2USE | GHG4Y | GHGBY | GJ42A | GIVJA |
| GH51C | GCD10USE | GHG8 | GMASTAT | GJ42B | GIVJB |
| GH51D . | GCD11USE | GHG9 | GHGSPN | GJ42C | GIVJC |
| GH51E | GCD3USE | GHG10 | GHGEMP | GJ42D | GIVJD |
| GH51F | GCD4USE | GHG11 | GHGFNO | GJ42E | GIVJE |
| GH51G | GCD5USE | GHG12 | . GHGMNO | GM1 | GHLSTAT |
| GH51H . | GCD6USE | GHG13 | GHGRA | GM2 | GHLDSBL |
| GH51I | GCD7USE | GI1 | GIV1 | GM3M0 | GHLPRB |
| GH51J | GCD8USE | GI2 | GIV2 | GM3A | GHLPRBA |
| GH51K. | GCD9USE | Gl4 | GIV4 | GM3B | GHLPRBB |
| GH51L | GCD12USE | GI5 | GIV5 | GM3C | GHLPRBC |
| GH53A | GCD1NEW | GI6A | GIV6A | GM3D | GHLPRBD |
| GH53B | GCD2NEW | GI6B | GIV6B | GM3E | GHLPRBE |
| GH53C . | GCD10NEW | GI6C | GIV6C | GM3F | GHLPRBF |
| GH53D . | GCD11NEW | GI6D | . GIV6D | GM3G | GHLPRBG |
| GH53E | GCD3NEW | GI6E | . GIV6E | GM3H | GHLPRBH |
| GH53F | GCD4NEW | GI7 | GIV6F | GM3I | GHLPRBI |
| GH53G | GCD5NEW | GI8 | GIV7 | GM3J | GHLPRBJ |
| GH53H . | GCD6NEW | GJ2 | GEDNEW | GM3K | GHLPRBK |
| GH53I | GCD7NEW | GJ3A | GEDNEW1 | GM3L | GHLPRBL |
| GH53J | GCD8NEW | GJ3B | GEDNEW2 | GM3M | GHLPRBM |
| GH53K | GCD9NEW | GJ3C | GEDNEW3 | GM4 | GHLLT |
| GH53L | GCD12NEW | GJ3D | GEDNEW4 | GM5A | GHLLTA |
| GH54A | GCD1CST | GJ4A | GEDNEWQ | GM5B | GHLLTB |
| GH54B | GCD2CST | GJ4B | GEDNEWP1 | GM5C | GHLLTC |
| GH54E | GCD3CST | GJ8D | GCJSBGD | GM5D | GHLLTD |
| GH54F | GCD4CST | GJ8M | GCJSBGM | GM5E | GHLLTE |
| GH54G | GCD5CST | GJ8Y | GCJSBGY | GM6 | GHLLTW |
| GH54H . | GCD6CST | GJ9 | GNEMST | GM7 | GHLENDW |
| GH54I | GCD7CST | GJ10D | GCJSBGD | GM8 | GHLLTWA |
| GH54J | GCD8CST | GJ10M | GCJSBGM | GM9 | GHLIV65 |
| GH54K. | GCD9CST | GJ10Y | GCJSBGY | GM10A | GADLA |
| GH54C . | GCD10CST | GJ11 | GCJSBLY | GM10B | GADLAD |
| GH54D . | GCD11CST | GJ12 | . GJHSTAT | GM11A | GADLB |
| GH54L | GCD12CST | GJ13D | GJHBGD | GM11B | GADLBD |
| GH55 | GXPHP | GJ13M | GJHBGM | GM12A | GADLC |
| GH56 | GXPHPDF | GJ13Y | GJHBGY | GM12B | GADLCD |
| GH57A . | GHSCANA | GJ15 | GNJBS | GM13A | GADLD |
| GH57B | GHSCANB | GJ17 | GJHSOC | GM13B | GADLDD |
| GH57C | GHSCANC | GJ19 | GJHSEMP | GM14A | GADLE |
| GH57D . | GHSCAND | GJ20 | GJHBOSS | GM14B | GADLED |
| GH57E . | GHSCANE | GJ21 | GJHSECT | GM15A | GADLF |
| GH57F | GHSCANF | GJ22 | GJHMNGR | GM15B | GADLFD |
| GH58A . | GHSCNTA | GJ24 | . GJHPLDF | GM16 | GHL2GP |
| GH58B | GHSCNTB | GJ25 | GJHSIC | GM17 | GHL2HOP |
| GH58C . | GHSCNTC | GJ26 | . GJHSIZE | GM18 | . GXDTS |


| GM19 | GNXDTS | GM34B | GHLCKBN | GS1C . | GGHQC |
| :---: | :---: | :---: | :---: | :---: | :---: |
| GM20 | . GHOSP | GM34C | GHLCKCN | GS1D . | GGHQD |
| GM21 | GHOSPD | GM34D | GHLCKDN | GS1E. | GGHQE |
| GM23 | GHOSPCH | GM34E | GHLCKEN | GS1F | GGHQF |
| GM24 | GHOSPNHS | GM34F | GHLCKIN | GS1G | GGHQG |
| GM25 | GHLCVR | GM34G | GHLCKFN | GS1H . | GGHQH |
| GM26 | GHLCVRH | GM34H | GHLCKGN | GS1I | GGHQI |
| GM27 | GHLCVRL | GM34I | GHLCKHN | GS1J | GGHQJ |
| GM28 | GHLSV | GM35 | GSMOKER | GS1K. | GGHQK |
| GM29A | GHLSVA | GM36 | GNCIGS | GS1L | GGHQL |
| GM29B | GHLSVB | GM37A | GOPHLA | GS2A . | GOPFAMA |
| GM29C | GHLSVC | GM37B | GOPHLB | GS2B | GOPFAMB |
| GM29D | . GHLSVD | GM37C | GOPHLC | GS2C . | GOPFAMC |
| GM29E | . GHLSVE | GM39 | GAIDHH | GS2D . | GOPFAMD |
| GM29F | . GHLSVF | GM40P1 | GAIDHUA | GS2E | GOPFAME |
| GM29G | GHLSVG | GM40P2 | GAIDHUB | GS2F | GOPFAMF |
| GM29H | GHLSVH | GM40P3 | . GAIDHUC | GS2G | GOPFAMG |
| GM29I | GHLSVI | GM41 | GAIDXHH | GS2H . | GOPFAMH |
| GM29L1 | GHLSVJ | GM42 | GNAIDXHH | GS21 | GOPFAMI |
| GM29L2 | GHLSVK | GM43M1 | . GAIDHU1 | GS3A . | GLFSAT1 |
| GM29J | GHLSVL | GM43M2 | GAIDHU2 | GS3B | GLFSAT2 |
| GM29K | GHLSVM | GM45 | GAIDHRS | GS3C . | GLFSAT3 |
| GM30A | GHLSVAN | GM46A | GIVMA | GS3D . | GLFSAT4 |
| GM30B | GHLSVBN | GM46B | . GIVMB | GS3E . | GLFSAT5 |
| GM30C | GHLSVCN | GM46C | GIVMC | GS3F | GLFSAT6 |
| GM30D | GHLSVDN | GM46D | GIVMD | GS3G | GLFSAT7 |
| GM30E | GHLSVEN | GM46E | . GIVME | GS3H . | GLFSAT8 |
| GM30F | GHLSVFN | GP2B | GPRRS21 | GS4A . | GLFSATO |
| GM30G | GHLSVGN | GP2C | GPRIPN | GS4B | GLFSATL |
| GM30H | GHLSVHN | GP2D | GPRWHY | GS5A . | GXSUPA |
| GM301 | GHLSVIN | GP3 | GPPLEVR | GS5B | GXSUPB |
| GM30L1 | GHLSVJN | GP10M | GPRESBGM | GS5C . | GXSUPC |
| GM30L2 | GHLSVKN | GP10Y | GPRESBGY | GS6A . | GSSUPA |
| GM30J | GHLSVLN | GP11 | GPRESLY | GS6B . | GSSUPB |
| GM30K | GHLSVMN | GP23 | GPRFEHQ | GS6C . | GSSUPC |
| GM31A | GHLSVAF | GP25 | GPRSEHQ | GS6D . | GSSUPD |
| GM31B | GHLSVBF | GP58 | GPRJBFT | GS6E . | GSSUPE |
| GM31C | GHLSVCF | GP59M | GPRJBBGM | GS7A . | GSSUP1 |
| GM31D | GHLSVDF | GP59Y | GPRJBBGY | GS7B | GSSUPR2R |
| GM31E | GHLSVEF | GP60 | GPRJBLY | GT2B | GTELWHY |
| GM31F | GHLSVFF | GP61 | GPREARN | GT45 | GTLFIYRL |
| GM31G | GHLSVGF | GP70A | GPRF101 | GT50 | GTLFIYR |
| GM31H | GHLSVHF | GP70B | . GPRF102 | GV1A . | GOPSOCA |
| GM31I | GHLSVIF | GP70C | GPRF116 | GV1B | GOPSOCB |
| GM31L1 | GHLSVJF | GF70I | GPRF125 | GV1C . | GOPSOCC |
| GM31L2 | GHLSVKF | GP70D | GPRF131 | GV1D . | GOPSOCD |
| GM31J | GHLSVLF | GP70F | GPRF135 | GV1E . | GOPSOCE |
| GM31K | GHLSVMF | GP70G | . GPRF137 | GV1F | GOPSOCF |
| GM32 | GHLCK | GP70H | GPRF139 | GV2 | GVOTE1 |
| GM33A | GHLCKA | GP70J | GPRF141 | GV3 | GVOTE2 |
| GM33B | GHLCKB | GP70NONE | GPRFIRN | GV4 | GVOTE3 |
| GM33C | . GHLCKC | GP71 | . GPRFITB | GV5 | GVOTE4 |
| GM33D | . GHLCKD | GPI1A | GIVPA | GV6 | GVOTE5 |
| GM33E | GHLCKE | GPI1B | . GIVPB | GV7 | GVOTE7 |
| GM33G | . GHLCKF | GPI1C | GIVPC | GV8 | GVOTE8 |
| GM33H | GHLCKG | GPI1D | GIVPD | GV9 | GORGM |
| GM33I | . GHLCKH | GPI1E | . GIVPE | GV10A | GORGMA |
| GM33F | . . GHLCKI | GS1A | . GGHQA | GV10B | GORGMB |
| GM34A | GHLCKAN | GS1B | . GGHQB | GV10C | GORGMC |


| GV10D | GORGMD | GV28Y1 | GPYSMK1 | GY50 | GYPHFM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| GV10E | GORGME | GV28Y2 | GPYSMK2 | GY51 | GYPHFR |
| GV10F | GORGMF | GV28Y3 | GPYSMK3 | GY52 | GYPHLF |
| GV10G | GORGMG | GV29Y1 | GPYSAD1 | GY53 | GYPCOMA |
| GV10H | GORGMH | GV29Y2 | . GPYSAD2 | GY54 | GYPCOMB |
| GV10I | GORGMI | GV29Y3 | GPYSAD3 | GY55 | GYPCOMC |
| GV10J | GORGMJ | GV30Y1 | GPYWOR1 | GY56 | GYPCOMD |
| GV10K | GORGMK | GV30Y2 | GPYWOR2 | GY57 | GYPCOME |
| GV10L | . GORGML | GV30Y3 | . GPYWOR3 | GY58 | GYPCOMF |
| GV10M | GORGMM | GY1 | GYTVHRS | GY59 | GYPCOMG |
| GV100 | GORGMO | GY2 | GYTVSTP | GY60 | GYPOPLA |
| GV10P | GORGMP | GY3 | . GYPFPC | GY61 | GYPOPHA |
| GV10Q | GORGMQ | GY4 | GYPFPCGM | GY62 | GYPOPPL |
| GV11A | GORGAA | GY5 | GYPPALS | GY63 | GYPOPSCB |
| GV11B | GORGAB | GY6 | GYPUTEL | GY64 | GYPVTE6 |
| GV11C | GORGAC | GY7 | GYPLATE | GY65 | . GYPVTE3 |
| GV11D | GORGAD | GY8 | GYPFPARK | GY66 | GYPCRWRA |
| GV11E | GORGAE | GY9 | GYPFBEAU | GY67 | GYPCRWRB |
| GV11F | GORGAF | GY10 | GYPFCLUB | GY68 | GYPEXPL |
| GV11G | GORGAG | GY11 | GYPFDISC | GY69 | GYPVAND |
| GV11H | GORGAH | GY12 | GYPFSPOR | GY70 | GYPTRUN |
| GV11I | GORGAI | GY13 | GYPFARCA | GY71 | GYPOPSC |
| GV11J | GORGAJ | GY14 | GYPARGM | GY72 | GYPPASC |
| GV11K | GORGAK | GY15 | GYPARGF | GY73 | GYPLVSC |
| GV11L | GORGAL | GY16 | GYPTLKM | GY74 | GYPLVHM |
| GV11M | GORGAM | GY17 | GYPTLKF | GY75 | GYPAMAR |
| GV110 | GORGAO | GY18 | GYPNPAL | GY76 | GYPAPAR |
| GV11P | GORGAP | GY19 | GYPGANG | GY77 | GYPWHRS |
| GV11Q | GORGAQ | GY20 | GYPMKFRN | GY78 | GYPPAY |
| GV11 | GORGA | GY21 | GYPFGHT | GY80 | GYPSOC |
| GV12 | GFRNA | GY22 | GYPEATN | GY81 | GYPSOCY |
| GV13 | . GFRNB | GY23 | GYPSAVE | GY82 | GYPDLFA |
| GV14 | GFRNC | GY24L | GYPPKML | GY82 | GYPDLFB |
| GV15 | GFRND | GY24P | GYPPKMP | HDOAD | HDOID |
| GV16 | GFRNE | GY25 | GYPBEAU | HDOAM | HDOIM |
| GV17 | GOPRLG1 | GY26 | GYPDKLM | HDOAY | HDOIY4 |
| GV18 | GOPRLG2 | GY27 | GYPSMEV | HDOBA | HIVLYR |
| GV19 | GOPRLG3 | GY28 | GYPSMAG | HDOBB | HIVSTAT2 |
| GV20 | GYPPAR | GY29 | GYPSMOF | HDOD | HRACH12 |
| GV21 | GPYHLTH | GY30 | GYPSMLW | HD1H | HIVSOIH |
| GV22 | GPYHWRK | GY31 | GYPSMYR | HD1M | HIVSOIM |
| GV23 | GPYNYP | GY32 | GYPDGFR | HD2 | HLKNBRD |
| GV23A1 | GPYPNO1 | GY33 | . GYPSAD | HD3 | HLKMOVE |
| GV23A2 | GPYPNO2 | GY34 | . GYPWOR | HD4 | HLKMOVY |
| GV23A3 | GPYPNO3 | GY35 | . GYPBULL | HD5 | HXPMOVE |
| GV23B1 | GPYAGE1 | GY36 | GYPLONE | HD6 | HPLNEW |
| GV23B2 | GPYAGE2 | GY37 | . GYPBORED | HD7M | HPLNOWM |
| GV23B3 | GPYAGE3 | GY38 | GYPESTA | HD7Y | HPLNOWY4 |
| GV24Y1 | GPYWHR1 | GY39 | GYPESTB | HD8 | HMOVJB |
| GV24Y2 | GPYWHR2 | GY40 | GYPESTC | HD9A | HMOVJBA |
| GV25Y1 | GPYMAN1 | GY41 | GYPESTE | HD9B | HMOVJBB |
| GV25Y2 | GPYMAN2 | GY42 | GYPESTF | HD9C | HMOVJBC |
| GV25Y3 | GPYMAN3 | GY43 | GYPESTH | HD9D | HMOVJBD |
| GV26Y1 | GPYARG1 | GY44 | GYPTCHA | HD9E | HMOVJBE |
| GV26Y2 | GPYARG2 | GY45 | GYPTCHB | HD9F | HMOVJBF |
| GV26Y3 | GPYARG3 | GY46 | GYPTCHC | HD9G | HMOVJBG |
| GV27Y1 | . GPYTLK1 | GY47 | GYPESTG | HD9H | HMOVJBH |
| GV27Y2 | . GPYTLK2 | GY48 | . GYPHSW | HD91 | HMOVJBI |
| GV27Y3 | . GPYTLK3 | GY49 | . GYPHAP | HD10M2 | HMOVY2 |


| 1 | HSEX |
| :---: | :---: |
| HD11M | HDOBM |
| HD11Y | HDOBY |
| HD12 | HSEX |
| HD14 | HMLSTAT |
| HD15 | HMLCHNG |
| HD16M | HEDENDM |
| HD16M | HMLCHM |
| HD16Y | HEDENDY |
| HD16Y | HMLCHY4 |
| HD17 | HEDTYPE |
| HD17 | HJBSTAT |
| HD18 | HEDLYR |
| HD19 | HEDTYPE1 |
| HD19 | HEDTYPE2 |
| HD20 | HEDBLYR1 |
| HD20 | HEDBLYR2 |
| HD21M | HEDBGM1 |
| HD21M2 | HEDBGM2 |
| HD21Y | HEDBGY1 |
| HD21Y2 | HEDBGY2 |
| HD22 | HEDENNE1 |
| HD22M | HEDENM1 |
| HD22M2 | HEDENM2 |
| HD22NE2 | HEDENNE2 |
| HD22Y | HEDENY1 |
| HD22Y2 | HEDENY2 |
| HD23A | HEDFEEA1 |
| HD23A | HEDFEEA2 |
| HD23B | HEDFEEB1 |
| HD23B | HEDFEEB2 |
| HD23C | HEDFEEC1 |
| HD23C | HEDFEEC2 |
| HD23D | HEDFEED1 |
| HD23D | HEDFEED2 |
| HD23E | HEDFEEE1 |
| HD23E | HEDFEEE2 |
| HD23F | HEDFEEF1 |
| HD23F | HEDFEEF2 |
| HD23G | HEDFEEG1 |
| HD23G | HEDFEEG2 |
| HD24 | HEDQUAL1 |
| HD24 | HEDQUAL2 |
| HD25A1 | HEDQLA1 |
| HD25A1 | HEDQLAN1 |
| HD25A2 | HEDQLA2 |
| HD25A2 | HEDQLAN2 |
| HD25A2 | HEDQLBN2 |
| HD25A2 | HEDQLCN2 |
| HD25A2 | HEDQLDN2 |
| HD25A2 | HEDQLEN2 |
| HD25A2 | HEDQLFN2 |
| HD25A2 | HEDQLGN2 |
| HD25A2 | HEDQLHN2 |
| HD25A2 | HEDQLIN2 |
| HD25A2 | HEDQLJN2 |
| HD25B1 | HEDQLB1 |
| HD25B1 | HEDQLBN1 |
| HD25B2 | . HEDQLB2 |


| 1 | HEDQLC1 |
| :---: | :---: |
| HD25C1 | HEDQLCN1 |
| HD25C2 | HEDQLC2 |
| HD25D1 | HEDQLD1 |
| HD25D1 | HEDQLDN1 |
| HD25D2 | HEDQLD2 |
| HD25E1 | HEDQLE1 |
| HD25E1 | HEDQLEN1 |
| HD25E2 | HEDQLE2 |
| HD25F1 | HEDQLF1 |
| HD25F1 | HEDQLFN1 |
| HD25F2 | QLF2 |
| HD25G1 | HEDQLG1 |
| HD25G1 | HEDQLGN1 |
| HD25G2 | HEDQLG2 |
| HD25H1 | HEDQLH1 |
| HD25H1 | HEDQLHN1 |
| HD25H2 | HEDQLH2 |
| HD25I1 | HEDQLI1 |
| HD25I1 | HEDQLIN1 |
| HD25I2 | HEDQLI2 |
| HD25J1 | HEDQLJ1 |
| HD25J1 | HEDQLJN1 |
| HD25J2 | HEDQLJ2 |
| HD25NA | HEDQNN2 |
| HD25NONE | HEDQNN1 |
| HD26 | HEDOQL1 |
| HD26 | HEDOQL2 |
| HD26NONE | HEDOQLN1 |
| HD26NONE | HEDOQLN2 |
| HD27 | HEDMORE1 |
| HD27 | HEDMORE2 |
| HD29DST | HPLBORND |
| HD290S | HPLBORNC |
| HD30 | HYR2UK4 |
| HD31 | HMLSTAT |
| HD32M1 | HCITZN1 |
| HD32M2 | HCITZN2 |
| HD33 | HRACE |
| HD36 | HPASOC |
| HD36ANA | HPAJU |
| HD37 | MP |
| HD38 | PABOSS |
| HD39 | PAMNGR |
| HD40 | HMAJU |
| HD40 | HMASOC |
| HD41 | MASEMP |
| HD42 | HMABOSS |
| HD43 | HMAMNGR |
| HD44 | HJ1SOC |
| HD44NA | HJ1NONE |
| HD45 | HJ1SEMP |
| HD46 | HJ1BOSS |
| HD47 | HJ1MNGR |
| HD48 | HLCOH |
| HD49M | HCOH1BM |
| HD49Y | HCOH1BY |
| HD50 | COH1MR |
| D51M | CoH1EM |


| D51Y | Y |
| :---: | :---: |
| HD52 | HNMAR |
| HD53M | HLMAR1M |
| HD53Y | HLMAR1Y |
| HD54 | HLPRNT |
| HD55 | HLNPRNT |
| HD56M | HCH1BM |
| HD56Y | HCH1BY |
| HD58 | HSCEND |
| HD58NA | HSCHOOL |
| HD59 | HSCTYPE |
| HD60 | HSCNOW |
| HD61 | HFETYPE |
| HD62 | HFEEND |
| HD62NA | HFENOW |
| HD63 | HQFHAS |
| HD64A | HQFA |
| HD64B | HQFB |
| HD64C | HQFC |
| HD64D | HQFD |
| HD64E | HQFE |
| HD64F. | . HQFF |
| HD64G | HQFG |
| HD64H. | HQFH |
| HD64I | HQFI |
| HD64J | HQFJ |
| HD64K | HQFK |
| HD64L | HQFL |
| HD64M | HQFM |
| HD64N | HQFN |
| HD65 | HQFED |
| HD66A | HQFEDA |
| HD66B | HQFEDB |
| HD66C | HQFEDC |
| HD66D | HQFEDD |
| HD66E | HQFEDE |
| HD66F | HQFEDF |
| HD66G | HQFEDG |
| HD66H | HQFEDH |
| HD66I | . HQFEDI |
| HD66J | HQFEDJ |
| HD66K | HQFEDK |
| HD66L | HQFEDL |
| HD66M | HQFEDM |
| HD66N | HQFEDN |
| HD66O | HQFEDO |
| HD66P | HQFEDP |
| HD66Q | HQFEDQ |
| HD66R . | HQFEDR |
| HD66S | . HQFEDS |
| HD67A | HNQFEDA |
| HD67B | HNQFEDB |
| HD67C | HNQFEDC |
| HD67D | HNQFEDD |
| HD67E | HNQFEDE |
| HD67F | HNQFEDF |
| HD67G | HNQFEDG |
| HD67H | HNQFEDH |
| HD671 | . HNQFEDI |


| 7J | HNQFEDJ |
| :---: | :---: |
| HD67K | HNQFEDK |
| HD67L | HNQFEDL |
| HD67M | HNQFEDM |
| HD67N | HNQFEDN |
| HD67O | HNQFEDO |
| HD67P | HNQFEDP |
| HD67Q | HNQFEDQ |
| HD67R | HNQFEDR |
| HD67S | HNQFEDS |
| HD68 | HTRAIN |
| HD69 | HNTRAIN |
| HD70 | HTRPLCE1 |
| HD70 | HTRPLCE2 |
| HD70 | HTRPLCE3 |
| HD71A | HTRWHYA2 |
| HD71A1 | HTRWHYA1 |
| HD71A3 | HTRWHYA3 |
| HD71B | HTRWHYB2 |
| HD71B1 | HTRWHYB1 |
| HD71B3 | HTRWHYB3 |
| HD71C | HTRWHYC2 |
| HD71C1 | HTRWHYC1 |
| HD71C3 | HTRWHYC3 |
| HD71D | HTRWHYD2 |
| HD71D1 | HTRWHYD1 |
| HD71D3 | HTRWHYD3 |
| HD71E | HTRWHYE2 |
| HD71E1 | HTRWHYE1 |
| HD71E3 | HTRWHYE3 |
| HD72 | HTRQ1 |
| HD72 | HTRQ2 |
| HD72 | HTRQ3 |
| HD72 | HTRU1 |
| HD72 | RU2 |
| HD72 | HTRU3 |
| HD73A | HTRFEEA2 |
| HD73A1 | HTRFEEA1 |
| HD73A3 | HTRFEEA3 |
| HD73B | HTRFEEB2 |
| HD73B1 | TRFEEB1 |
| HD73B3 | HTRFEEB3 |
| HD73C | HTRFEEC2 |
| HD73C1 | TTRFEEC1 |
| HD73C3 | TRFEEC3 |
| HD73E | HTRFEEE2 |
| HD73E1 | HTRFEEE1 |
| HD73E3 | HTRFEEE3 |
| HD73F | HTRFEEF2 |
| HD73F1 | HTRFEEF1 |
| HD73F3 | HTRFEEF3 |
| HD73G | HTRFEEG2 |
| HD73G1 | HTRFEEG1 |
| HD73G3 | HTRFEEG3 |
| HD74 | HTRQLXP1 |
| HD74 | HTRQLXP2 |
| HD74 | HTRQLXP3 |
| HD75 | HTRQLAC1 |
| HD75 | HTRQLAC2 |


| HD75 | HTRQLAC3 |
| :---: | :---: |
| HD75NONE | HTRQLNN1 |
| HD75NONE | HTRQLNN2 |
| HD76A1 | HTRQLA1 |
| D76A2 | HTRQLA2 |
| HD76A3 | HTRQLA3 |
| HD76AN1 | HTRQLAN1 |
| HD76AN2 | HTRQLAN2 |
| HD76AN3 | TRQLAN3 |
| HD76B1 |  |
| HD76B2 | HTRQLB2 |
| HD76B3 | HTRQLB3 |
| HD76BN1 | TRQLBN1 |
| HD76BN2 | TRQLBN2 |
| HD76BN3 | TRQLBN3 |
| HD76C1 | HTRQLC1 |
| HD76C2 | HTRQLC2 |
| HD76C3 | HTRQLC3 |
| HD76CN1 | TRQLCN1 |
| HD76CN2 | TRQLCN2 |
| HD76CN3 | TRQLCN3 |
| HD76D1 | HTRQLD1 |
| HD76D2 | HTRQLD2 |
| HD76D3 | HTRQLD3 |
| HD76DN1 | TRQLDN1 |
| DD76DN2 | TRQLDN2 |
| HD76DN3 | TRQLDN3 |
| HD76E1 | HTRQLE1 |
| HD76E2 | HTRQLE2 |
| HD76E3 |  |
| HD76EN1 | HTRQLEN1 |
| HD76EN2 | TRQLEN2 |
| HD76EN3 | HTRQLEN3 |
| HD76F1 | HTRQLF1 |
| HD76F2 |  |
| F3 | RQLF3 |
| HD76FN1 | HTRQLFN1 |
| HD76FN2 | TRQLFN2 |
| HD76FN3 | TRQLFN3 |
| HD76G1 | TRQLG1 |
| HD76G2 | TRQLG2 |
| HD76G3 | HTRQLG3 |
| HD76GN1 | HTRQLGN1 |
| HD76GN2 | HTRQLGN2 |
| HD76GN3 | HTRQLGN3 |
| HD76H1 | HTRQLH1 |
| HD76H2 | TRQQLH2 |
| HD76H3 | TRQQLH3 |
| HD76HN1 | TRQLHN1 |
| HD76HN2 | TRQLHN2 |
| HD76HN3 | TRQLHN3 |
| HD76I1 | HTRQLI1 |
| HD76I2 | HTRQLI2 |
| HD76I3 | HTRQLI3 |
| HD76IN1 | TRQLIN1 |
| HD76IN2 | TRRQLIN2 |
| HD76IN3 | TRQLIN3 |
| HD76J1 | RQLJ1 |
| HD76J2 | QLJ |


| J3 | HTRQLJ3 |
| :---: | :---: |
| HD76JN1 | HTRQLJN1 |
| HD76JN2 | HTRQLJN2 |
| HD76JN3 | HTRQLJN3 |
| HD76NONE | HTRQLNN3 |
| HD77 | HTROQL1 |
| HD77 | HTROQL2 |
| HD77 | HTROQL3 |
| HD77 | HTROQLN3 |
| HD77NONE | HTROQLN1 |
| HD77NONE | HTROQLN2 |
| HD78 | HTRMORE1 |
| HD78 | HTRMORE2 |
| HD78 | HTRMORE3 |
| HD79 | HIVLPAR |
| HD80 | HNRPART |
| HD81 | HNRPTIM |
| HD82 | HNRPXPM1 |
| HD83 | HNRPXPM2 |
| HD84 | HCOHADV |
| HD85 | HCOHAD1 |
| HD85 | HCOHAD2 |
| HD86 | HCOHDIS |
| HD87 | HCOHDS1 |
| HD87 | HCOHDS2 |
| HD88 | HCOHXPM1 |
| HD89 | HCOHXPM2 |
| HD90 | HIVLPARY |
| HD91 | HCOHLYR |
| HD92M1 | HCOHLBM1 |
| HD92M1 | HCOHLBY1 |
| HD92M2 | HCOHLBM2 |
| HD92M2 | HCOHLBY2 |
| HD92M3 | HCOHLBM3 |
| HD92M3 | HCOHLBY3 |
| HD93M1 | HCOHLEM1 |
| HD93M1 | HCOHLEY1 |
| HD93M2 | HCOHLEM2 |
| HD93M2 | HCOHLEY2 |
| HD93M3 | HCOHLEM3 |
| HD93M3 | HCOHLEY3 |
| HD94 | HIVCBAGE |
| HD95 | HLCHMOR |
| HD96 | HLCHNMOR |
| HD97A | HIVDA |
| HD97B | HIVDB |
| HD97C | HIVDC |
| HD97D | HIVDD |
| HD97E | HIVDE |
| HE1 | HJBHAS |
| HE2 | . HJBOFF |
| HE3 | HJBOFFY |
| HE4 | HJBTERM |
| HE5 | HJBSOC |
| HE6 | HJBSIC |
| HE7 | HJBSEMP |
| HE8 | HJBMNGR |
| HE9 | HJBSECT |
| 10 | HJBSIZE |


| HE11 | HJBHRS | HE64BM | HJSPRBM | HE100 | HJUSOC |
| :---: | :---: | :---: | :---: | :---: | :---: |
| HE12 | HJBOT | HE64BY | HJSPRBY4 | HE101 | HJUHRSX |
| HE13 | HJBOTPD | HE64EM | HJSPREM | HE102 | HJUPAYX |
| HE14 | HJBHRLK | HE64EY. | HJSPREY4 | HE103 | HJUPAYL |
| HE15 | HJBPL | HE65 | HJSPRF | HE104 | HJUHRSL |
| HE16 | HJBTTWT | HE66 | HJSPRLS | HE105 | HEPROSH |
| HE17 | HJBTTWM | HE67 | HJSPRTX | HE106 | HEAAGE |
| HE18B | HJBSAT2 | HE68 | HJSPRNI | HE107 | HJBUB |
| HE18D | HJBSAT4 | HE69BM | HJSPRBM | HE108 | HJBUBY |
| HE18F | HJBSAT6 | HE69BY . | HJSPRBY4 | HE109 | HJ2HAS |
| HE18G | HJBSAT7 | HE69EM | HJSPREM | HE110 | HJ2SOC |
| HE19 | HJBSAT | HE69EY | HJSPREY4 | HE111 | HJ2SEMP |
| HE20 | HPAYGL | HE70 | HJSPRF | HE112 | HJ2HRS |
| HE21OC | HPAYGW | HE71 | HJSPRLS | HE113 | HJ2PAY |
| HE22 | HPAYNL | HE72 | HJSPRTX | HE114A | HIVEA |
| HE23OC | HPAYNW | HE73 | HJSPRNI | HE114B | HIVEB |
| HE24 | HPAYSLP | HE74 | HJSPAYU | HE114C | HIVEC |
| HE26 | HPAYUSL | HE75 | HJSPAYW | HE114D | HIVED |
| HE27 | HPAYU | HE76 | HJSPYTX | HE114E | HIVEE |
| HE28OC | HPAYUW | HE77 | HJSPYNI | HEG3 | PID |
| HE29 | HPAYUG | HE78 | HJSPL | HEG3 | PID |
| HE30A | HPAYDF1 | HE79 | HJSTTWT | HEG3 | PID |
| HE30B | . HPAYDF2 | HE80 | HJSTTWM | HEG4 | HHGSEX |
| HE30C | . HPAYDF3 | HE81A | HJSSAT1 | HEG4M | HHGBM |
| HE30D | . HPAYDF4 | HE81B | HJSSAT2 | HEG4Y | HHGBY |
| HE30E | . HPAYDF5 | HE81D | HJSSAT4 | HEG6 | HIVIOW7 |
| HE30F | HPAYDF6 | HE81E | HJSSAT5 | HEG6 | HIVIOW7 |
| HE30G | . HPAYDF7 | HE82 | HJSSAT | HEG6 | HIVIOW7 |
| HE30H | . HPAYDF9 | HE83D | HJSBGD | HEG6 | HIVLYR |
| HE30I | HPAYDF8 | HE83M | HJSBGM | HEG7 | HIVSTAT1 |
| HE31 | HJBPERFP | HE83Y | HJSBGY4 | HEG7 | HIVSTAT1 |
| HE32 | HJBONUS | HE84A | HJBLKCHA | HEG8 | HIVELIG |
| HE33 | HJBONAM | HE84B | HJBLKCHB | HEG9 | HHHMEM |
| HE34 | HJBONG | HE84C | HJBLKCHC | HEG9 | HHHMEM |
| HE35 | HJBRISE | HE84D | HJBLKCHD | HEG9 | HHHMEM |
| HE36 | HTUJBPL | HE84E | HJBLKCHE | HEG10 | HNEWHY |
| HE37 | HTUIN1 | HE85A | HJBXPCHA | HEG10 | HNEWHY |
| HE38 | HJBOPPS | HE85B | НJBXPCHB | HEG10 | HNEWHY |
| HE39 | HJBTIME | HE85C | HJBXPCHC | HEG11 | HLVWHY |
| HE40 | HJBPEN | HE85D | HJBXPCHD | HEG12M | HLVMN |
| HE41 | HJBPENM | HE85E | HJBXPCHE | HEG12M | HNEMNJN |
| HE43D | HJBBGD | HE86 | HJBMRS | HEG12M | HNEMNJN |
| HE43M | HJBBGM | HE88M1. | HJBCHC1 | HEG12M | HNEMNJN |
| HE43Y | . HJBBGY4 | HE88M2 . | HJBCHC2 | HEG12Y . | HLVYR4 |
| HE44 | HJBBGLY | HE88M3 . | . HJBCHC 3 | HEG12Y . | HNEYRJN4 |
| HE45 | HPAYS | HE90 | HXPCHCF | HEG12Y. | HNEYRJN4 |
| HE46OC | HPAYSW | HE91 | . HXPCHC | HEG12Y. | HNEYRJN4 |
| HE48 | HPAYSG | HE92 | HHUXPCH | HEG13 | HLVLOC |
| HE50 | HPAYLY | HE93 | HHUNURS | HEG14 | HIVFIO |
| HE52OC | HPAYLYW | HE94 | . HJULK1 | HEG14 | HIVFIO |
| HE53 | HPAYLYG | HE95 | . HJULK4 | HEG14 | HIVFIO |
| HE56 | HJSBOSS | HE96A | HJULKA | HEG15 | HIVRREF |
| HE57 | HJSSIZE | HE96B | HJULKB | HEG16 | HIVIREIS |
| HE58 | HJSHRS | HE96C | . HJULKC | HF2 | HNF1 |
| HE59 | HJSHRLK | HE96D | . HJULKD | HF2 | HNFR |
| HE60 | HJSTIME | HE96E | . HJULKE | HF3A | HFICODE |
| HE61 | HJSTYPEB | HE97 | HJULKJB | HF3B01 | HFR01 |
| HE62 | HJSACCS | HE98 | HJUBGN | HF3B02 | HFR02 |
| HE63 | . HJSPART | HE99 | HJUSPEC | HF3B03 | HFR03 |


| HF3B04 | HFR04 | HF27A1 | HFTEXA | HF124 | HF124 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| HF3B05 | HFR05 | HF27A2 | HFTEXB | HF125 | HF125 |
| HF3B06 | HFR06 | HF27A3 | HFTEXC | HF126 | HF126 |
| HF3B07 | HFR07 | HF27B11 | HFTEXA1 | HF127 | HF127 |
| HF3B08 | HFR08 | HF27B12 | HFTEXB1 | HF128 | HF128 |
| HF3B09 | HFR09 | HF27B13 | HFTEXC1 | HF131 | HF131 |
| HF3B10 | HFR10 | HF27B21 | HFTEXA2 | HF132 | HF132 |
| HF3B11 | . HFR11 | HF27B22 | HFTEXB2 | HF135 | HF135 |
| HF3B12 | . HFR12 | HF27B23 | HFTEXC2 | HF136 | HF136 |
| HF3B13 | HFR13 | HF27B31 | HFTEXA3 | HF137 | HF137 |
| HF3B14 | . HFR14 | HF27B32 | HFTEXB3 | HF138 | HF138 |
| HF3B15 | . HFR15 | HF27B33 | HFTEXC3 | HF139 | HF139 |
| HF3B16 | . HFR16 | HF27B41 | HFTEXA4 | HF140 | HF140 |
| HF3B17 | . HFR17 | HF27B42 | HFTEXB4 | HF141 | HF141 |
| HF3BAL | HFRALL | HF27B43 | HFTEXC4 | HF142 | HF142 |
| HF3C | HFRNOW | HF27B51 | hFTEXA5 | HF151 | HF151 |
| HF3D | . HFR VAL | HF27B52 | HFTEXB5 | HF152 | HF152 |
| HF3EOC | HFRW | HF27B53 | HFTEXC5 | HF153 | HF153 |
| HF3F | HFRJT | HF27B61 | HFTEXA6 | HF154 | HF154 |
| HF3FPN. | HFRJTPN | HF27B62 | HFTEXB6 | HF155 | HF155 |
| HF3SEQ | HFISEQ | HF27B63 | HFTEXC6 | HF156 | HF156 |
| HF4 | HFISIT | HF27C1 | HFTEXAV | HF157 | HF157 |
| HF5 | HFISITC | HF27C2 | HFTEXBV | HF158 | HF158 |
| HF6 | HFISITY | HF27C3 | HFTEXCV | HF159 | HF159 |
| HF7 | HFISITX | HF27DOC | hftexaw | HHOAD | HHHDOI |
| HF701 | . HPRF125 | HF27DOC | HFTEXBW | HHOAM | HHHMOI |
| HF8 | HFIYRDI | HF27DOC | HFTEXCW | HHOAY . | HHHYOI4 |
| HF9 | HFIYRDIU | HF28 | . HSPINHH | HHOC. | HHSTYPE |
| HF10 | HSAVE | HF29A | hHUBUYS | HH2 | . HHSROOM |
| HF11 | HSAVED | HF29B | HHUFRYS | H 3 | .HHSOWND |
| HF12M1. | HSAVEY1 | HF29C | . HHUMOPS | HH4M1 | . HHSOWR1 |
| HF12M2. | HSAVEY2 | HF29D | HHUIRON | HH4M2 | . HHSOWR2 |
| HF13 | HPPPEN | HF30 | HHHCH12 | HH5 | HHSVAL |
| HF14 | HPENB4 | HF31 | . HHUSITS | HH6 | HMGHAVE |
| HF15 | . HPENB4Y4 | HF32 | HHOWLNG | HH7 | . HHSOWRP |
| HF16 | HPENB4V | HF33 | HCARUSE | HH8 | . HMGYNOT |
| HF170C. | HPENB4W | HF35 | . HNEIGH1 | HH9. | HHSCOST |
| HF18 | HPENYR4 | HF35 | . HNEIGH2 | HH10 | HHSYR04 |
| HF19 | HPENADD | HF35 | . HNEIGH3 | HH12 | HMGYR04 |
| HF20 | HPENADV | HF35 | . HNEIGH4 | HH13 | HMGLY |
| HF210C. | HPENADW | HF36A | HIVFA | HH14 | HHSIVW7 |
| HF22 | HWINDF | HF36B | HIVFB | HH17 | HMGOLD |
| HF23A | HWINDFA | HF36C | . HIVFC | HH18 | HMGLIFE |
| HF23B | HWINDFB | HF36D | . HIVFD | HH19 | . HMGTYPE |
| HF23C | HWINDFC | HF36E | HIVFE | HH1A | HHSRINS |
| HF23D | HWINDFD | HF37H | HIVFOIH | HH2O | . HMGXTRA |
| HF23F | HWINDFF | HF37M | HIVFOIM | HH21 | . HMGNEW |
| HF23G | HWINDFG | HF38. | . . HIVSC | HH22A | HMGXTY1 |
| HF23H | HWINDFH | HF101 | HF101 | HH22B | HMGXTY2 |
| HF24A | HWINDFAY | HF102 | HF102 | HH22C. | HMGXTY3 |
| HF24B | HWINDFBY | HF103 | HF103 | HH22D. | HMGXTY4 |
| HF24C | HWINDFCY | HF104 | HF104 | HH22E | HMGXTY5 |
| HF24D | HWINDFDY | HF105 | HF105 | HH23 | HXPMG |
| HF24F | HWINDFFY | HF106 | HF106 | HH24A | HXPMG1 |
| HF24G | HWINDFGY | HF116 | HF116 | HH24B | HXPMG2 |
| HF24H | HWINDFHY | HF118 | HF118 | HH24C. | HXPMG3 |
| HF25A | HXPMEAL | HF119 | HF119 | HH24D. | HXPMG4 |
| HF25B | HXPLEIS | HF121 | HF121 | HH25 | . HHSJB |
| HF26 | HFTEXHH | HF122 | HF122 | HH26M1 | HRENTP1 |


| HH26M2 | HRENTP2 | HH511 | HCD7USE | HHG10. | HHGEMP |
| :---: | :---: | :---: | :---: | :---: | :---: |
| HH27 | . HRENTLL | HH51J | HCD8USE | HHG10. | HHGEMP |
| HH28 | HRENTF | HH51K | HCD9USE | HHG11. | HHGFNO |
| HH30 | HRENT | HH51L | HCD12USE | HHG11. | HHGFNO |
| HH31 | HRENTW | HH52 | HCDBGHT | HHG12. | HHGMNO |
| HH32A | .HRENT1 | HH53A | . HCD1NEW | HHG12. | HHGMNO |
| HH32B | HRENT7 | HH53B | . HCD2NEW | HHG13. | HHGRA |
| HH32C | HRENT2 | HH53C | HCD10NEW | HHG13. | HHGRA |
| HH32D | HRENT3 | HH53D | HCD11NEW | HI1 | HIV1 |
| HH32E | HRENT4 | HH53E | . HCD3NEW | H12 | HIV2 |
| HH32F | HRENT5 | HH53F | . HCD4NEW | HI4 | HIV4 |
| HH32G | HRENT8 | HH53G | HCD5NEW | HI5 | HIV5 |
| HH32H | HRENT6 | HH53H | HCD6NEW | HI6A | HIV6A |
| HH33 | HRENTHB | HH53I | HCD7NEW | HI6B | HIV6B |
| HH34 | HRENTG | HH53J | HCD8NEW | HI6C | Hiv6C |
| HH35 | HRENTG | HH53K | . HCD9NEW | HI6D | HIV6D |
| HH36 | HRENTGW | HH53L | HCD12NEW | HI6E | HIV6E |
| HH37 | HXPHSDF | HH54A | HCD1CST | HI7 | HIV6F |
| HH38A | HXPHSD1 | HH54B | HCD2CST | HI8 | HIV7 |
| HH38B | HXPHSD2 | HH54C | HCD10CST | HJ6 | HNEMST |
| HH39 | HXPHSDB | HH54D | HCD11CST | HJ7D | HCJSBGD |
| HH40A | HHSBTH | HH54E | HCD3CST | HJ7M | hCJSBGM |
| HH40A | HHSGDN | HH54F | HCD4CST | HJ7Y | HCJSBGY4 |
| HH40A | HHSKCH | HH54G | HCD5CST | HJ9 | . . HJHSTAT |
| HH40A | HHSTLT | HH54H | HCD6CST | HJ10D | HCJSBGD |
| HH40B | HHSBTHS | HH541 | HCD7CST | HJ10D | HJHBGD |
| HH40B | HHSGDNS | HH54J | HCD8CST | HJ10M | HCJSBGM |
| HH40B | HHSKCHS | HH54K | HCD9CST | HJ10M | HJHBGM |
| HH40B | . HHSTLTS | HH54L | HCD12CST | HJ10Y | . $\mathrm{HCJSBGY4}$ |
| HH41A | HXPGASY | HH55 | . . HXPHP | HJ10Y | . . $\mathrm{HJHBGY4}$ |
| HH41B | HXPLECY | HH56 | HXPHPDF | HJ11 | . HCJSBLY |
| HH41C | HXPOILY | HH57A | HHSCANA | HJ14 | HJHSOC |
| HH41D | HXPSFLY | HH57B | HHSCANB | HJ15 | HNJBS |
| HH42 | HHEATCH | HH57C | HHSCANC | HJ16 | HJHSEMP |
| HH43 | HHEATYP | HH57D | HHSCAND | HJ17 | HJHBOSS |
| HH44A | HHSPRBG | HH57E | HHSCANE | HJ18 | . HJHSECT |
| HH44B | HHSPRBH | HH57F | HHSCANF | HJ19 | HJHMNGR |
| HH44C | HHSPRBI | HH58A | HHSCNTA | HJ21 | HJHPLDF |
| HH44D | HHSPRBJ | HH58B | HHSCNTB | HJ22 | HJHSIC |
| HH44E | HHSPRBK | HH58C | HHSCNTC | HJ23 | HJHSIZE |
| HH44F | HHSPRBL | HH58D | HHSCNTD | HJ24 | HJHPAYL |
| HH44G | HHSPRBM | HH58E | HHSCNTE | HJ250C | HJHPYLW |
| HH44H | HHSPRBN | HH58F | HHSCNTF | HJ26 | . HJHPYLG |
| HH441 | HHSPRBO | HH59 | HXPFOOD | HJ27 | . . HJHSTPY |
| HH44J | HHSPRBP | HH60 | . HNCARS | HJ28 | . HJBLKY |
| HH44K | . HHSPRBQ | HH61 | HCAROWN | HJ31 | HJBHAD |
| HH45 | . hHSCTAX | HH63M1 | HIVH1 | HJ32 | HJLEND4 |
| HH46 | HHS2OWND | HH63M2 | HIVH2 | HJ33 | HJLSOC |
| HH47 | . HHS2VAL | HH63M3 | HIVH3 | HJ34 | HJLSIC |
| HH49 | . HMGTOT | HHG2 | HHGR2R | HJ35 | . HJLSEMP |
| HH50 | HCDHAVE | HHG2 | HHGR2R | HJ36 | . HJLBOSS |
| HH51A | HCD1USE | HHG3 | HHGSEX | HJ37 | HJLMNGR |
| HH51B | HCD2USE | HHG3 | HHGSEX | HJ38 | HJLSIZE |
| HH51C | HCD10USE | HHG4M | HHGBM | HJ39A | HIVJA |
| HH51D | HCD11USE | HHG4Y | HHGBY | HJ39B | HIVJB |
| HH51E | hCD3USE | HHG8 | hmastat | HJ39C | HIVJC |
| HH51F | HCD4USE | HHG8 | HMASTAT | HJ39D | HIVJD |
| HH51G | HCD5USE | HHG9 | HHGSPN | HJ39E | HIVJE |
| HH51H | HCD6USE | HHG9 | HHGSPN | HM1 | HHLSTAT |


| HM2 | HHLDSBL | HM29J2 | HHLSVK |
| :---: | :---: | :---: | :---: |
| HM3A | HHLPRBA | HM29L | HHLSVL |
| HM3B | HHLPRBB | HM29M | HHLSVM |
| HM3C | HHLPRBC | HM30A | HHLSVAN |
| HM3D | HHLPRBD | HM30B | HHLSVBN |
| HM3E | HHLPRBE | HM30C | HHLSVCN |
| HM3F | HHLPRBF | HM30D | HHLSVDN |
| HM3G | HHLPRBG | HM30E | HHLSVEN |
| HM3H | HHLPRBH | HM30F | HHLSVFN |
| HM3I | HHLPRBI | HM30G | HHLSVGN |
| HM3J | HHLPRBJ | HM30H | HHLSVHN |
| HM3K | HHLPRBK | HM30I | HHLSVIN |
| HM3L | HHLPRBL | HM30J1 | .HHLSVJN |
| HM3M | HHLPRBM | HM30J2 | HHLSVKN |
| HM3M0 | HHLPRB | HM30L | . HHLSVLN |
| HM4 | HHLLT | HM30M | HHLSVMN |
| HM5A | HHLLTA | HM31A | HHLSVAF |
| HM5B | HHLLTB | HM31B | HHLSVBF |
| HM5C | HHLLTC | HM31C | HHLSVCF |
| HM5D | HHLLTD | HM31D | HHLSVDF |
| HM5E | . HHLLTE | HM31E | HHLSVEF |
| HM6 | HHLLTW | HM31F | HHLSVFF |
| HM7 | HHLENDW | HM31G | HHLSVGF |
| HM8 | HHLLTWA | HM31H | HHLSVHF |
| HM9 | HHLIV65 | HM31I | HHLSVIF |
| HM10A | . HADLA | HM31J1 | HHLSVJF |
| HM10B | HADLAD | HM31J2 | HHLSVKF |
| HM11A. | HADLB | HM31L | HHLSVLF |
| HM11B | HADLBD | HM31M | HHLSVMF |
| HM12A | HADLC | HM32 | HHLCK |
| HM12B | HADLCD | HM33A | HHLCKA |
| HM13A | HADLD | HM33B | HHLCKB |
| HM13B | HADLDD | HM33C | HHLCKC |
| HM14A | HADLE | HM33D | HHLCKD |
| HM14B | HADLED | HM33E | HHLCKE |
| HM15A. | HADLF | HM33F | HHLCKI |
| HM15B | HADLFD | HM33G | HHLCKF |
| HM16 | HHL2GP | HM33H | HHLCKG |
| HM17 | HHL2HOP | HM33I | HHLCKH |
| HM18 | HXDTS | HM34A | HHLCKAN |
| HM19 | HNXDTS | HM34B | HHLCKBN |
| HM20 | HHOSP | HM34C | HHLCKCN |
| HM21 | HHOSPD | HM34D | HHLCKDN |
| HM23 | HHOSPCH | HM34E | HHLCKEN |
| HM24 | HHOSPNHS | HM34F | HHLCKIN |
| HM25 | HHLCVR | HM34G | HHLCKFN |
| HM26 | HHLCVRH | HM34H | HHLCKGN |
| HM27 | HHLCVRL | HM34I | HHLCKHN |
| HM28 | HHLSV | HM35 | HSMOKER |
| HM29A | HHLSVA | HM36 | . HNCIGS |
| HM29B. | HHLSVB | HM38 | . HAIDHH |
| HM29C | HHLSVC | HM39P1 | HAIDHUA |
| HM29D | HHLSVD | HM39P2 | . HAIDHUB |
| HM29E . | HHLSVE | HM39P3 | . HAIDHUC |
| HM29F | . HHLSVF | HM40 | . HAIDXHH |
| HM29G | HHLSVG | HM41 | HNAIDXHH |
| HM29H | HHLSVH | HM42M1 | HAIDHU1 |
| HM29I | . HHLSVI | HM42M2 | HAIDHU2 |
| HM29J1 | . HHLSVJ | HM44 | HAIDHRS |


| 5A | HIVMA |
| :---: | :---: |
| HM45B | HIVMB |
| HM45C | HIVMC |
| HM45D | HIVMD |
| HM45E | HIVME |
| HP2B | 21 |
| HP2C | HPRIPN |
| HP2D | HPRWHY |
| HP3 | HPPLEVR |
| HP10M | HPRESBGM |
| HP10Y | HPRESBY4 |
| HP11 | HPRESLY |
| HP23 | HPRFEHQ |
| HP25 | HPRSEHQ |
| HP58 | HPRJBFT |
| HP59M | HPRJBBGM |
| HP59Y | HPRJBBY4 |
| HP60 | HPRJBLY |
| HP61 | HPREARN |
| HP70A | HPRF101 |
| HP70B | HPRF102 |
| HP70C | HPRF116 |
| HP70D | HPRF131 |
| HP70F | HPRF135 |
| HP70G | HPRF137 |
| HP70H | HPRF139 |
| HP70J | HPRF141 |
| HP70NONE | HPRFIRN |
| HP71 | HPRFITB |
| HPI1A | HIVPA |
| HPI1B | HIVPB |
| HPI1C | HIVPC |
| HPI1D | HIVPD |
| HPI1E | HIVPE |
| HS1A | HGHQA |
| HS1B | HGHQB |
| HS1C | HGHQC |
| HS1D | HGHQD |
| HS1E | HGHQE |
| HS1F | HGHQF |
| HS1G | . HGHQG |
| HS1H | HGHQH |
| HS1I | HGHQI |
| HS1J | HGHQJ |
| HS1K | HGHQK |
| HS1L | . HGHQL |
| HS2A | HOPFAMO |
| HS2B | HOPFAML |
| HS2C | HOPFAMP |
| HS2D | HOPFAMQ |
| HS2E | HOPFAMK |
| HS2F | HOPFAMR |
| HS3A | HLFSAT1 |
| HS3B | HLFSAT2 |
| HS3C | HLFSAT3 |
| HS3D | HLFSAT4 |
| HS3E | HLFSAT5 |
| HS3F | HLFSAT6 |
| HS3G | LFS |


| HS3H | HLFSAT8 | HV11F | HLFIMPF | HY9 | HYPFBEAU |
| :---: | :---: | :---: | :---: | :---: | :---: |
| HS4A | HLFSATO | HV11G. | HLFIMPG | HY10 | HYPFCLUB |
| HS4B | HLFSATL | HV11H | HLFIMPH | HY11 | HYPFDISC |
| HS5A | HNETSX1 | HV12A | hlocsera | HY12 | HYPFSPOR |
| HS5A | HNETSX2 | HV12B | hlocserb | HY13 | HYPFARCA |
| HS5A | HNETSX3 | HV12C | hlocserc | HY14 | HYPARGM |
| HS5B | HNET1RL | HV12D | hlocserd | HY15 | HYPARGF |
| HS5B | HNET2RL | HV12E | hlocsere | HY16 | HYPTLKM |
| HS5B | HNET3RL | HV13 | HLOCCHD | HY17 | HYPTLKF |
| HS5BOC | HNET1WR | HV14A | . hopNGBHA | HY18 | HYPNPAL |
| HS5BOC | HNET2WR | HV14B | . HOPNGBHB | HY19 | HYPGANG |
| HS5BOC | HNET3WR | HV14C | . HOPNGBHC | HY20 | HYPMKFRN |
| HS5C | HNET1AG | HV14D | HOPNGBHD | HY21 | HYPFGHT |
| HS5C | HNET2AG | HV14E | . HOPNGBHE | HY22 | HYPEATN |
| HS5C | HNET3AG | HV14F | . HOPNGBHF | HY23 | HYPSAVE |
| HS5D | HNET1KN | HV14G | . HOPNGBHG | HY24L | HYPPKML |
| HS5D | HNET2KN | HV14H | . HOPNGBHH | HY24P | HYPPKMP |
| HS5D | HNET3KN | HV15 | HFRNA | HY25 | HYPBEAU |
| HS5E | HNET1PH | HV16 | HFRNB | HY26 | HYPDKLM |
| HS5E | HNET2PH | HV17 | HFRNC | HY27 | HYPSMEV |
| HS5E | HNET3PH | HV18 | HYPPAR | HY28 | HYPSMAG |
| HS5F | HNET1LV | HV19 | HPYHLTH | HY29 | HYPSMOF |
| HS5F | HNET2LV | HV20 | . HPYHWRK | HY30 | HYPSMLW |
| HS5F | HNET3LV | HV21 | HPYNYP | HY31 | HYPSMYR |
| HS5G | HNET1JB | HV21A1 | HPYPNO1 | HY32 | HYPDGFR |
| HS5G | HNET2JB | HV21A2 | HPYPNO2 | HY33 | HYPSAD |
| HS5G | HNET3JB | HV21A3 | HPYPNO3 | HY34 | HYPWOR |
| HS6A | . HNETSOC | HV21B1 | HPYAGE1 | HY35 | HYPBULL |
| HT2B | . HTELWHY | HV21B2 | HPYAGE2 | HY36 | HYPLONE |
| HT45 | HTLFIYRL | HV21B3 | HPYAGE3 | HY37 | HYPBORED |
| HT50 | HTLFIYR | HV22Y1 | HPYWHR1 | HY38 | HYPESTA |
| HV1A | hoppola | HV22Y2 | HPYWHR2 | HY39 | HYPESTB |
| HV1B | HOPPOLB | HV22Y3 | HPYWHR3 | HY40 | HYPESTC |
| HV1C | HOPPOLC | HV23Y1 | HPYMAN1 | HY41 | HYPESTE |
| HV1D | HOPPOLD | HV23Y2 | HPYMAN2 | HY42 | HYPESTF |
| HV2 | HVOTE1 | HV23Y3 | HPYMAN3 | HY43 | HYPESTH |
| HV3 | HVOTE2 | HV24Y1 | HPYARG1 | HY44 | HYPTCHA |
| HV4 | HVOTE3 | HV24Y2 | HPYARG2 | HY45 | HYPTCHB |
| HV5 | HVOTE4 | HV24Y3 | HPYARG3 | HY46 | HYPTCHC |
| HV6 | HVOTE5 | HV25Y1 | . HPYTLK1 | HY47 | HYPESTG |
| HV7 | HVOTE7 | HV25Y2 | . HPYTLK2 | HY48 | . HYPHSW |
| HV8 | HVOTE8 | HV25Y3 | . HPYTLK3 | HY49 | HYPHAP |
| HV9A | . HLACTA | HV26Y1 | HPYSMK1 | HY50 | HYPHFM |
| HV9B | . HLACTB | HV26Y2 | HPYSMK2 | HY51 | HYPHFR |
| HV9C | HLACTC | HV26Y3 | HPYSMK3 | HY52 | HYPHLF |
| HV9D | HLACTD | HV27Y1 | HPYSAD1 | HY53 | HYPCOMA |
| HV9E | . HLACTE | HV27Y2 | HPYSAD2 | HY54 | HYPCOMB |
| HV9F | HLACTF | HV27Y3 | HPYSAD3 | HY55 | HYPCOMC |
| HV9H | HLACTH | HV28Y1 | HPYWOR1 | HY56 | HYPCOMD |
| HV91 | . HLACTI | HV28Y2 | HPYWOR2 | HY57 | HYPCOME |
| HV9J | . HLACTJ | HV28Y3 | HPYWOR3 | HY58 | HYPCOMF |
| HV9K | . HLACTK | HY1 | HYTVHRS | HY59 | HYPCOMG |
| HV9L | HLACTL | HY2 | HYTVSTP | HY60 | HYPOPLA |
| HV10 | HTRUST | HY3 | HYPFPC | HY61 | HYPOPHA |
| HV11A | HLFIMPA | HY4 | HYPFPCGM | HY62 | HYPOPPL |
| HV11B | . HLFIMPB | HY5 | . HYPPALS | HY63 | HYPOPSCB |
| HV11C | HLFIMPC | HY6 | HYPUTEL | HY64 | HYPVTE6 |
| HV11D | HLFIMPD | HY7 | HYPLATE | HY65 | HYPVTE3 |
| HV11E | HLFIMPE | HY8 | HYPFPARK | HY66 | HYPCRWRA |


| HY67 | HYPCRWRB | ID21Y | IEDBGY1 | ID25I1 | IEDQLIN1 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| HY68 | . . HYPEXPL | ID21Y2 | IEDBGY2 | ID25I2 | . IEDQLI2 |
| HY69 | HYPVAND | ID22 | IEDENNE1 | ID25J1 | IEDQLJ1 |
| HY70 | HYPTRUN | ID22M | IEDENM1 | ID25J1 | IEDQLJN1 |
| HY71 | HYPOPSC | ID22M2 | IEDENM2 | ID25J2 | IEDQLJ2 |
| HY72 | HYPPASC | ID22NE2 | IEDENNE2 | ID25NA | IEDQNN2 |
| HY73 | . HYPLVSC | ID22Y | IEDENY1 | ID25NONE | IEDQNN1 |
| HY74 | HYPLVHM | ID22Y2 | IEDENY2 | ID26 | IEDOQL1 |
| HY75 | HYPAMAR | ID23A | IEDFEEA1 | ID26 | IEDOQL2 |
| HY76 | HYPAPAR | ID23A | IEDFEEA2 | ID26NONE | IEDOQLN1 |
| HY77 | HYPWHRS | ID23B | IEDFEEB1 | ID26NONE | IEDOQLN2 |
| HY78 | HYPPAY | ID23B | IEDFEEB2 | ID27 | IEDMORE1 |
| HY80 | HYPSOC | ID23C | IEDFEEC1 | ID27 | IEDMORE2 |
| HY81 | HYPSOCY | ID23C | IEDFEEC2 | ID29DST | IPLBORND |
| HY82 | . HYPDLFA | ID23D | IEDFEED1 | ID290S | IPLBORNC |
| HY82 | HYPDLFB | ID23D | IEDFEED2 | ID30 | IYR2UK4 |
| IDOAD | IDOID | ID23E | IEDFEEE1 | ID31 | IMLSTAT |
| IDOAM | IDOIM | ID23E | IEDFEEE2 | ID32M1 | . ICITZN1 |
| IDOAY | IDOIY4 | ID23F | IEDFEEF1 | ID32M2 | ICITZN2 |
| IDOBA | . IIVLYR | ID23F | IEDFEEF2 | ID33 | IRACE |
| IDOBB | . IIVSTAT2 | ID23G | IEDFEEG1 | ID36 | IPASOC |
| IDOD | IRACH12 | ID23G | IEDFEEG2 | ID36ANA | . IPAJU |
| ID1H | IIVSOIH | ID24 | IEDQUAL1 | ID37 | IPASEMP |
| ID1M | . IIVSOIM | ID24 | IEDQUAL2 | ID38 | . IPABOSS |
| ID2 | . ILKNBRD | ID25A1 | IEDQLA1 | ID39 | IPAMNGR |
| ID3 | ILKMOVE | ID25A1 | IEDQLAN1 | ID40 | IMAJU |
| ID4 | . ILKMOVY | ID25A2 | IEDQLA2 | ID40 | IMASOC |
| ID5 | IXPMOVE | ID25A2 | IEDQLAN2 | ID41 | IMASEMP |
| ID6 | . IPLNEW | ID25A2 | IEDQLBN2 | ID42 | IMABOSS |
| ID7M | IPLNOWM | ID25A2 | IEDQLCN2 | ID43 | IMAMNGR |
| ID7Y | IPLNOWY4 | ID25A2 | IEDQLDN2 | ID44 | IJ1SOC |
| ID8 | IMOVJB | ID25A2 | IEDQLEN2 | ID44NA | IJ1NONE |
| ID9A | . IMOVJBA | ID25A2 | IEDQLFN2 | ID45 | IJ1SEMP |
| ID9B | . IMOVJBB | ID25A2 | IEDQLGN2 | ID46 | IJ1BOSS |
| ID9C | . IMOVJBC | ID25A2 | IEDQLHN2 | ID47 | IJ1MNGR |
| ID9D | . IMOVJBD | ID25A2 | . IEDQLIN2 | ID48 | ILCOH |
| ID9E | . IMOVJBE | ID25A2 | IEDQLJN2 | ID49M | ICOH1BM |
| ID9F | . IMOVJBF | ID25B1 | IEDQLB1 | ID49Y | ICOH1BY |
| ID9G | . IMOVJBG | ID25B1 | IEDQLBN1 | ID50 | ICOH1MR |
| ID9H | IMOVJBH | ID25B2 | IEDQLB2 | ID51M | ICOH1EM |
| ID91 | . IMOVJBI | ID25C1 | . IEDQLC1 | ID51Y | . ICOH1EY |
| ID10M1 | . IMOVY1 | ID25C1 | IEDQLCN1 | ID52 | INMAR |
| ID10M2 | . IMOVY2 | ID25C2 | IEDQLC2 | ID53M | ILMAR1M |
| ID11 | . ISEX | ID25D1 | . IEDQLD1 | ID53Y | ILMAR1Y |
| ID11M | . IDOBM | ID25D1 | IEDQLDN1 | ID54 | . ILPRNT |
| ID11Y | . IDOBY | ID25D2 | . IEDQLD2 | ID55 | ILNPRNT |
| ID12 | ISEX | ID25E1 | IEDQLE1 | ID56M | ICH1BM |
| ID14 | . IMLSTAT | ID25E1 | IEDQLEN1 | ID56Y | ICH1BY |
| ID15 | IMLCHNG | ID25E2 | . IEDQLE2 | ID57 | ISCEND |
| ID16M | . IMLCHM | ID25F1 | IEDQLF1 | ID57NA | . ISCHOOL |
| ID16Y | IMLCHY4 | ID25F1 | IEDQLFN1 | ID58 | . ISCTYPE |
| ID17 | IJBSTAT | ID25F2 | IEDQLF2 | ID59 | ISCNOW |
| ID18 | IEDLYR | ID25G1 | IEDQLG1 | ID60 | IFETYPE |
| ID19 | . IEDTYPE1 | ID25G1 | IEDQLGN1 | ID61 | . IFEEND |
| ID19 | . IEDTYPE2 | ID25G2 | IEDQLG2 | ID61NA | . IFENOW |
| ID20 | . IEDBLYR1 | ID25H1 | . IEDQLH1 | ID62 | . IQFHAS |
| ID20 | IEDBLYR2 | ID25H1 | IEDQLHN1 | ID63A | IQFA |
| ID21M | . IEDBGM1 | ID25H2 | . IEDQLH2 | ID63B | IQFB |
| ID21M2 | . . IEDBGM2 | ID25I1 | . IEDQLI1 | ID63C | . IQFC |


| 63D | D |
| :---: | :---: |
| ID63E | QFE |
| ID63F | QFF |
| ID63G | IQFG |
| ID63H | IQFH |
| ID631 | IQFI |
| ID63J | IQFJ |
| ID63K | IQFK |
| ID63L | IQFL |
| ID63M | IQFM |
| ID63N | IQFN |
| ID64 | IQFED |
| ID65A | IQFEDA |
| ID65B | IQFEDB |
| ID65C | IQFEDC |
| ID65D | IQFEDD |
| ID65E | IQFEDE |
| ID65F | IQFEDF |
| ID65G | IQFEDG |
| ID65H | IQFEDH |
| ID65I | IQFEDI |
| ID65J | IQFEDJ |
| ID65K | IQFEDK |
| ID65L | IQFEDL |
| ID65M | IQFEDM |
| ID65N | . IQFEDN |
| ID650 | IQFEDO |
| ID65P | IQFEDP |
| ID65Q | IQFEDQ |
| ID65R | . IQFEDR |
| ID65S | IQFEDS |
| ID65T | IQFEDT |
| ID66A | NQFEDA |
| ID66B | INQFEDB |
| ID66C | INQFEDC |
| ID66D | . INQFEDD |
| ID66E | INQFEDE |
| ID66F | INQFEDF |
| ID66G | INQFEDG |
| ID66H | INQFEDH |
| ID66I | INQFEDI |
| ID66J | INQFEDJ |
| ID66K | INQFEDK |
| ID66L | INQFEDL |
| ID66M | INQFEDM |
| ID66N | INQFEDN |
| ID660 | INQFEDO |
| ID66P | INQFEDP |
| ID66Q | INQFEDQ |
| ID66R | . INQFEDR |
| ID66S | INQFEDS |
| ID66T | INQFEDT |
| ID67 | ITRAIN |
| ID68 | . INTRAIN |
| ID69 | ITRPLCE1 |
| ID69 | ITRPLCE2 |
| ID69 | ITRPLCE3 |
| ID70A | TRWHYA2 |
| 70A1 | RWHYA1 |


| ID70A3. | ITRWHYA3 | ID75F2 | ITRQLF2 |
| :---: | :---: | :---: | :---: |
| ID70B | ITRWHYB2 | ID75F3 | ITRQLF3 |
| ID70B1. | ITRWHYB1 | ID75G1 | ITRQLG1 |
| ID70B3 . | ITRWHYB3 | ID75G2 | ITRQLG2 |
| ID70C | ITRWHYC2 | ID75G3 | ITRQLG3 |
| ID70C1 | ITRWHYC1 | ID75H1 | ITRQLH1 |
| ID70C3 | ITRWHYC3 | ID75H2 | ITRQLH2 |
| ID70D | ITRWHYD2 | ID75H3 | ITRQLH3 |
| ID70D1 | ITRWHYD1 | ID75I1 | . ITRQLII |
| ID70D3 | ITRWHYD3 | ID75I2 | ITRQLI2 |
| ID70E | ITRWHYE2 | ID7513 | ITRQLI3 |
| ID70E1. | ITRWHYE1 | ID75J1 | ITRQLJ1 |
| ID70E3. | ITRWHYE3 | ID75J2 | ITRQLJ2 |
| ID71 | . ITRQ1 | ID75J3 | ITRQLJ3 |
| ID71 | . ITRQ2 | ID75NONE | ITRQLNN1 |
| ID71 | . ITRQ3 | ID75NONE | ITRQLNN2 |
| ID71 | . ITRU1 | ID75NONE | ITRQLNN3 |
| ID71 | ITRU2 | ID76AN1 | ITRQLAN1 |
| ID71 | ITRU3 | ID76AN2 | ITRQLAN2 |
| ID72A | ITRFEEA2 | ID76AN3 | ITRQLAN3 |
| ID72A1 | ITRFEEA1 | ID76BN1 | ITRQLBN1 |
| ID72A3. | ITRFEEA3 | ID76BN2 | ITRQLBN2 |
| ID72B | ITRFEEB2 | ID76BN3 | ITRQLBN3 |
| ID72B1 | ITRFEEB1 | ID76CN1 | ITRQLCN1 |
| ID72B3 | ITRFEEB3 | ID76CN2 | ITRQLCN2 |
| ID72C | ITRFEEC2 | ID76CN3 | ITRQLCN3 |
| ID72C1 | ITRFEEC1 | ID76DN1 | ITRQLDN1 |
| ID72C3 | ITRFEEC3 | ID76DN2 | ITRQLDN2 |
| ID72E | ITRFEEE2 | ID76DN3 | ITRQLDN3 |
| ID72E1 | ITRFEEE1 | ID76EN1 | ITRQLEN1 |
| ID72E3. | ITRFEEE3 | ID76EN2 | ITRQLEN2 |
| ID72F | ITRFEEF2 | ID76EN3 | ITRQLEN3 |
| ID72F1 | ITRFEEF1 | ID76FN1 | ITRQLFN1 |
| ID72F3 | ITRFEEF3 | ID76FN2 | ITRQLFN2 |
| ID72G | ITRFEEG2 | ID76FN3 | ITRQLFN3 |
| ID72G1 | ITRFEEG1 | ID76GN1 | ITRQLGN1 |
| ID72G3 | ITRFEEG3 | ID76GN2 | ITRQLGN2 |
| ID73 | ITRQLXP1 | ID76GN3 | ITRQLGN3 |
| ID73 | ITRQLXP2 | ID76HN1 | ITRQLHN1 |
| ID73 | ITRQLXP3 | ID76HN2 | ITRQLHN2 |
| ID74 | ITRQLAC1 | ID76HN3 | ITRQLHN3 |
| ID74 | ITRQLAC2 | ID76IN1 | ITRQLIN1 |
| ID74 | ITRQLAC3 | ID76IN2 | ITRQLIN2 |
| ID75A1 | . ITRQLA1 | ID76IN3 | . ITRQLIN3 |
| ID75A2. | . ITRQLA2 | ID76JN1 | ITRQLJN1 |
| ID75A3. | . ITRQLA3 | ID76JN2 | ITRQLJN2 |
| ID75B1. | . ITRQLB1 | ID76JN3 | ITRQLJN3 |
| ID75B2. | ITRQLB2 | ID77 | . ITROQL1 |
| ID75B3. | . ITRQLB3 | ID77 | . ITROQL2 |
| ID75C1 | . ITRQLC1 | ID77 | . ITROQL3 |
| ID75C2 | . ITRQLC2 | ID77 | ITROQLN3 |
| ID75C3 | . ITRQLC3 | ID77NONE | ITROQLN1 |
| ID75D1 | . ITRQLD1 | ID77NONE | ITROQLN2 |
| ID75D2 | . ITRQLD2 | ID78 | ITRMORE1 |
| ID75D3 | . ITRQLD3 | ID78 | ITRMORE2 |
| ID75E1. | ITRQLE1 | ID79 | IMABWT |
| ID75E2. | ITRQLE2 | ID80 | IMABWTN |
| ID75E3. | ITRQLE3 | ID81 | IBWTAG1 |
| ID75F1 | ITRQLF1 | ID81 | IBWTAG2 |


| ID81 | IBWTAG3 | ID94E | . IWLSHUE | IE41 | IJBONAM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ID81 | IBWTAG4 | ID95A | IIVDA | IE42 | IJBONG |
| ID81 | IBWTPN1 | ID95B | IIVDB | IE43 | IJBRISE |
| ID81 | IBWTPN2 | ID95C | IIVDC | IE44 | ITUJBPL |
| ID81 | IBWTPN3 | ID95D | IIVDD | IE45 | ITUIN1 |
| ID81 | IBWTPN4 | ID95E | IIVDE | IE46 | IJBOPPS |
| ID82 | . IBWTXP1 | IE1 | IJBHAS | IE460C | IPAYSW |
| ID82 | . IBWTXP2 | IE2 | IJBOFF | IE47 | IJBtime |
| ID82 | . IBWTXP3 | IE3. | IJBOFFY | IE48 | IJBWKHRA |
| ID82 | . IBWTXP4 | IE4 | IJBTERM1 | IE48 | IJBWKHRB |
| ID83 | IBWTEL1 | IE5 | IJBSOC | IE48 | . IJBWKHRC |
| ID83 | IBWTEL2 | IE6 | IJBSIC | IE48 | . IJBWKHRD |
| ID83 | IBWTEL3 | IE7 | IJBSEMP | IE48 | . IJBWKHRE |
| ID83 | IBWTEL4 | IE8 | IJBMNGR | IE48 | IJBWKHRF |
| ID84 | IBWTWK1 | IE9 | IJBSECT | IE48 | . IJBWKHRG |
| ID84 | IBWTWK2 | IE10 | IJBSIZE | IE48 | IJBWKHRH |
| ID84 | IBWTWK3 | IE11 | IJBHRS | IE48 | IPAYSG |
| ID84 | IBWTWK4 | IE12 | IJBOT | IE49 | IJBPEN |
| ID85 | IBWTKN1 | IE13 | IJBOTPD | IE4A | IJBTERM2 |
| ID85 | IBWTKN2 | IE14 | IJBHRLK | IE50 | IJBPENM |
| ID85 | IBWTKN3 | IE15 | IJBPL | IE52D | IJBBGD |
| ID85 | IBWTKN4 | IE16 | IJBTTWT | IE52M | IJBBGM |
| ID86 | IBWTLB1 | IE17 | IJBTTWM | IE52Y | IJBBGY4 |
| ID86 | IBWTLB2 | IE18B | IJBSAT2 | IE53 | IJBBGLY |
| ID86 | IBWTLB3 | IE18D | IJBSAT4 | IE54 | IPAYS |
| ID86 | . IBWTLB4 | IE18F | IJBSAT6 | IE59 | IPAYLY |
| ID86 | IBWTOZ1 | IE18G | IJBSAT7 | IE600C | IPAYLYW |
| ID86 | IBWTOZ2 | IE19 | IJBSAT | IE61 | IPAYLYG |
| ID86 | IBWTOZ3 | IE20 | IPAYGL | IE65 | INMWCHK |
| ID86 | IBWTOZ4 | IE210C | IPAYGW | IE66. | INMWHRCH |
| ID87 | IBWTGM1 | IE22 | IPAYNL | IE67. | InMWPACH |
| ID87 | IBWTGM2 | IE230C | IPAYNW | IE68 | INMWOPCH |
| ID87 | IBWTGM3 | IE24 | IPAYSLP | IE70 | INMWGBEF |
| ID87 | IBWTGM4 | IE26 | IPAYUSL | IE71 | INMWGFX |
| ID88 | . IBWTG51 | IE27 | IPAYU | IE72A | INMWGFXA |
| ID88 | . IBWTG52 | IE280C | IPAYUW | IE72B | INMWGFXB |
| ID88 | . IBWTG53 | IE29 | IPAYUG | IE72C | INMWGFXC |
| ID88 | . IBWTG54 | IE30A | IPAYDF1 | IE72D | INMWGFXD |
| ID89 | INATIDA | IE30B | IPAYDF2 | IE73 | IJSBOSS |
| ID89 | INATIDB | IE30C | IPAYDF3 | IE74 | IJSSIZE |
| ID89 | InATIDC | IE30D | IPAYDF4 | IE75 | IJSHRS |
| ID89 | INATIDD | IE30E | IPAYDF5 | IE76 | IJSHRLK |
| ID89 | INATIDE | IE30F | IPAYDF6 | IE77 | IJStime |
| ID89 | INATIDF | IE30G | IPAYDF7 | IE78 | IJSTYPEB |
| ID89 | INATIDG | IE30H | IPAYDF9 | IE79 | IJSACCS |
| ID89 | INATIDH | IE301 | IPAYDF8 | IE80 | IJSPART |
| ID89 | INATIDI | IE31 | IPAYTYP | IE81BM | IJSPRBM |
| ID90 | INATIDMN | IE32 | IOVTPAY | IE81BY | IJSPRBY4 |
| ID91 | IMABORN | IE33 | IEXTRATE | IE81EM | IJSPREM |
| ID92 | IPABORN | IE33 | IEXTREST | IE81EY | IJSPREY4 |
| ID93A | IWLSHA | IE34 | IBASRATE | IE82 | IJSPRF |
| ID93B | IWLSHB | IE34 | IBASREST | IE83 | IJSPRLS |
| ID93C | IWLSHC | IE35 | IOVTRATE | IE84 | IJSPRTX |
| ID93D | IWLSHD | IE35 | IOVTREST | IE85 | IJSPRNI |
| ID93E | IWLSHE | IE36 | . IOVTCHC | IE86BM | IJSPRBM |
| ID94A | .IWLSHUA | IE37 | IPAYNMW1 | IE86BY | IJSPRBY4 |
| ID94B | . IWLSHUB | IE38 | IPAYNMW2 | IE86EM | IJSPREM |
| ID94C | IWLSHUC | IE39 | IJBPERFP | IE86EY | IJSPREY4 |
| ID94D | IWLSHUD | IE40 | IJBONUS | IE87 | IJSPRF |


| IE88 | IJSPRLS | IE127 | IJBLKY1 | IF3D | IFRVAL |
| :---: | :---: | :---: | :---: | :---: | :---: |
| IE89 | IJSPRTX | IE128 | IJBLKY2 | IF3EOC | IFRW |
| IE90 | IJSPRNI | IE129 | IEAAGE | IF3F | IFRJT |
| IE91 | IJSPAYU | IE130 | IJBUB | IF3FPN | IFRJTPN |
| IE92 | IJSPAYW | IE131 | IJBUBY | IF3SEQ | IFISEQ |
| IE93 | IJSPYTX | IE132 | IJ2HAS | IF4 | IFISIT |
| IE94 | . IJSPYNI | IE133 | IJ2SOC | IF5 | IFISITC |
| IE95 | IJSPL | IE134 | IJ2SEMP | IF6 | IFISITY |
| IE96 | IJSTTWT | IE135 | IJ2HRS | IF601 | IPRF125 |
| IE97 | IJSTTWM | IE136 | IJ2PAY | IF7 | IFISITX |
| IE98A | IJSSAT1 | IE137A. | . IIVEA | IF8 | IFIYRDIA |
| IE98B | IJSSAT2 | IE137B . | . IIVEB | IF9A | IFIYRDB1 |
| IE98D | IJSSAT4 | IE137C | IIVEC | IF9B | IFIYRDB2 |
| IE98E | IJSSAT5 | IE137D | IIVED | IF9C | IFIYRDB3 |
| IE99 | . IJSSAT | IE137E | . IIVEE | IF9D | IFIYRDB4 |
| IE100D | IJSBGD | IEG3 | PID | IF9E | IFIYRDB5 |
| IE100M | IJSBGM | IEG4 | IHGSEX | IF9F | IFIYRDB6 |
| IE100Y | IJSBGY4 | IEG4M | IHGBM | IF10 | ISAVE |
| IE101A | IJBLKCHA | IEG4Y | IHGBY | IF11 | ISAVED |
| IE101B | IJBLKCHB | IEG6 | Ilviows | IF12M1 | ISAVEY1 |
| IE101C | IJBLKCHC | IEG6 | IIVLYR | IF12M2 | ISAVEY2 |
| IE101D | IJBLKCHD | IEG7 | IIVSTAT1 | IF13 | IPPPEN |
| IE101E | IJBLKCHE | IEG8 | IIVELIG | IF14 | IPENB4 |
| IE102A | IJBXPCHA | IEG9 | IHHMEM | IF15 | IPENB4Y4 |
| IE102B | IJBXPCHB | IEG10 | INEWHY | IF16 | IPENB4V |
| IE102C | IJBXPCHC | IEG11 | ILVWHY | IF170C | IPENB4W |
| IE102D | IJBXPCHD | IEG12M | ILVMN | IF18 | IPENYR4 |
| IE102E | IJBXPCHE | IEG12M | . INEMNJN | IF19 | . IPENADD |
| IE103A | IJBSTRNA | IEG12Y | ILVYR4 | IF20 | IPENADV |
| IE103B | IJBSTRNB | IEG12Y | INEYRJN4 | IF210C | IPENADW |
| IE103C | IJBSTRNC | IEG13 | ILVLOC | IF22 | IWINDF |
| IE103D | IJBSTRND | IEG14 | IIVFIO | IF23A | IWINDFA |
| IE105M1 | IJBCHC1 | IEG15 | IIVRREF | IF23B | IWINDFB |
| IE105M2 | IJBCHC2 | IEG16 | IIVIREIS | IF23C | IWINDFC |
| IE105M3 | ІЈВСНС3 | IF2 | . INF1 | IF23D | IWINDFD |
| IE107 | IXPCHCF | IF2 | INFR | IF23F | IWINDFF |
| IE108 | IXPCHC | IF3A | IFICODE | IF23G | IWINDFG |
| IE109 | IHUXPCH | IF3B01 | IFR01 | IF23H. | IWINDFH |
| IE110 | IHUNURS | IF3B02 | IFR02 | IF24A | IWINDFAY |
| IE111 | . IJULK1 | IF3B03 | IFR03 | IF24B | IWINDFBY |
| IE112 | IJULK4 | IF3B04 | IFR04 | IF24C | IWINDFCY |
| IE113A | IJULKA | IF3B05 | IFR05 | IF24D | IWINDFDY |
| IE113B | IJULKB | IF3B06 | IFR06 | IF24F | IWINDFFY |
| IE113C | IJULKC | IF3B07 | IFR07 | IF24G | IWINDFGY |
| IE113D | IJULKD | IF3B08 | IFR08 | IF24H | IWINDFHY |
| IE113E | IJULKE | IF3B09 | IFR09 | IF25A | IXPMEAL |
| IE114 | . IJULKJB | IF3B10 | IFR10 | IF25B | . IXPLEIS |
| IE115 | . IJUBGN | IF3B11 | IFR11 | IF26 | IFTEXHH |
| IE116 | . IJUSPEC | IF3B12 | IFR12 | IF27A1 | IFTEXA |
| IE117 | . IJUSOC | IF3B13 | . IFR13 | IF27A2 | IFTEXB |
| IE118 | IJUHRSX | IF3B14 | IFR14 | IF27A3 | IFTEXC |
| IE119 | IJUPAYX | IF3B15 | IFR15 | IF27B11 | IFTEXA1 |
| IE120 | IJUPAYL | IF3B16 | IFR16 | IF27B12 | IFTEXB1 |
| IE121 | IJUHRSL | IF3B17 | IFR17 | IF27B13 | IFTEXC1 |
| IE122 | InmwUFXA | IF3B18 | IFR18 | IF27B21 | IFTEXA2 |
| IE123 | InmwUFXB | IF3B19 | IFR19 | IF27B22 | IFTEXB2 |
| IE124 | . IEPROSH | IF3B20 | IFR20 | IF27B23 | IFTEXC2 |
| IE125 | . IJBASP1 | IF3BAL | IFRALL | IF27B31 | IFTEXA3 |
| IE126 | . IJBASP2 | IF3C | IFRNOW | IF27B32 | IFTEXB3 |


| IF27B33 | IFTEXC3 | IF136 | IF136 | IH32B | IRENT7 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| IF27B41 | IFTEXA4 | IF137 | IF137 | IH32C | IRENT2 |
| IF27B42 | IFTEXB4 | IF138 | IF138 | IH32D | IRENT3 |
| IF27B43 | IFTEXC4 | IF139 | IF139 | IH32E | IRENT4 |
| IF27B51 | IFTEXA5 | IF140 | IF140 | IH32F. | IRENT5 |
| IF27B52 | IFTEXB5 | IF141 | IF141 | IH32G | IRENT8 |
| IF27B53 | IFTEXC5 | IF142 | IF142 | IH32H | IRENT6 |
| IF27B61 | IFTEXA6 | IF151 | IF151 | IH33 | IRENTHB |
| IF27B62 | IFTEXB6 | IF152 | IF152 | IH34 | IRENTG |
| IF27B63 | IFTEXC6 | IF153 | IF153 | IH35 | IRENTG |
| IF27C1 | IFTEXAV | IF154 | IF154 | IH36 | IRENTGW |
| IF27C2 | IFTEXBV | IF155 | IF155 | IH37 | IXPHSDF |
| IF27C3 | IFTEXCV | IF156 | IF156 | IH38A | IXPHSD1 |
| IF27DOC1 | IFTEXAW | IF157 | IF157 | IH38B | IXPHSD2 |
| IF27DOC2 | IFTEXBW | IF158 | IF158 | IH39 | IXPHSDB |
| IF27DOC3 | . IFTEXCW | IF159 | IF159 | IH40A | IHSBTH |
| IF28 | ISPINHH | IHOAD | IHHDOI | IH40A | . IHSGDN |
| IF29A | . IHUBUYS | IHOAM | IHHMOI | IH40A | IHSKCH |
| IF29B | . IHUFRYS | IHOAY | IHHYOI4 | IH40A | IHSTLT |
| IF29C | IHUMOPS | IHOBH | IHHSOIH | IH40B | IHSBTHS |
| IF29D | IHUIRON | IHOBM | IHHSOIM | IH40B | IHSGDNS |
| IF30 | IHHCH12 | IHOC | IHSTYPE | IH40B | IHSKCHS |
| IF31 | IHUSITS | IH1A | IHSRINS | IH40B | IHSTLTS |
| IF32 | IHOWLNG | IH2 | IHSROOM | IH41A | IXPGASY |
| IF33 | . ICARUSE | IH3 | IHSOWND | IH41B | IXPLECY |
| IF34M1 | IEVENT1 | IH4M1 | IHSOWR1 | IH41C | IXPOILY |
| IF34M1 | IEVENT1S | IH4M2 | IHSOWR2 | IH41D | IXPSFLY |
| IF34M2 | IEVENT2 | IH5 | IHSVAL | IH42 | IHEATCH |
| IF34M2 | IEVENT2S | IH6 | IMGHAVE | IH43 | IHEATYP |
| IF34M3 | IEVENT3 | IH7 | IHSOWRP | IH44A | IHSPRBG |
| IF34M3 | IEVENT3S | IH8 | IMGYNOT | IH44B | IHSPRBH |
| IF34M4 | IEVENT4 | IH9 | IHSCOST | IH44C | IHSPRBI |
| IF34M4 | IEVENT4S | IH10 | IHSYR04 | IH44D | IHSPRBJ |
| IF35A | . IIVFA | IH12 | IMGYR04 | IH44E | IHSPRBK |
| IF35B | . . IIVFB | IH13 | . IMGLY | IH44F. | IHSPRBL |
| IF35C | . IIVFC | IH14 | IHSIVW8 | IH44G | IHSPRBM |
| IF35D | . IIVFD | IH17 | IMGOLD | IH44H | IHSPRBN |
| IF35E | . . . IIVFE | IH18 | IMGLIFE | IH44I | IHSPRBO |
| IF36H | . IIVFOIH | IH19 | IMGTYPE | IH44J | IHSPRBP |
| IF36M | . IIVFOIM | IH2O | IMGXTRA | IH44K | IHSPRBQ |
| IF37 | IIVSC | IH21 | IMGNEW | IH45 | IHSCTAX |
| IF101 | . IF101 | IH22A | IMGXTY1 | IH46 | IHS2OWND |
| IF102 | . IF102 | IH22B | IMGXTY2 | IH47 | IHS2VAL |
| IF103 | . . IF103 | IH22C | IMGXTY3 | IH49 | IMGTOT |
| IF104 | . . IF104 | IH22D | IMGXTY4 | IH50 | ICDHAVE |
| IF105 | . IF105 | IH22E | IMGXTY5 | IH51A | ICD1USE |
| IF106 | . . IF106 | IH23 | IXPMG | IH51B | ICD2USE |
| IF116 | . IF116 | IH24A | IXPMG1 | IH51C | ICD10USE |
| IF118 | . . IF118 | IH24B | . IXPMG2 | IH51D | ICD11USE |
| IF119 | . . IF119 | IH24C | . IXPMG3 | IH51E | ICD3USE |
| IF121 | . IF121 | IH24D | . IXPMG4 | IH51F. | ICD4USE |
| IF122 | . IF122 | IH25 | . IHSJB | IH51G | ICD5USE |
| IF124 | . IF124 | IH26M1 | IRENTP1 | IH51H | ICD6USE |
| IF125 | . . IF125 | IH26M2 | IRENTP2 | IH51I | ICD7USE |
| IF126 | . IF126 | IH27 | IRENTLL | IH51J. | ICD8USE |
| IF127 | . IF127 | IH28 | IRENTF | IH51K | ICD9USE |
| IF128 | . IF128 | IH30 | . IRENT | IH51L | ICD12USE |
| IF132 | . IF132 | IH31 | IRENTW | IH52 | ICDBGHT |
| IF135 | . . IF135 | IH32A | . IRENT1 | IH53A | . ICD1NEW |


| IH53B | ICD2NEW | II6A | IIV6A | IM2M | IHLPRBM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| IH53C | . ICD10NEW | II6B | . IIV6B | IM2M0 | IHLPRB |
| IH53D | . ICD11NEW | II6C | IIV6C | IM3 | IHLSF1 |
| IH53E | ICD3NEW | II6D | IIV6D | IM4 | IHLSF2 |
| IH53F | ICD4NEW | II6E | IIV6E | IM5A | IHLSF3A |
| IH53G | ICD5NEW | 117 | . IIV6F | IM5B | IHLSF3B |
| IH53H | ICD6NEW | 118 | IIV7 | IM5C | IHLSF3C |
| IH53I | ICD7NEW | IJ5D | ICJSBGD | IM5D | IHLSF3D |
| IH53J | ICD8NEW | IJ5M | ICJSBGM | IM5E | IHLSF3E |
| IH53K | ICD9NEW | IJ5Y | ICJSBGY4 | IM5F | IHLSF3F |
| IH53L | . ICD12NEW | IJ6 | INEMST | IM5G | IHLSF3G |
| IH54A | ICD1CST | IJ7D | ICJSBGD | IM5H | IHLSF3H |
| IH54B | ICD2CST | IJ7M | ICJSBGM | IM5I | IHLSF3I |
| IH54C | ICD10CST | IJ7Y | ICJSBGY4 | IM5J | IHLSF3J |
| IH54D | ICD11CST | IJ8 | ICJSBLY | IM6A | IHLSF4A |
| IH54E | ICD3CST | IJ9 | IJHSTAT | IM6B | IHLSF4B |
| IH54F | ICD4CST | IJ10D | IJHBGD | IM6C | IHLSF4C |
| IH54G | ICD5CST | IJ10M | IJHBGM | IM6D | IHLSF4D |
| IH54H | . ICD6CST | IJ10Y | IJHBGY4 | IM7A | IHLSF5A |
| IH54I | . ICD7CST | IJ12 | INJBS | IM7B | IHLSF5B |
| IH54J | ICD8CST | IJ14 | IJHSOC | IM7C | IHLSF5C |
| IH54K | . ICD9CST | IJ16 | IJHSEMP | IM8 | IHLSF6 |
| IH54L | . ICD12CST | $1 J 17$ | IJHBOSS | IM9 | IHLSF7 |
| IH55 | . IXPHP | $1 J 18$ | IJHSECT | IM10 | IHLSF8 |
| IH56 | . IXPHPDF | $1 J 19$ | IJHMNGR | IM11A | IHLSF9A |
| IH57A | . IHSCANA | IJ21 | IJHPLDF | IM11B | IHLSF9B |
| IH57B | . IHSCANB | IJ22 | IJHSIC | IM11C | IHLSF9C |
| IH57C | . IHSCANC | IJ23 | IJHSIZE | IM11D | IHLSF9D |
| IH57D | . IHSCAND | IJ24 | IJHPAYL | IM11E | IHLSF9E |
| IH57E | . IHSCANE | IJ250C | IJHPYLW | IM11F | IHLSF9F |
| IH57F | . IHSCANF | IJ26 | IJHPYLG | IM11G | IHLSF9G |
| IH58A | . IHSCNTA | IJ27 | IJHSTPY | IM11H | IHLSF9H |
| IH58B | . IHSCNTB | IJ28 | IJBLKY | IM11I | . IHLSF91 |
| IH58C | . IHSCNTC | IJ31 | IJBHAD | IM11J | IHLSF9J |
| IH58D | . IHSCNTD | IJ32 | IJLEND4 | IM12A | IHLSF10A |
| IH58E | . IHSCNTE | IJ33 | IJLSOC | IM12B | IHLSF10B |
| IH58F | . IHSCNTF | IJ34 | IJLSIC | IM12C | IHLSF10C |
| IH59 | . IXPFOOD | IJ35 | IJLSEMP | IM12D | IHLSF10D |
| IH60 | . INCARS | IJ36 | IJLBOSS | IM13 | IHL2GP |
| IH61 | ICAROWN | IJ37 | IJLMNGR | IM14 | IHL2HOP |
| IH62M1 | IIVH1 | IJ38 | IJLSIZE | IM15 | . . IXDTS |
| IH62M2 | IIVH2 | IJ39A | . IIVJA | IM16 | . INXDTS |
| IH62M3 | IIVH3 | IJ39B | IIVJB | IM17 | IHOSP |
| IH63H | . IHHFOIH | IJ39C | IIVJC | IM18 | IHOSPD |
| IH63M | . IHHFOIM | IJ39D | IIVJD | IM20 | IHOSPCH |
| IHG2 | . IHGR2R | IJ39E | IIVJE | IM21 | IHOSPNHS |
| IHG3 | . IHGSEX | IM1 | IHLDSBL | IM22 | . IHLCVR |
| IHG4M | . . IHGBM | IM2A | IHLPRBA | IM23 | IHLCVRH |
| IHG4Y | . . IHGBY | IM2B | IHLPRBB | IM24 | IHLCVRL |
| IHG8 | IMASTAT | IM2C | IHLPRBC | IM25 | IHLSV |
| IHG9 | . IHGSPN | IM2D | IHLPRBD | IM26A | IHLSVA |
| IHG10 | . . IHGEMP | IM2E | IHLPRBE | IM26B | . IHLSVB |
| IHG11 | . . IHGFNO | IM2F | . IHLPRBF | IM26C | . IHLSVC |
| IHG12 | . IHGMNO | IM2G | IHLPRBG | IM26D | . IHLSVD |
| IHG13 | . IHGRA | IM2H | IHLPRBH | IM26E | . IHLSVE |
| II1 | . IIV1 | IM2I | . IHLPRRBI | IM26F | IHLSVF |
| II2 | . IIV2 | IM2J | IHLPRBJ | IM26G | IHLSVG |
| 114 | . IIV4 | IM2K | IHLPRBK | IM26H | IHLSVH |
| 115 | . IIV5 | IM2L | . IHLPRBL | IM26I | IHLSVI |


| IM26J1 | IHLSVJ | IM41P3 | IAIDHUC | IS2H | IOPFAMH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| IM26J2 | IHLSVK | IM42 | IAIDXHH | IS2I | IOPFAMI |
| IM26L | IHLSVL | IM43 | INAIDXHH | IS3A | ILFSAT1 |
| IM26M | IHLSVM | IM44M1 | . IAIDHU1 | IS3B | ILFSAT2 |
| IM27A | IHLSVAN | IM44M2 | IAIDHU2 | IS3C | ILFSAT3 |
| IM27B | . IHLSVBN | IM45A | . IIVMA | IS3D | ILFSAT4 |
| IM27C | . IHLSVCN | IM45B | . IIVMB | IS3E | ILFSAT5 |
| IM27D | . IHLSVDN | IM45C | . IIVMC | IS3F | ILFSAT6 |
| IM27E | . IHLSVEN | IM45D | IIVMD | IS3G | ILFSAT7 |
| IM27F | IHLSVFN | IM45E | . IIVME | IS3H | ILFSAT8 |
| IM27G | IHLSVGN | IM46 | IAIDHRS | IS4A | ILFSATO |
| IM27H | . IHLSVHN | IP2B | IPRRS2I | IS4B | ILFSATL |
| IM27I | IHLSVIN | IP2C | IPRIPN | IS5A | IXSUPA |
| IM27J1 | IHLSVJN | IP2D | IPRWHY | IS5B | IXSUPB |
| IM27J2 | IHLSVKN | IP3 | IPPLEVR | IS5C | . IXSUPC |
| IM27L | IHLSVLN | IP10M | IPRESBGM | IS6A | ISSUPA |
| IM27M | IHLSVMN | IP10Y | IPRESBY4 | IS6B | ISSUPB |
| IM28A | IHLSVAF | IP11 | IPRESLY | IS6C | ISSUPC |
| IM28B | IHLSVBF | IP23 | . IPRFEHQ | IS6D | ISSUPD |
| IM28C | IHLSVCF | IP25 | . IPRSEHQ | IS6E | ISSUPE |
| IM28D | IHLSVDF | IP48 | IPRJBFT | IS7A | ISSUP1 |
| IM28E | IHLSVEF | IP49M | . IPRJBBGM | IS7B | ISSUPR2R |
| IM28F | IHLSVFF | IP49Y | IPRJBBY4 | IT2B | ITELWHY |
| IM28G | IHLSVGF | IP50 | IPRJBLY | IT45 | ITLFIYRL |
| IM28H | IHLSVHF | IP60A | IPRF101 | IT50 | ITLFIYR |
| IM28I | IHLSVIF | IP60B | . IPRF102 | IV1A | IOPNATA |
| IM28J1 | IHLSVJF | IP60C | IPRF116 | IV1B | IOPNATB |
| IM28J2 | IHLSVKF | IP60D | IPRF131 | IV1C | IOPNATC |
| IM28L | IHLSVLF | IP60F | . IPRF135 | IV1D | IOPNATD |
| IM28M . | IHLSVMF | IP60G | . IPRF137 | IV1E | IOPNATE |
| IM29 | IHLCK | IP60H | . IPRF139 | IV1F | IOPNATF |
| IM30A | IHLCKA | IP60J | . IPRF141 | IV2 | IVOTE1 |
| IM30B | IHLCKB | IP60NONE | . IPRFIRN | IV3 | . IVOTE2 |
| IM30C | IHLCKC | IP61 | . IPREARN | IV4 | . IVOTE3 |
| IM30D | IHLCKD | IP61 | . IPRFITB | IV5 | IVOTE4 |
| IM30E | . IHLCKE | IPI1A | IIVPA | IV6 | . IVOTE5 |
| IM30F | IHLCKI | IPI1B | IIVPB | IV7 | IVOTE7 |
| IM30G | IHLCKF | IPI1C | . IIVPC | IV8 | . IVOTE8 |
| IM30H | IHLCKG | IPI1D | . IIVPD | IV9 | ISWVT1 |
| IM301 | IHLCKH | IPI1E | . IIVPE | IV10 | . ISWVT2 |
| IM31A | . IHLCKAN | IS1A | IGHQA | IV11 | . ISWVT3 |
| IM31B | . IHLCKBN | IS1B | IGHQB | IV12 | IOPDEV1 |
| IM31C | IHLCKCN | IS1C | . IGHQC | IV13 | IOPDEV2 |
| IM31D | IHLCKDN | IS1D | . IGHQD | IV14 | IOPEUR1 |
| IM31E | . IHLCKEN | IS1E | . IGHQE | IV15 | IOPEUR2 |
| IM31F | IHLCKIN | IS1F | . . IGHQF | IV16 | IOPEUR3 |
| IM31G | IHLCKFN | IS1G | . . IGHQG | IV17 | IOPEUR4 |
| IM31H | IHLCKGN | IS1H | IGHQH | IV18 | IORGM |
| IM31\| | . IHLCKHN | IS1I | . IGHQI | IV19A | IORGMA |
| IM32 | ISMEVER | IS1J | . . IGHQJ | IV19B | . IORGMB |
| IM33 | ISMNOW | IS1K | . . IGHQK | IV19C | IORGMC |
| IM34 | INCIGS | IS1L | . . IGHQL | IV19D | IORGMD |
| IM35 | . ISMCIGS | IS2A | . IOPFAMA | IV19E | IORGME |
| IM36 | ISMNCIGS | IS2B | . IOPFAMB | IV19F | IORGMF |
| IM37 | ISMSTOP | IS2C | IOPFAMC | IV19G | . IORGMG |
| IM38 | ISMAGBG | IS2D | IOPFAMD | IV19H | . IORGMP |
| IM40 | . IAIDHH | IS2E | . IOPFAME | IV19I | . IORGMQ |
| IM41P1 | IAIDHUA | IS2F | IOPFAMF | IV19J | IORGMO |
| IM41P2 | IAIDHUB | IS2G | . IOPFAMG | IV19K | . IORGMH |


| IV19L | IORGMI | IY31 | IYPLONE | JD9G | JMOVJBG |
| :---: | :---: | :---: | :---: | :---: | :---: |
| IV19M | IORGMJ | IY32 | IYPBORED | JD9H | JMOVJBH |
| IV19N | IORGMK | IY33 | IYPESTA | JD91 | JMOVJBI |
| IV190 | IORGML | IY34 | IYPESTI | JD10M1 | JMOVY1 |
| IV19P . | IORGMM | IY35 | IYPESTB | JD10M2 | JMOVY2 |
| IV20 | IORGA | IY36 | IYPESTJ | JD11 | JSEX |
| IV20A | IORGAA | IY37 | IYPESTC | JD11M | JDOBM |
| IV20B | IORGAB | IY38 | IYPESTK | JD11Y | JDOBY |
| IV20C | IORGAC | IY39 | IYPESTE | JD12 | JSEX |
| IV20D | IORGAD | IY40 | IYPESTF | JD14 | JMLSTAT |
| IV20E | IORGAE | IY41 | IYPESTH | JD15 | JMLCHNG |
| IV20F . | . IORGAF | IY42 | IYPTCHA | JD16M | JMLCHM |
| IV20G | IORGAG | IY43 | IYPTCHB | JD16Y | JMLCHY4 |
| IV20H | . IORGAP | IY44 | IYPHSW | JD17 | JJBSTAT |
| IV20I | IORGAQ | IY45 | IYPHAP | JD18 | JEDLYR |
| IV20J | . IORGAO | IY46 | . IYPHFM | JD19 | JEDTYPE1 |
| IV20K | IORGAH | IY47 | . IYPHFR | JD19 | JEDTYPE2 |
| IV20L | IORGAI | IY48 | IYPHLF | JD20 | JEDBLYR2 |
| IV20M | . IORGAJ | IY49 | IYPOPFF | JD20 | JEDBLYR1 |
| IV20N | . IORGAK | IY50 | IYPOPFB | JD21M | JEDBGM1 |
| IV200 | . IORGAL | IY51 | IYPOPFJ | JD21M2 | JEDBGM2 |
| IV20P . | IORGAM | IY52 | IYPOPPL | JD21Y | JEDBGY1 |
| IV21 | IFRNA | IY53 | IYPVTE6 | JD21Y2 | JEDBGY2 |
| IV22 | IFRNB | IY54 | IYPVTE3 | JD22 | JEDENNE1 |
| IV23 | IFRNC | IY55 | IYPCRWRA | JD22M | JEDENM1 |
| IV24 | IOPRLG1 | IY56 | IYPCRWRB | JD22M2 | JEDENM2 |
| IV25 | . IOPRLG2 | IY57 | IYPEXPL | JD22NE2 | JEDENNE2 |
| IV26 | IOPRLG3 | IY58 | IYPVAND | JD22Y | JEDENY1 |
| IY1 | . IYTVHRS | IY59 | IYPTRUN | JD22Y2 | JEDENY2 |
| IY2 | IYTVSTP | IY60 | IYPOPSC | JD23A | JEDFEEA2 |
| IY3 | . . IYPFPC | IY61 | IYPLVSC | JD23A | JEDFEEA1 |
| IY4 | IYPFPCGM | IY62 | IYPLVHM | JD23B | JEDFEEB2 |
| IY5 | . IYPPALS | IY63 | IYPWHRS | JD23B | JEDFEEB1 |
| IY6 | . IYPPALO | IY64 | . IYPPAY | JD23C | JEDFEEC1 |
| IY7 | . IYPUTEL | IY65 | IYPFSOC | JD23C | JEDFEEC2 |
| IY8 | . IYPLATE | IY66 | IYPDLFA | JD23D | JEDFEED2 |
| IY9 | IYPFBEAU | IY67 | IYPDLFB | JD23D | JEDFEED1 |
| IY10 | IYPFCLUB | JD0AD | JDOID | JD23E | JEDFEEE1 |
| IY11 | . IYPFDISC | JDOAM | JDOIM | JD23E | JEDFEEE2 |
| IY12 | IYPFSPOR | JDOAY | JDOIY4 | JD23F | . JEDFEEF1 |
| IY13 | . IYPARGM | JDOBA | JIVLYR | JD23F | . JEDFEEF2 |
| IY14 | . IYPARGF | JDOBB | JIVSTAT2 | JD23G | . JEDFEEG1 |
| IY15 | IYPTLKM | JD0D | JRACH12 | JD23G | . JEDFEEG2 |
| IY16 | IYPTLKF | JD1H | JIVSOIH | JD24 | JEDQUAL1 |
| IY17 | . IYPNPAL | JD1M | JIVSOIM | JD24 | JEDQUAL2 |
| IY18 | IYPMKFRN | JD2 | JLKNBRD | JD25A1 | . JEDQLA1 |
| IY19 | . IYPFGHT | JD3 | JLKMOVE | JD25A1 | JEDQLAN1 |
| IY20 | . IYPEATN | JD4 | JLKMOVY | JD25A2 | JEDQLIN2 |
| IY21 | . IYPSAVE | JD5 | JXPMOVE | JD25A2 | JEDQLDN2 |
| IY22L | . IYPPKML | JD6 | . JPLNEW | JD25A2 | . JEDQLJN2 |
| IY22P. | . IYPPKMP | JD7M | JPLNOWM | JD25A2 | JEDQLHN2 |
| IY23 | . IYPSMEV | JD7Y | JPLNOWY4 | JD25A2 | JEDQLGN2 |
| IY24 | . IYPSMOF | JD8 | JMOVJB | JD25A2 | . JEDQLFN2 |
| IY25 | . IYPSMLW | JD9A | JMOVJBA | JD25A2 | JEDQLEN2 |
| IY26 | . IYPOPSM | JD9B | JMOVJBB | JD25A2 | JEDQLBN2 |
| IY27 | . IYPDGFR | JD9C | JMOVJBC | JD25A2 | JEDQLAN2 |
| IY28 | . IYPSAD | JD9D | JMOVJBD | JD25A2 | . .JEDQLA2 |
| IY29 | IYPWOR | JD9E | JMOVJBE | JD25A2 | JEDQLCN2 |
| IY30 | . IYPBULL | JD9F | . JMOVJBF | JD25B1 | . . JEDQLB1 |


| JD25B1 | JEDQLBN1 | JD49Y | . JCOH1BY | JD66F | QFEDF |
| :---: | :---: | :---: | :---: | :---: | :---: |
| JD25B2 | JEDQLB2 | JD50 | JCOH1MR | JD66G | JNQFEDG |
| JD25C1 | JEDQLC1 | JD51M | JCOH1EM | JD66H | JNQFEDH |
| JD25C1 | JEDQLCN1 | JD51Y | . JCOH1EY | JD661 | JNQFEDI |
| JD25C2 | JEDQLC2 | JD52 | JNMAR | JD66J | JNQFEDJ |
| JD25D1 | JEDQLDN1 | JD53M | JLMAR1M | JD66K | JNQFEDK |
| JD25D1 | JEDQLD1 | JD53Y | . JLMAR1Y | JD66L | JNQFEDL |
| JD25D2 | JEDQLD2 | JD54 | JLPRNT | JD66M | JNQFEDM |
| JD25E1 | JEDQLE1 | JD55 | . JLNPRNT | JD66N | JNQFEDN |
| JD25E1 | JEDQLEN1 | JD56M | JCH1BM | JD66O | JNQFEDO |
| JD25E2 | JEDQLE2 | JD56Y | . JCH1BY | JD66P | JNQFEDP |
| JD25F1 | JEDQLF1 | JD57 | JSCEND | JD66Q | JNQFEDQ |
| JD25F1 | JEDQLFN1 | JD57NA | JSCHOOL | JD66R | JNQFEDR |
| JD25F2 | JEDQLF2 | JD58 | . JSCTYPE | JD66S | JNQFEDS |
| JD25G1 | JEDQLGN1 | JD59 | JSCNOW | JD66T | JNQFEDT |
| JD25G1 | JEDQLG1 | JD60 | . JFETYPE | JD67 | JTRAIN |
| JD25G2 | JEDQLG2 | JD61 | JFEEND | JD68 | JNTRAIN |
| JD25H1 | JEDQLHN1 | JD61NA | JFENOW | JD69 | JTRPLCE1 |
| JD25H1 | JEDQLH1 | JD62 | . JQFHAS | JD69 | JTRPLCE2 |
| JD25H2 | JEDQLH2 | JD63A | JQFA | JD69 | JTRPLCE3 |
| JD25I1 | JEDQLIN1 | JD63B | . JQFB | JD70A | JTRWHYA2 |
| JD2511 | JEDQLI1 | JD63C | JQFC | JD70A1 | JTRWHYA1 |
| JD2512 | JEDQLI2 | JD63D | JQFD | JD70A3 | JTRWHYA3 |
| JD25J1 | JEDQLJN1 | JD63E | JQFE | JD70B | JTRWHYB2 |
| JD25J1 | JEDQLJ1 | JD63F | JQFF | JD70B1 | JTRWHYB1 |
| JD25J2 | JEDQLJ2 | JD63G | JQFG | JD70B3 | JTRWHYB3 |
| JD25NA | JEDQNN2 | JD63H | JQFH | JD70C | JTRWHYC2 |
| JD25NON | JEDQNN1 | JD631 | JQFI | JD70C1 | JTRWHYC1 |
| JD26 | JEDOQL2 | JD63J | JQFJ | JD70C3 | JTRWHYC3 |
| JD26 | JEDOQL1 | JD63K | JQFK | JD70D | JTRWHYD2 |
| JD26NON | JEDOQLN2 | JD63L | JQFL | JD70D1 | JTRWHYD1 |
| JD26NON | JEDOQLN1 | JD63M | JQFM | JD70D3 | JTRWHYD3 |
| JD27 | JEDMORE2 | JD63N | JQFN | JD70E | JTRWHYE2 |
| JD27 | JEDMORE1 | JD64 | JQFED | JD70E1 | JTRWHYE1 |
| JD29DST | JPLBORND | JD65A | . JQFEDA | JD70E3 | JTRWHYE3 |
| JD290S | JPLBORNC | JD65B | JQFEDB | JD71 | . JTRQ2 |
| JD30 | JYR2UK4 | JD65C | JQFEDC | JD71 | JTRQ3 |
| JD31 | JMLSTAT | JD65D | JQFEDD | JD71 | JTRU1 |
| JD32M1 | JCITZN1 | JD65E | . JQFEDE | JD71 | . JTRU3 |
| JD32M2 | JCITZN2 | JD65F | JQFEDF | JD71 | JTRU2 |
| JD33 | JRACE | JD65G | JQFEDG | JD71 | JTRQ1 |
| JD34 | JJBSTAT | JD65H | JQFEDH | JD72A | JTRFEEA2 |
| JD36 | JPASOC | JD651 | JQFEDI | JD72A1 | JTRFEEA1 |
| JD36ANA | . JPAJU | JD65J | . JQFEDJ | JD72A3 | JTRFEEA3 |
| JD37 | JPASEMP | JD65K | . JQFEDK | JD72B | JTRFEEB2 |
| JD38 | JPABOSS | JD65L | JQFEDL | JD72B1 | JTRFEEB1 |
| JD39 | JPAMNGR | JD65M | JQFEDM | JD72B3 | JTRFEEB3 |
| JD40 | JMASOC | JD65N | JQFEDN | JD72C | JTRFEEC2 |
| JD40 | JMAJU | JD650 | JQFEDO | JD72C1 | JTRFEEC1 |
| JD41 | JMASEMP | JD65P | . JQFEDP | JD72C3 | JTRFEEC3 |
| JD42 | JMABOSS | JD65Q | JQFEDQ | JD72E | JTRFEEE2 |
| JD43 | JMAMNGR | JD65R | JQFEDR | JD72E1 | JTRFEEE1 |
| JD44 | JJ1SOC | JD65S | .JQFEDS | JD72E3 | JTRFEEE3 |
| JD44NA | JJ1NONE | JD65T | JQFEDT | JD72F | JTRFEEF2 |
| JD45 | JJ1SEMP | JD66A | JNQFEDA | JD72F1 | JTRFEEF1 |
| JD46 | JJ1BOSS | JD66B | JNQFEDB | JD72F3 | JTRFEEF3 |
| JD47 | . JJ1MNGR | JD66C | JNQFEDC | JD72G | JTRFEEG2 |
| JD48 | JLCOH | JD66D | JNQFEDD | JD72G1 | JTRFEEG1 |
| JD49M | JCOH1BM | JD66E | JNQFEDE | JD72G3 | JTRFEEG3 |


| 73 | 3 |
| :---: | :---: |
| JD73 | JTRQLXP2 |
| JD73 | JTRQLXP1 |
| JD74 | JTRQLAC1 |
| JD74 | JTRQLAC2 |
| JD74 | JTRQLAC3 |
| JD75A1 | JTRQLA1 |
| JD75A2 | JTRQLA2 |
| JD75A3 | JTRQLA3 |
| JD75B1 | JTRQLB1 |
| JD75B2 | JTRQLB2 |
| JD75B3 | JTRQLB3 |
| JD75C1 | JTRQLC1 |
| JD75C2 | JTRQLC2 |
| JD75C3 | JTRQLC3 |
| JD75D1 | JTRQLD1 |
| JD75D2 | JTRQLD2 |
| JD75D3 | JTRQLD3 |
| JD75E1 | JTRQLE1 |
| JD75E2 | JTRQLE2 |
| JD75E3 | JTRQLE3 |
| JD75F1 | JTRQLF1 |
| JD75F2 | JTRQLF2 |
| JD75F3 | JTRQLF3 |
| JD75G1 | JTRQLG1 |
| JD75G2 | JTRQLG2 |
| JD75G3 | JTRQLG3 |
| JD75H1 | JTRQLH1 |
| JD75H2 | JTRQLH2 |
| JD75H3 | JTRQLH3 |
| JD75I1 | JTRQLI1 |
| JD75I2 | JTRQLI2 |
| JD7513 | JTRQLI3 |
| JD75J1 | JTRQLJ1 |
| JD75J2 | JTRQLJ2 |
| JD75J3 | JTRQLJ3 |
| JD75NON | JTRQLNN3 |
| JD75NON | JTRQLNN1 |
| JD75NON | JTRQLNN2 |
| JD76AN1 | JTRQLAN1 |
| JD76AN2 | JTRQLAN2 |
| JD76AN3 | JTRQLAN3 |
| JD76BN1 | JTRQLBN1 |
| JD76BN2 | JTRQLBN2 |
| JD76BN3 | JTRQLBN3 |
| JD76CN1 | JTRQLCN1 |
| JD76CN2 | JTRQLCN |
| JD76CN3 | JTRQLCN |
| JD76DN1 | JTRQLDN |
| JD76DN2 | JTRQLDN |
| JD76DN3 | JTRQLDN |
| JD76EN1 | JTRQLEN |
| JD76EN2 | JTRQLEN |
| JD76EN3 | JTRQLEN |
| JD76FN1 | JTRQLFN |
| JD76FN2 | JTRQLFN2 |
| JD76FN3 | JTRQLFN3 |
| JD76GN1 | JTRQLGN1 |
| JD76GN2 | JTRQLGN2 |


| JD76GN3 | JTRQLGN3 | JD93 | NGWKE |
| :---: | :---: | :---: | :---: |
| JD76HN1 | JTRQLHN1 | JD94 | JLNGWKX |
| JD76HN2 | JTRQLHN2 | JD95A | JIVDA |
| JD76HN3 | JTRQLHN3 | JD95B | JIVDB |
| JD76IN1 | JTRQLIN1 | JD95C | JIVDC |
| JD76IN2 | JTRQLIN2 | JD95D | JIVDD |
| JD76IN3 | JTRQLIN3 | JD95E | JIVDE |
| JD76JN1 | JTRQLJN1 | JE1 | JJBHAS |
| JD76JN2 | JTRQLJN2 | JE2 | JJBOFF |
| JD76JN3 | JTRQLJN3 | JE3 | JJBOFFY |
| JD77 | . JTROQL1 | JE4 | JJBTERM1 |
| JD77 | . JTROQL2 | JE5 | JJBSOC |
| JD77 | . JTROQL3 | JE6 | JJBSIC |
| JD77 | JTROQLN3 | JE7 | JJBSEMP |
| JD77NON | JTROQLN1 | JE8 | JJBMNGR |
| JD77NON | JTROQLN2 | JE9 | JJBSECT |
| JD78 | JTRMORE1 | JE10 | JJBSIZE |
| JD78 | JTRMORE2 | JE11 | JJBHRS |
| JD79A | JBIRHH | JE12 | JJBOT |
| JD79B | JMABWLY | JE13 | JJBOTPD |
| JD80 | JMABWNLY | JE14 | JJBHRLK |
| JD81AGM | JBWTAGM1 | JE15 | JJBPL |
| JD81AGM | JBWTAGM2 | JE16 | JJBTTWT |
| JD81AGM | JBWTAGM3 | JE17 | JJBTTWM |
| JD81PN1 | JBWTPN1 | JE18B | JJBSAT2 |
| JD81PN2 | JBWTPN2 | JE18D | JJBSAT4 |
| JD81PN3 | JBWTPN3 | JE18F | JJBSAT6 |
| JD82 | . JBWTXP1 | JE18G | JJBSAT7 |
| JD82 | . JBWTXP2 | JE19 | JJBSAT |
| JD82 | . JBWTXP3 | JE20 | JPAYGL |
| JD83 | JBWTEL1 | JE21OC | JPAYGW |
| JD83 | JBWTEL2 | JE22 | JPAYNL |
| JD83 | JBWTEL3 | JE23A | JPYTC |
| JD84 | JBWTWK1 | JE23B | JPYWFTC |
| JD84 | JBWTWK2 | JE23C | JPYWFTCW |
| JD84 | JBWTWK3 | JE23D | JPYDPTC |
| JD85 | JBWTKN1 | JE23E | JPYDPTCW |
| JD85 | JBWTKN2 | JE23OC | JPAYNW |
| JD85 | JBWTKN3 | JE24 | JPAYSLP |
| JD86LB1 | JBWTLB1 | JE26 | JPAYUSL |
| JD86LB2 | JBWTLB2 | JE27 | JPAYU |
| JD86LB3 | . JBWTLB3 | JE28OC | JPAYUW |
| JD86OZ1 | JBWTOZ1 | JE29 | JPAYUG |
| JD86OZ2 | JBWTOZ2 | JE30A | JPAYDF1 |
| JD86OZ3 | JBWTOZ3 | JE30B | JPAYDF2 |
| JD87 | JBWTGM1 | JE30C | JPAYDF3 |
| JD87 | JBWTGM2 | JE30D | JPAYDF4 |
| JD87 | JBWTGM3 | JE30E | JPAYDF5 |
| JD88 | . JBWTG51 | JE30F | . JPAYDF6 |
| JD88 | . JBWTG52 | JE30G | JPAYDF7 |
| JD88 | . JBWTG53 | JE30H | JPAYDF9 |
| JD89 | JLNGENG | JE301 | JPAYDF8 |
| JD89 | JLNGOTH | JE31 | JPAYTYP |
| JD90A | . JLNGUSA | JE32 | . JOVTPAY |
| JD90B | . JLNGUSB | JE33 | JEXTRATE |
| JD90NON | JLNGUSN | JE33 | JEXTREST |
| JD91 | JLNGCNV | JE34 | JBASRATE |
| JD92 | JLNGRED | JE34 | JBASREST |
| JD93 | JLNGWKO | JE35 | JOVTREST |


| JE35 | . JOVTRATE | JE95 | JJSPL | JEG4M | JHGBM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| JE39 | JJBPERFP | JE96 | JJSTTWT | JEG4Y | . JHGBY |
| JE40 | JJBONUS | JE97 | JJSTTWM | JEG6 | JIVIOLW |
| JE41 | JJBONAM | JE98A | JJSSAT1 | JEG6 | JIVLYR |
| JE42 | JJBONG | JE98B | JJSSAT2 | JEG7 | JIVSTAT1 |
| JE43 | . JJBRISE | JE98D | JJSSAT4 | JEG8 | JIVELIG |
| JE44 | JTUJBPL | JE98E | JJSSAT5 | JEG9 | JHHMEM |
| JE45 | JTUIN1 | JE99 | JJSSAT | JEG10 | JNEWHY |
| JE46 | JJBOPPS | JE100D | JJSBGD | JEG11 | JLVWHY |
| JE460C | JPAYSW | JE100M | . JJSBGM | JEG12M | JNEMNJN |
| JE47 | JJBTIME | JE100Y | JJSBGY4 | JEG12M | JLVMN |
| JE48 | JJBWKHRC | JE101A | JJBLKCHA | JEG12Y | JNEYRJN4 |
| JE48 | JJBWKHRH | JE101B | JJBLKCHB | JEG12Y | JLVYR4 |
| JE48 | JJBWKHRA | JE101C | JJBLKCHC | JEG13 | JLVLOC |
| JE48 | .JPAYSG | JE101D | JJBLKCHD | JEG14 | JIVFIO |
| JE48 | JJBWKHRB | JE101E | JJBLKCHE | JEG15 | JIVRREF |
| JE48 | JJBWKHRD | JE102A | JJBXPCHA | JEG16 | JIVIREIS |
| JE48 | JJBWKHRF | JE102B | JJBXPCHB | JEG18 | JIVFIO |
| JE48 | JJBWKHRG | JE102C | JJBXPCHC | JF2 | JNFR |
| JE48 | JJBWKHRE | JE102D | JJBXPCHD | JF2 | JNF1 |
| JE49 | . . JJBPEN | JE102E | JJBXPCHE | JF3A | JFICODE |
| JE4A | JJBTERM2 | JE105M1 | JJBCHC1 | JF3B01 | JFR01 |
| JE50 | JJBPENM | JE105M2 | JJBCHC2 | JF3B02 | JFR02 |
| JE52D | JJBBGD | JE105M3 | JJBCHC3 | JF3B03 | JFR03 |
| JE52M | JJBBGM | JE107 | JXPCHCF | JF3B04 | JFR04 |
| JE52Y | .JJBBGY4 | JE108 | . JXPCHC | JF3B05 | JFR05 |
| JE53 | JJBBGLY | JE109 | JHUXPCH | JF3B06 | JFR06 |
| JE54 | . JPAYS | JE110 | JHUNURS | JF3B07 | JFR07 |
| JE59 | JPAYLY | JE111 | JJULK1 | JF3B08 | JFR08 |
| JE600C | JPAYLYW | JE112 | JJULK4 | JF3B09 | JFR09 |
| JE61 | JPAYLYG | JE113A | JJULKA | JF3B10 | JFR10 |
| JE73 | JJSBOSS | JE113B | JJULKB | JF3B11 | JFR11 |
| JE74 | JJSSIZE | JE113C | . JJULKC | JF3B12 | JFR12 |
| JE75 | JJSHRS | JE113D | . JJULKD | JF3B13 | JFR13 |
| JE76 | . JJSHRLK | JE113E | . JJULKE | JF3B14 | . JFR14 |
| JE77 | JJSTIME | JE114 | JJULKJB | JF3B15 | JFR15 |
| JE78 | JJSTYPEB | JE115 | JJUBGN | JF3B16 | JFR16 |
| JE79 | JJSACCS | JE116 | JJUSPEC | JF3B17 | JFR17 |
| JE80 | JJSPART | JE117 | JJUSOC | JF3B18 | . JFR18 |
| JE81BM | JJSPRBM | JE118 | . JJUHRSX | JF3B19 | . JFR19 |
| JE81BY | JJSPRBY4 | JE119 | JJUPAYX | JF3B20 | JFR20 |
| JE81EM | JJSPREM | JE120 | JJUPAYL | JF3BAL | JFRALL |
| JE81EY | JJSPREY4 | JE121 | JJUHRSL | JF3C | JFRNOW |
| JE82 | . JJSPRF | JE124 | JEPROSH | JF3D | JFRVAL |
| JE83 | . JJSPRLS | JE129 | JEAAGE | JF3EOC | JFRW |
| JE84 | . JJSPRTX | JE130 | JJBUB | JF3F | JFRJT |
| JE85 | JJSPRNI | JE131 | . JJBUBY | JF3FPN | JFRJTPN |
| JE86BM | JJSPRBM | JE132 | JJ2HAS | JF3SEQ | JFISEQ |
| JE86BY | JJSPRBY4 | JE133 | . . JJ2SOC | JF4 | JFISIT |
| JE86EM | . JJSPREM | JE134 | . JJ2SEMP | JF5 | JFISITC |
| JE86EY | JJSPREY4 | JE135 | JJ2HRS | JF6 | JFISITY |
| JE87 | JJSPRF | JE136 | JJ2PAY | JF7 | JFISITX |
| JE88 | JJSPRLS | JE137A | . JIVEA | JF8 | . JFCCARD |
| JE89 | . JJSPRTX | JE137B | . . JIVEB | JF9 | . JFIYRDIA |
| JE90 | JJSPRNI | JE137C | JIVEC | JF10A | JFIYRDB1 |
| JE91 | . JJSPAYU | JE137D | JIVED | JF10B | JFIYRDB2 |
| JE92 | JJSPAYW | JE137E | . JIVEE | JF10C | JFIYRDB3 |
| JE93 | . JJSPYTX | JEG3 | . PID | JF10D | JFIYRDB4 |
| JE94 | . . .JJSPYNI | JEG4 | . JHGSEX | JF10E | JFIYRDB5 |


| JF10F | JFIYRDB6 | JF37H | JWINDFHY | JF58 | JDFWLD |
| :---: | :---: | :---: | :---: | :---: | :---: |
| JF11 | JSAVE | JF38A | JXPMEAL | JF58A1 | . JDFWLD1 |
| JF12 | JSAVED | JF38B | JXPLEIS | JF58A2 | . JDFWLD2 |
| JF12M1 | JSAVEY1 | JF39 | JFTEXHH | JF58A3 | .JDFWLD3 |
| JF12M2 | JSAVEY2 | JF40A | JFTEXA | JF58A4 | .JDFWLD4 |
| JF13 | JSAVREG | JF40B | JFTEXB | JF59A | JIVFA |
| JF14 | JSAVLT | JF40C | JFTEXC | JF59B | JIVFB |
| JF15A | JNVESTA | JF41A1 | JFTEXA1 | JF59C | JIVFC |
| JF15A | JSVAC | JF41A2 | JFTEXA2 | JF59D | JIVFD |
| JF15B | JNVEST | JF41A3 | JFTEXA3 | JF59E | JIVFE |
| JF15B | JNVESTB | JF41A4 | JFTEXA4 | JF60H | JIVFOIH |
| JF15C | JNVESTC | JF41A5 | JFTEXA5 | JF60M | JIVFOIM |
| JF15D | JNVESTD | JF41A6 | JFTEXA6 | JF61 | JIVSC |
| JF15E | JNVESTE | JF41B1 | JFTEXB1 | JF701 | JPRF125 |
| JF15F | . JNVESTF | JF41B2 | JFTEXB2 | JF101 | JF101 |
| JF15G | . JNVESTG | JF41B3 | JFTEXB3 | JF102 | JF102 |
| JF15H | JNVESTH | JF41B4 | JFTEXB4 | JF103 | JF103 |
| JF15I | JNVESTI | JF41B5 | JFTEXB5 | JF104 | JF104 |
| JF15J | JNVESTJ | JF41B6 | JFTEXB6 | JF105 | JF105 |
| JF15NON | JNVESTNN | JF41C1 | JFTEXC1 | JF106 | JF106 |
| JF16 | JSVACK | JF41C2 | JFTEXC2 | JF116 | JF116 |
| JF17A | . JSVACKB1 | JF41C3 | JFTEXC3 | JF118 | JF118 |
| JF17B | . JSVACKB2 | JF41C4 | JFTEXC4 | JF119 | JF119 |
| JF17C | JSVACKB3 | JF41C5 | JFTEXC5 | JF121 | JF121 |
| JF17D | JSVACKB4 | JF41C6 | JFTEXC6 | JF122 | JF122 |
| JF18 | JSVACSJ | JF42A | JFTEXAV | JF124 | JF124 |
| JF19 | JSVACSK | JF42B | . JFTEXBV | JF125 | JF125 |
| JF20 | JSVACSP | JF42C | JFTEXCV | JF126 | JF126 |
| JF21 | JNVESTK | JF43A | JFTEXAW | JF127 | JF127 |
| JF22A | . JNVESTC1 | JF43B | JFTEXBW | JF128 | JF128 |
| JF22B | . JNVESTC2 | JF43C | JFTEXCW | JF132 | JF132 |
| JF22C | JNVESTC3 | JF44 | JDEBT | JF135 | JF135 |
| JF22D | JNVESTC4 | JF45A | JDEBTA | JF136 | JF136 |
| JF23 | JNVESTSJ | JF45B | JDEBTB | JF137 | JF137 |
| JF24 | JNVESTSK | JF45C | . JDEBTC | JF138 | JF138 |
| JF25 | JNVESTSP | JF45D | . JDEBTD | JF139 | JF139 |
| JF26 | JPPPEN | JF45E | JDEBTE | JF140 | JF140 |
| JF27 | . JPENB4 | JF45F | JDEBTF | JF141 | JF141 |
| JF28 | . JPENB4Y4 | JF45G | . JDEBTG | JF142 | JF142 |
| JF29 | JPENB4V | JF45H | JDEBTH | JF151 | JF151 |
| JF30 | JPENB4W | JF451 | JDEBTI | JF152 | JF152 |
| JF31 | JPENYR4 | JF46 | JDEBTY | JF153 | JF153 |
| JF32 | JPENADD | JF47A | JDEBTC1 | JF154 | JF154 |
| JF33 | JPENADV | JF47B | JDEBTC2 | JF155 | JF155 |
| JF34 | JPENADW | JF47C | JDEBTC3 | JF156 | JF156 |
| JF35 | JWINDF | JF47D | JDEBTC4 | JF157 | JF157 |
| JF36A | JWINDFA | JF48 | JDEBTSJ | JF158 | JF158 |
| JF36B | JWINDFB | JF49 | JDEBTSK | JF159 | JF159 |
| JF36C | JWINDFC | JF50 | JDEBTSP | JHOAD | JHHDOI |
| JF36D | . JWINDFD | JF51 | JSPINHH | JHOAM | JHHMOI |
| JF36F | . JWINDFF | JF52A | JHUBUYS | JHOAY | JHHYOI4 |
| JF36G | . JWINDFG | JF52B | JHUFRYS | JHOBH | JHHSOIH |
| JF36H | . JWINDFH | JF52C | JHUMOPS | JHOBM . | JHHSOIM |
| JF37A | . JWINDFAY | JF52D | JHUIRON | JHOC | JHSTYPE |
| JF37B | . JWINDFBY | JF53 | JHHCH12 | JH2 | JHSROOM |
| JF37C | JWINDFCY | JF54 | . JHUSITS | JH3 | JHSOWND |
| JF37D | JWINDFDY | JF55 | JHOWLNG | JH4M1 | JHSOWR1 |
| JF37F | JWINDFFY | JF56 | JCARUSE | JH4M2 | JHSOWR2 |
| JF37G | JWINDFGY | JF57 | JMOBUSE | JH5 | . JHSVAL |


| JH6 | JMGHAVE | JH41B | JXPLECY | JH54J | JCD8CST |
| :---: | :---: | :---: | :---: | :---: | :---: |
| JH7 | JHSOWRP | JH41C | JXPOILY | JH54K | JCD9CST |
| JH8 | JMGYNOT | JH41D | JXPSFLY | JH54L | JCD12CST |
| JH9 | JHSCOST | JH42 | JHEATCH | JH55 | JPCNET |
| JH10 | JHSYR04 | JH43 | JHEATYP | JH56 | JXPHP |
| JH11 | JHSCOST | JH44A | JHSPRBG | JH57 | JXPHPDF |
| JH12 | . JMGYR04 | JH44B | JHSPRBH | JH58A | JHSCANA |
| JH13 | JMGLY | JH44C | JHSPRBI | JH58B | JHSCANB |
| JH14 | JHSIVW9 | JH44D | JHSPRBJ | JH58C | JHSCANC |
| JH14 | . JMGYR04 | JH44E | . JHSPRBBK | JH58D | JHSCAND |
| JH16 | JHSCOST | JH44F | . JHSPRBBL | JH58E | JHSCANE |
| JH17 | JMGOLD | JH44G | JHSPRBM | JH58F | JHSCANF |
| JH18 | JMGLIFE | JH44H | JHSPRBN | JH59A | JHSCNTA |
| JH19 | JMGTYPE | JH44I | JHSPRBO | JH59B | JHSCNTB |
| JH1A | JHSRINS | JH44J | JHSPRBP | JH59C | JHSCNTC |
| JH2O | JMGXTRA | JH44K | JHSPRBQ | JH59D | JHSCNTD |
| JH21 | JMGNEW | JH45 | . JHSCTAX | JH59E | JHSCNTE |
| JH22A | . JMGXTY1 | JH46 | JHS2OWND | JH59F | JHSCNTF |
| JH22B | .JMGXTY2 | JH47 | JHS2VALO | JH60 | JXPFOOD |
| JH22C | JMGXTY3 | JH47A | JHS2VALA | JH61 | JNCARS |
| JH22D | JMGXTY4 | JH47B | JHS2VALB | JH62 | JCAROWN |
| JH22E | . JMGXTY5 | JH47C | JHS2VALC | JH63 | JCARVAL |
| JH23 | JXPMG | JH47D | JHS2VALD | JH64M1 | JIVH1 |
| JH24A | JXPMG1 | JH49 | JMGTOT | JH64M2 | JIVH2 |
| JH24B | JXPMG2 | JH50 | JCDHAVE | JH64M3 | JIVH3 |
| JH24C | JXPMG3 | JH51A | JCD1USE | JH65H | JHHFOIH |
| JH24D | JXPMG4 | JH51B | . JCD2USE | JH65M | JHHFOIM |
| JH25 | JHSJB | JH51C | JCD10USE | JHG2 | . JHGR2R |
| JH26M1 | JRENTP1 | JH51D | JCD11USE | JHG3 | JHGSEX |
| JH26M2 | JRENTP2 | JH51E | . JCD3USE | JHG4M | JHGBM |
| JH27 | JRENTLL | JH51F | JCD4USE | JHG4Y | JHGBY |
| JH28 | JRENTF | JH51G | JCD5USE | JHG8 | JMASTAT |
| JH30 | . . JRENT | JH51H | . JCD6USE | JHG9 | JHGSPN |
| JH31 | JRENTW | JH51I | . JCD7USE | JHG10 | JHGEMP |
| JH32A | . JRENT1 | JH51J | JCD8USE | JHG10 | JHGEMP |
| JH32B | JRENT7 | JH51K | . JCD9USE | JHG11 | JHGFNO |
| JH32C | . JRENT2 | JH51L | . JCD12USE | JHG11 | JHGFNO |
| JH32D | . JRENT3 | JH52 | JCDBGHT | JHG12 | JHGMNO |
| JH32E | . JRENT4 | JH53A | JCD1NEW | JHG12 | JHGMNO |
| JH32F | . JRENT5 | JH53B | JCD2NEW | JHG13 | JHGRA |
| JH32G | . JRENT8 | JH53C | JCD10NEW | JHG13 | JHGRA |
| JH32H | . JRENT6 | JH53D | JCD11NEW | JI1 | JIV1 |
| JH33 | . JRENTHB | JH53E | JCD3NEW | JI2 | . JIV2 |
| JH34 | JRENTG | JH53F | JCD4NEW | J14 | . JIV4 |
| JH35 | JRENTG | JH53G | JCD5NEW | JI5 | JIV5 |
| JH36 | JRENTGW | JH53H | JCD6NEW | JI5A | JIV5AA |
| JH37 | . JXPHSDF | JH53I | JCD7NEW | JI5B | JIV5AB |
| JH38A | . JXPHSD1 | JH53J | JCD8NEW | JI5C | JIV5AC |
| JH38B | . JXPHSD2 | JH53K | JCD9NEW | JI6A | JIV6A |
| JH39 | . JXPHSDB | JH53L | JCD12NEW | JI6B | JIV6B |
| JH40A | JHSGDN | JH54A | JCD1CST | JI6C | JIV6C |
| JH40A | JHSTLT | JH54B | JCD2CST | JI6D | JIV6D |
| JH40A | . JHSBTH | JH54C | JCD10CST | JI6E | JIV6E |
| JH40A | . JHSKCH | JH54D | JCD11CST | JI7 | JIV6F |
| JH40B | JHSGDNS | JH54E | . JCD3CST | J18 | . JIV7 |
| JH40B | JHSTLTS | JH54F | JCD4CST | JJ5D | JCJSBGD |
| JH40B | . JHSBTHS | JH54G | . JCD5CST | JJ5M | JCJSBGM |
| JH40B | JHSKCHS | JH54H | . . JCD6CST | JJ5Y | JCJSBGY4 |
| JH41A | .JXPGASY | JH54I. | . . JCD7CST | JJ6 | JNEMST |


| JJ7D | . JCJSBGD | JM5B | JHLLTWA | JM28H | JHLSVHF |
| :---: | :---: | :---: | :---: | :---: | :---: |
| JJ7M | JCJSBGM | JM6 | JHLIV65 | JM281 | JHLSVIF |
| JJ7Y | JCJSBGY4 | JM7A | JADLA | JM28J1 | JHLSVJF |
| JJ8 | JCJSBLY | JM7B | JadLad | JM28J2 | JHLSVKF |
| JJ9 | JJHSTAT | JM8A | JADLB | JM28L | JHLSVLF |
| JJ10D | JJHBGD | JM8B | JADLBD | JM28M | JHLSVMF |
| JJ10M | JJHBGM | JM9A | JADLC | JM29 | JHLCK |
| JJ10Y | JJHBGY4 | JM9B | JADLCD | JM30A | JHLCKA |
| JJ12 | JNJBS | JM10A | JADLD | JM30B | JHLCKB |
| JJ14 | JJHSOC | JM10B | JadLDD | JM30С . | JHLCKC |
| JJ16 | JJHSEMP | JM11A | JADLE | JM30D. | JHLCKD |
| JJ17 | JJHBOSS | JM11B | JADLED | JM30E | JHLCKE |
| JJ18 | JJHSECT | JM12A | JADLF | JM30F | JHLCKI |
| JJ19 | JJHMNGR | JM12B | JADLFD | JM30G . | JHLCKF |
| JJ21 | JJHPLDF | JM13 | JHL2GP | JM30H. | JHLCKG |
| JJ22 | JJHSIC | JM14 | JHL2HOP | JM301 | JHLCKH |
| JJ23 | JJHSIZE | JM15 | JXDTS | JM31A | JHLCKAN |
| JJ24 | JJHPAYL | JM16 | JNXDTS | JM31B | JHLCKBN |
| JJ250C | JJHPYLW | JM17 | JHOSP | JM31C. | JHLCKCN |
| JJ26 | JJHPYLG | JM18 | JHOSPD | JM31D. | JHLCKDN |
| JJ27 | JJHSTPY | JM20 | JHOSPCH | JM31E | JHLCKEN |
| JJ28 | JJBLKY | JM21 | JHOSPNHS | JM31F | JHLCKIN |
| JJ31 | JJBHAD | JM22 | JHLCVR | JM31G. | JHLCKFN |
| JJ32 | JJLEND4 | JM23 | JHLCVRH | JM31H | JHLCKGN |
| JJ33 | JJLSOC | JM24 | JHLCVRL | JM311 | JHLCKHN |
| JJ34 | JJLSIC | JM25 | . JHLSV | JM33 | JSMOKER |
| JJ35 | JJLSEMP | JM26A | . JHLSVA | JM34 | JNCIGS |
| JJ36 | JJLBOSS | JM26B | . JHLSVB | JM37A | JOPHLA |
| JJ37 | JJLMNGR | JM26C | JHLSVC | JM37B | JOPHLB |
| JJ38 | JJLSIZE | JM26D | JHLSVD | JM37C . | JOPHLC |
| JJ39A | JIVJA | JM26E | JHLSVE | JM40 | JAIDHH |
| JJ39B | JIVJB | JM26F | JHLSVF | JM41P1 | JAIDHUA |
| JJ39C | JIVJC | JM26G | JHLSVG | JM41P2 | JAIDHUB |
| JJ39D | JIVJD | JM26H | JHLSVH | JM41P3 | JAIDHUC |
| JJ39E | JIVJE | JM261 | JHLSVI | JM42 | JAIDXHH |
| JM1 | JHLDSBL | JM26J1 | JHLSVJ | JM43 | JNAIDXHH |
| JM1A | . JHLSTAT | JM26J2 | . JHLSVK | JM44M1 | JAIDHU1 |
| JM2A | JHLPRBA | JM26L | JHLSVL | JM44M2 | JAIDHU2 |
| JM2B | JHLPRBB | JM26M | .JHLSVM | JM45A | JIVMA |
| JM2C | . JHLPRBC | JM27A | JHLSVAN | JM45B | JIVMB |
| JM2D | . JHLPRBD | JM27B | JHLSVBN | JM45C | JIVMC |
| JM2E | JHLPRBE | JM27C | JHLSVCN | JM45D | JIVMD |
| JM2F | JHLPRBF | JM27D | JHLSVDN | JM45E | JIVME |
| JM2G | JHLPRBG | JM27E | JHLSVEN | JM46 | JAIDHRS |
| JM2H | . JHLPRBH | JM27F | JHLSVFN | JP10M | JPRESBGM |
| JM2I | JHLPRBI | JM27G | JHLSVGN | JP10Y | JPRESBY4 |
| JM2J | JHLPRBJ | JM27H. | JHLSVHN | JP2B | JPRRS21 |
| JM2K | JHLPRBK | JM271 | JHLSVIN | JP2C | JPRIPN |
| JM2L | JHLPRBL | JM27J1 | JHLSVJN | JP2D | JPRWHY |
| JM2M | JHLPRBM | JM27J2 | . JHLSVKN | JP3 | JPPLEVR |
| JM2MO. | JHLPRB | JM27L | JHLSVLN | JP11 | JPRESLY |
| JM3 | JHLLT | JM27M | JHLSVMN | JP23 | JPRFEHQ |
| JM4A | JHLLTA | JM28A | JHLSVAF | JP25 | JPRSEHQ |
| JM4B | . JHLLTB | JM28B | JHLSVBF | JP58 | . JPRJBFT |
| JM4C | JHLLTC | JM28C . | JHLSVCF | JP59M | JPRJBBGM |
| JM4D | JHLLTD | JM28D . | JHLSVDF | JP59Y | JPRJBBY4 |
| JM4E | JHLLTE | JM28E | JHLSVEF | JP60 | JPRJBLY |
| JM5 | JHLLTW | JM28F | JHLSVFF | JP61 | JPREARN |
| JM5A | JHLENDW | JM28G | JHLSVGF | JP70A | JPRF101 |


| JP70B | JPRF102 | JS5E | JNET3PH | JY18 | JYPMKFRN |
| :---: | :---: | :---: | :---: | :---: | :---: |
| JP70C | JPRF116 | JS5F | JNET1LV | JY19 | JYPFGHT |
| JP70D | JPRF131 | JS5F | JNET2LV | JY20 | JYPEATN |
| JP70F | JPRF135 | JS5G | JNET3JB | JY21 | JYPSAVE |
| JP70G | JPRF137 | JS5F | JNET3LV | JY22L | JYPPKML |
| JP70H | JPRF139 | JS5G | JNET1JB | JY22P | JYPPRMP |
| JP70J | JPRF141 | JS5G | JNET2JB | JY23 | JYPSMEV |
| JP70NON | JPRFIRN | JS6A | JNETSOC | JY24 | JYPSMOF |
| JP71 | JPRFITB | JT2B | JTELWHY | JY25 | JYPSMLW |
| JPI1A | JIVPA | JT44 | JTLFIYRL | JY26 | JYPOPSM |
| JPI1B | JIVPB | JT49 | JTLFIYR | JY27 | JYPDGFR |
| JPI1C | JIVPC | JV1A | JOPSOCA | JY28 | JYPSAD |
| JPI1D | JIVPD | JV1B | Jopsocb | JY29 | JYPWOR |
| JPI1E | JIVPE | JV1C | JOPSOCC | JY30 | JYPBULL |
| JS1A | JGHQA | JV1D | JOPSOCD | JY31 | JYPLONE |
| JS1B | JGHQB | JV1E | JOPSOCE | JY32 | JYPBORED |
| JS1C | JGHQC | JV1F | JOPSOCF | JY33 | JYPESTA |
| JS1D | JGHQD | JV2 | . JVOTE1 | JY34 | JYPESTI |
| JS1E | JGHQE | JV3 | . JVOTE2 | JY35 | JYPESTB |
| JS1F | JGHQF | JV4 | . JVOTE3 | JY36 | JYPESTJ |
| JS1G | JGHQG | JV5 | JVOTE4 | JY37 | JYPESTC |
| JS1H | JGHQH | JV6 | . JVOTE5 | JY38 | JYPESTK |
| JS11 | JGHQI | JV7 | JOPCLS1 | JY39 | JYPESTE |
| JS1J | JGHQJ | JV8 | JOPCLS2 | JY40 | JYPESTF |
| JS1K | JGHQK | JV9 | JOPCLS3 | JY41 | JYPESTH |
| JS1L | JGHQL | JV10 | JVOTE7 | JY42 | JYPTCHA |
| JS2A | Jopfamo | JV11 | JVOTE8 | JY43 | JYPTCHB |
| JS2B | . JopfamL | JV12A | Jlacta | JY44 | JYPHSW |
| JS2C | JOPFAMP | JV12B | Jlactb | JY45 | JYPHAP |
| JS2D | JOPFAMQ | JV12C | . JLACTC | JY46 | . JYPHFM |
| JS2E | JOPFAMK | JV12D | . JLACTD | JY47 | JYPHFR |
| JS2F | JOPFAMR | JV12E | JLACTE | JY48 | JYPHLF |
| JS3A | JLFSAT1 | JV12F | JLACTF | JY49 | JYPOPFF |
| JS3B | JLFSAT2 | JV12H | JLACTH | JY50 | JYPOPFB |
| JS3C | JLFSAT3 | JV121. | . JLACTI | JY51 | JYPOPFJ |
| JS3D | JLFSAT4 | JV12J | JLACTJ | JY52 | JYPOPPL |
| JS3E | JLFSAT5 | JV12K | JLACTK | JY53 | JYPVTE6 |
| JS3F | JLFSAT6 | JV12L | JLACTL | JY54 | JYPVTE3 |
| JS3G | JLFSAT7 | JV13 | JTRUST | JY55 | JYPCRWRA |
| JS3H | JLFSAT8 | JV14 | JFRNA | JY56 | JYPCRWRB |
| JS4A | JLFSATO | JV15 | . JFRNB | JY57 | JYPEXPL |
| JS4B | JLFSATL | JV16 | JFRNC | JY58 | . . JYPVAND |
| JS5A | JNETSX1 | JY1 | JYTVHRS | JY59 | . JYPTRUN |
| JS5A | JNETSX2 | JY2 | JYTVSTP | JY60 | JYPOPSC |
| JS5A | JNETSX3 | JY3 | JYPFPC | JY61 | JYPLVSC |
| JS5B | JNET1RL | JY4 | JYPFPCGM | JY62 | . JYPLVHM |
| JS5B | JNET2RL | JY5 | JYPPALS | JY63 | JYPWHRS |
| JS5B | JNET3RL | JY6 | JYPPALO | JY64 | . . JYPPAY |
| JS5BOC. | JNET1WR | JY7 | JYPUTEL | JY65 | . JYPFSOC |
| JS5BOC. | JNET2WR | JY8 | JYPLATE | JY66 | JYPDLFA |
| JS5BOC. | JNET3WR | JY9 | . JYPFBEAU | JY67 | JYPDLFB |
| JS5C | . JNET1AG | JY10 | . JYPFCLLUB | KDOAD | KDOID |
| JS5C | . JNET2AG | JY11 | JYPFDISC | KDOAM | KDOIM |
| JS5C | . Jnet3ag | JY12 | JYPFSPOR | KDOAY | KDOIY4 |
| JS5D | . JNET1KN | JY13 | JYPARGM | KDOBA | KIVLYR |
| JS5D | . JNET2KN | JY14 | JYPARGF | KDOBB | KIVSTAT2 |
| JS5D | JNET3KN | JY15 | JYPTLKM | KD1H. | KIVSOIH |
| JS5E | JNET1PH | JY16 | JYPTLKF | KD1M | KIVSOIM |
| JS5E | JNET2PH | JY17 | JYPNPAL | KD2 | KLKNBRD |


| KD3 | KLKMOVE | KD25A2 | KEDQLA2 | KD37 | KPASEMP |
| :---: | :---: | :---: | :---: | :---: | :---: |
| KD4 | KLKMOVY | KD25B1 | KEDQLB1 | KD38 | KPABOSS |
| KD5 | KXPMOVE | KD25B2 | KEDQLB2 | KD39 | KPAMNGR |
| KD6 | KPLNEW | KD25C1 | KEDQLC1 | KD40 | KMASOC |
| KD7M | . KPLNOWM | KD25C2 | KEDQLC2 | KD40 | KMAJU |
| KD7Y | KPLNOWY4 | KD25D1 | KEDQLD1 | KD40 | KMASOC00 |
| KD8 | KMOVJB | KD25D2 | KEDQLD2 | KD41 | KMASEMP |
| KD9A | KMOVJBA | KD25E1 | KEDQLE1 | KD42 | KMABOSS |
| KD9B | KMOVJBB | KD25E2 | KEDQLE2 | KD43 | KMAMNGR |
| KD9C | KMOVJBC | KD25F1 | KEDQLF1 | KD44 | KJ1SOC |
| KD9D | KMOVJBD | KD25F2 | KEDQLF2 | KD44 | KJ1SOC00 |
| KD9E | KMOVJBE | KD25G1 | KEDQLG1 | KD44NA | KJ1NONE |
| KD9F | KMOVJBF | KD25G2 | KEDQLG2 | KD45 | KJ1SEMP |
| KD9G | KMOVJBG | KD25H1 | KEDQLH1 | KD46 | KJ1BOSS |
| KD9H | KMOVJBH | KD25H2 | KEDQLH2 | KD47 | KJ1MNGR |
| KD91 | . KMOVJBI | KD2511 | KEDQLI1 | KD48 | KLCOH |
| KD10M1 | KMOVY1 | KD25I2 | KEDQLI2 | KD49M | KCOH1BM |
| KD10M2 | KMOVY2 | KD25J1 | KEDQLJ1 | KD49Y | KCOH1BY |
| KD11M | KDOBM | KD25J2 | KEDQLJ2 | KD50 | KCOH1MR |
| KD11Y | KDOBY | KD25NA | KEDQNN2 | KD51M | KCOH1EM |
| KD12 | KSEX | KD25NON | KEDQNN1 | KD51Y | KCOH1EY |
| KD12 | KSEX | KD26A1 | KEDQLAN1 | KD52 | KNMAR |
| KD14 | KMLSTAT | KD26A2 | KEDQLGN2 | KD53M | KLMAR1M |
| KD15 | KMLCHNG | KD26A2 | KEDQLAN2 | KD53Y | KLMAR1Y |
| KD16M | KMLCHM | KD26A2 | KEDQLBN2 | KD54 | KLPRNT |
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| KD17 | KJBSTAT | KD26A2 | KEDQLDN2 | KD56M | KCH1BM |
| KD18 | KEDLYR | KD26A2 | KEDQLEN2 | KD56Y | KCH1BY |
| KD19 | KEDTYPE1 | KD26A2 | KEDQLFN2 | KD57 | KSCEND |
| KD19 | KEDTYPE2 | KD26A2 | KEDQLHN2 | KD57NA | KSCHOOL |
| KD20 | KEDBLYR2 | KD26A2 | KEDQLIN2 | KD58 | KSCTYPE |
| KD20 | KEDBLYR1 | KD26A2 | KEDQLJN2 | KD59 | KSCNOW |
| KD21M | KEDBGM1 | KD26B1 | KEDQLBN1 | KD60 | KFETYPE |
| KD21M2 | KEDBGM2 | KD26C1 | KEDQLCN1 | KD61 | KFEEND |
| KD21Y | KEDBGY1 | KD26D1 | KEDQLDN1 | KD61NA | KFENOW |
| KD21Y2 | KEDBGY2 | KD26E1 | KEDQLEN1 | KD62 | KQFHAS |
| KD22 | KEDENNE1 | KD26F1 | KEDQLFN1 | KD63A | KQFA |
| KD22M | KEDENM1 | KD26G1 | KEDQLGN1 | KD63B | . KQFB |
| KD22M2 | KEDENM2 | KD26H1 | KEDQLHN1 | KD63C | KQFC |
| KD22NE2 | KEDENNE2 | KD26I1 | KEDQLIN1 | KD63D | KQFD |
| KD22Y | KEDENY1 | KD26J1 | KEDQLJN1 | KD63E | . KQFE |
| KD22Y2 | KEDENY2 | KD27 | KEDOQL2 | KD63F | KQFF |
| KD23A | KEDFEEA2 | KD27 | . KEDOQL1 | KD63G | KQFG |
| KD23A | KEDFEEA1 | KD27NON | KEDOQLN1 | KD63H | KQFH |
| KD23B | KEDFEEB2 | KD27NON | KEDOQLN2 | KD63I | KQFI |
| KD23B | KEDFEEB1 | KD28 | KEDMORE2 | KD63J | KQFJ |
| KD23C | KEDFEEC2 | KD28 | KEDMORE1 | KD63K | . KQFK |
| KD23C | KEDFEEC1 | KD29 | KLCHMOR | KD63L | KQFL |
| KD23D | KEDFEED1 | KD29DST | KPLBORND | KD63M | KQFM |
| KD23D | KEDFEED2 | KD290S | KPLBORNC | KD63N | KQFN |
| KD23E | KEDFEEE1 | KD30 | KYR2UK4 | KD64 | KQFED |
| KD23E | KEDFEEE2 | KD31 | KMLSTAT | KD65A | KQFEDA |
| KD23F | . KEDFEEF1 | KD32M1 | KCITZN1 | KD65B | KQFEDB |
| KD23F | . KEDFEEF2 | KD32M2 | KCITZN2 | KD65C | KQFEDC |
| KD23G | KEDFEEG1 | KD33 | KRACE | KD65D | KQFEDD |
| KD23G | KEDFEEG2 | KD34 | KJBSTAT | KD65E | KQFEDE |
| KD24 | KEDQUAL2 | KD36 | KPASOC | KD65F | KQFEDF |
| KD24 | KEDQUAL1 | KD36 | KPASOC00 | KD65G | KQFEDG |
| KD25A1 | KEDQLA1 | KD36ANA. | KPAJU | KD65H | KQFEDH |


| D651 | I |
| :---: | :---: |
| KD65J | KQFEDJ |
| KD65K | KQFEDK |
| KD65L | KQFEDL |
| KD65M | KQFEDM |
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| KD650 | KQFEDO |
| KD65P | KQFEDP |
| KD65Q | KQFEDQ |
| KD65R | KQFEDR |
| KD65S | KQFEDS |
| KD65T | KQFEDT |
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| KD66H | KNQFEDH |
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| KD66R | KNQFEDR |
| KD66S | KNQFEDS |
| KD66T | KNQFEDT |
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| KD68 | KNTRAIN |
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| KD70D | KTRWHYD2 |
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| KD71 | KTRQ2 |
| KD71 | KTRU2 |
| KD71 | . KTRQ3 |
| KD72A | KTRFEEA2 |


| KD72A1 | . KTRFEEA1 | KD76BN1 | QLBN1 |
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| KD72C1 | KTRFEEC1 | KD76DN1 | KTRQLDN1 |
| KD72C3 | KTRFEEC3 | KD76DN2 | KTRQLDN2 |
| KD72E | KTRFEEE2 | KD76DN3 | KTRQLDN3 |
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| KD72G | KTRFEEG2 | KD76FN3 | KTRQLFN3 |
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| KD75C2 | KTRQLC2 | KD77 | KTROQL1 |
| KD75C3 | KTRQLC3 | KD77NON | KTROQLN2 |
| KD75D1 | KTRQLD1 | KD77NON | KTROQLN1 |
| KD75D2 | KTRQLD2 | KD78 | KTRMORE1 |
| KD75D3 | KTRQLD3 | KD78 | KTRMORE2 |
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| KD75E2 | KTRQLE2 | KD79B | KMABWLY |
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| KD75G1 | KTRQLG1 | KD81PN1 | KBWTPN1 |
| KD75G2 | KTRQLG2 | KD81PN2 | KBWTPN2 |
| KD75G3 | . KTRQLG3 | KD81PN3 | KBWTPN3 |
| KD75H1 | . KTRQLH1 | KD82 | KBWTXP3 |
| KD75H2 | KTRQLH2 | KD82 | KBWTXP1 |
| KD75H3 | KTRQLH3 | KD82 | KBWTXP2 |
| KD75I1 | KTRQLI1 | KD83 | KBWTEL2 |
| KD75I2 | KTRQLI2 | KD83 | KBWTEL3 |
| KD75I3 | KTRQLI3 | KD83 | KBWTEL1 |
| KD75J1 | . KTRQLJ1 | KD84 | KBWTWK1 |
| KD75J2 | . KTRQLJ2 | KD84 | KBWTWK2 |
| KD75J3 | . .KTRQLJ3 | KD84 | KBWTWK3 |
| KD75NON | KTRQLNN2 | KD85 | KBWTKN3 |
| KD75NON | KTRQLNN3 | KD85 | KBWTKN1 |
| KD75NON | KTRQLNN1 | KD85 | KBWTKN2 |
| KD76AN1 | KTRQLAN1 | KD86LB1 | KBWTLB1 |
| KD76AN2 | KTRQLAN2 | KD86LB2 | KBWTLB2 |
| KD76AN3 | KTRQLAN3 | KD86LB3 | KBWTLB3 |


| KD86OZ1 | KBWTOZ1 | KD102G | KNATIDG | KE32 | KOVTPAY |
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| KD86OZ2 | KBWTOZ2 | KD102H | KNATIDH | KE33 | KEXTREST |
| KD86OZ3 | KBWTOZ3 | KD102I | KNATIDI | KE33 | KEXTRATE |
| KD87 | . KBWTGM1 | KD103 | . KNATIDMN | KE34 | KBASREST |
| KD87 | . KBWTGM2 | KD104 | KMABORN | KE34 | KBASRATE |
| KD87 | . KBWTGM3 | KD105 | KPABORN | KE35 | KOVTRATE |
| KD88 | KBWTG53 | KD106A | KIVDA | KE35 | KOVTREST |
| KD88 | KBWTG52 | KD106B | KIVDB | KE39 | .KJBPERFP |
| KD88 | KBWTG51 | KD106C | KIVDC | KE40 | KJBONUS |
| KD89 | KAGERET | KD106D | KIVDD | KE41 | KJBONAM |
| KD90 | KREWORK | KD106E | KIVDE | KE42 | KJBONG |
| KD91 | KRETEX | KE1 | KJBHAS | KE43 | KJBRISE |
| KD92 | KAGEXRT | KE2 | KJBOFF | KE44 | KTUJBPL |
| KD93 | KRETFIX | KE3 | KJBOFFY | KE45 | KTUIN1 |
| KD94 | . KRTMAGE | KE4 | KJBTERM1 | KE46 | KJBOPPS |
| KD95AA | KRTRLYA | KE5 | KJBSOC00 | KE47 | KJBTIME |
| KD95AB | KRTRLYB | KE5 | KJBSOC | KE48 | KJBWKHRG |
| KD95AC | KRTRLYC | KE6 | KJBSIC92 | KE48 | KJBWKHRH |
| KD95AD | KRTRLYD | KE6 | KJBSIC | KE48 | KJBWKHRF |
| KD95AE | KRTRLYE | KE7 | KJBSEMP | KE48 | KJBWKHRE |
| KD95AF | KRTRLYF | KE8 | KJBMNGR | KE48 | KJBWKHRD |
| KD95AG | KRTRLYG | KE9 | KJBSECT | KE48 | KJBWKHRB |
| KD95AH | KRTRLYH | KE10 | KJBSIZE | KE48 | KJBWKHRA |
| KD95AI | KRTRLYI | KE11 | KJBHRS | KE48 | KJBWKHRC |
| KD95AJ | KRTRLYJ | KE12 | KJBOT | KE49 | KJBPEN |
| KD95AK | KRTRLYK | KE13 | KJBOTPD | KE4A | KJBTERM2 |
| KD95AL | KRTRLYL | KE14 | KJBHRLK | KE50 | KJBPENM |
| KD95AM | KRTRLYM | KE15 | KJBPL | KE52D | KJBBGD |
| KD95B | KYRTRLY | KE16 | KJBTTWT | KE52M | KJBBGM |
| KD96AA | KRTLATA | KE17 | KJBTTWM | KE52Y | KJBBGY4 |
| KD96AB | KRTLATB | KE18B | KJBSAT2 | KE53 | KJBBGLY |
| KD96AC | KRTLATC | KE18D | KJBSAT4 | KE54 | KPAYS |
| KD96AD | KRTLATD | KE18F | KJBSAT6 | KE550C | KPAYSW |
| KD96AE | KRTLATE | KE18G | KJBSAT7 | KE56 | KPAYSG |
| KD96AF | KRTLATF | KE19 | KJBSAT | KE57D | KJBBGD |
| KD96AG | .KRTLATG | KE20 | KPAYGL | KE57M | KJBBGM |
| KD96AH | KRTLATH | KE21OC | KPAYGW | KE57Y | KJBBGY4 |
| KD96AI | KRTLATI | KE22 | KPAYNL | KE58 | KJBBGLY |
| KD96AJ | KRTLATJ | KE23A | KPYTC | KE59 | KPAYLY |
| KD96B | KYRTLAT | KE23B | KPYWFTC | KE600C | KPAYLYW |
| KD97 | KRTVOL | KE23C | KPYWFTCW | KE61 | KPAYLYG |
| KD98 | KRTSAT | KE23D | KPYDPTC | KE62 | KPAYS |
| KD99 | KRTCOMP | KE23E | KPYDPTCW | KE63OC | KPAYSW |
| KD100A | KRTPRO1 | KE230C | KPAYNW | KE64 | KPAYSG |
| KD100B | KRTPRO2 | KE24 | KPAYSLP | KE73 | KJSBOSS |
| KD100C | KRTPRO3 | KE26 | KPAYUSL | KE74 | KJSSIZE |
| KD100D | KRTPRO4 | KE27 | KPAYU | KE75 | KJSHRS |
| KD100E | KRTPRO5 | KE280C | KPAYUW | KE76 | KJSHRLK |
| KD100F | KRTPRO6 | KE29 | KPAYUG | KE77 | KJSTIME |
| KD101A | KRTCON1 | KE30A | KPAYDF1 | KE78 | KJSTYPEB |
| KD101B | KRTCON2 | KE30B | KPAYDF2 | KE79 | KJSACCS |
| KD101C | KRTCON3 | KE30C | KPAYDF3 | KE80 | KJSPART |
| KD101D | KRTCON4 | KE30D | KPAYDF4 | KE81BM | KJSPRBM |
| KD102A | KNATIDA | KE30E | KPAYDF5 | KE81BY | KJSPRBY4 |
| KD102B | KNATIDB | KE30F | .KPAYDF6 | KE81EM | KJSPREM |
| KD102C | . KNATIDC | KE30G | KPAYDF7 | KE81EY | KJSPREY4 |
| KD102D | KNATIDD | KE30H | KPAYDF9 | KE82 | KJSPRF |
| KD102E | KNATIDE | KE30I | KPAYDF8 | KE83 | KJSPRLS |
| KD102F | KNATIDF | KE31 | KPAYTYP | KE84 | KJSPRTX |


| KE85 | KJSPRNI | KE132 | KJ2HAS | KF4 | KFISIT |
| :---: | :---: | :---: | :---: | :---: | :---: |
| KE86BM . | KJSPRBM | KE133 | KJ2SOC | KF5 | KFISITC |
| KE86BY | .KJSPRBY4 | KE133 | KJ2SOC00 | KF6 | KFISITY |
| KE86EM . | KJSPREM | KE134 | KJ2SEMP | KF7 | KFISITX |
| KE86EY | .KJSPREY4 | KE135 | KJ2HRS | KF8 | KFIYRDIA |
| KE87 | KJSPRF | KE136 | KJ2PAY | KF9A | KFIYRDB1 |
| KE91 | KJSPAYU | KE137A . | KIVEA | KF9B | KFIYRDB2 |
| KE92 | KJSPAYW | KE137B | KIVEB | KF9C | KFIYRDB3 |
| KE93 | KJSPYTX | KE137C | KIVEC | KF9D | KFIYRDB4 |
| KE94 | KJSPYNI | KE137D | KIVED | KF9E | KFIYRDB5 |
| KE95 | KJSPL | KE137E | KIVEE | KF9F | KFIYRDB6 |
| KE96 | KJSTTWT | KEG3 | PID | KF10 | KSAVE |
| KE97 | KJSTTWM | KEG4 | KHGSEX | KF11 | KSAVED |
| KE98A | KJSSAT1 | KEG5M | KHGBM | KF11AM1 | KSAVEY1 |
| KE98B | KJSSAT2 | KEG5Y | KHGBY | KF11AM2 | KSAVEY2 |
| KE98D | KJSSAT4 | KEG6 | KIVIOLW | KF12 | KSAVREG |
| KE98E | KJSSAT5 | KEG7 | KIVSTAT1 | KF13 | KSAVLT |
| KE99 | KJSSAT | KEG8 | KIVELIG | KF14 | KPPPEN |
| KE100D | KJSBGD | KEG9 | KHHMEM | KF15 | KPENB4 |
| KE100M | KJSBGM | KEG10 | KNEWHY | KF16 | . KPENB4Y4 |
| KE100Y | KJSBGY4 | KEG11 | KLVWHY | KF17 | KPENB4V |
| KE101A | KJBLKCHA | KEG12M | KNEMNJN | KF18 | KPENB4W |
| KE101B | KJBLKCHB | KEG12M | KLVMN | KF19 | KPENYR4 |
| KE101C | KJBLKCHC | KEG12Y. | KNEYRJN4 | KF20 | KPENADD |
| KE101D | KJBLKCHD | KEG12Y. | KLVYR4 | KF21 | KPENADV |
| KE101E | KJBLKCHE | KEG13 | KLVLOC | KF22 | KPENADW |
| KE102A | KJBXPCHA | KEG14 | KIVFIO | KF23 | KPENMJN |
| KE102B | KJBXPCHB | KEG16 | KIVRREF | KF24 | KPENMCN |
| KE102C | KJBXPCHC | KEG17 | KIVIREIS | KF25 | KPENMPY |
| KE102D | KJBXPCHD | KEG18 | KIVFIO | KF26 | KPENMTP |
| KE102E | KJBXPCHE | KF2 | KNF1 | KF27 | KSPINHH |
| KE104 | KRACH12 | KF3A | KFICODE | KF28 | KPENMSP |
| KE105M1 | KJBCHC1 | KF3B01 | KFR01 | KF29 | KPENMEX |
| KE105M2 | KJBCHC2 | KF3B02 | KFR02 | KF30 | KPPPEX |
| KE105M3 | KJBCHC3 | KF3B03 | KFR03 | KF31 | KPPPEXM |
| KE107 | KXPCHCF | KF3B04 | KFR04 | KF32 | KSTAKEH |
| KE108 | KXPCHC | KF3B05 | KFR05 | KF34 | KSPPEN |
| KE109 | KHUXPCH | KF3B06 | KFR06 | KF35A | KRETEXP |
| KE110 | KHUNURS | KF3B07 | KFR07 | KF35B | KRETAMT |
| KE111 | KJULK1 | KF3B08 | KFR08 | KF36 | KWINDF |
| KE112 | KJULK4 | KF3B09 | KFR09 | KF36 | KRETSUF |
| KE113A | KJULKA | KF3B10 | KFR10 | KF38A | KWINDFA |
| KE113B | KJULKB | KF3B11 | KFR11 | KF38B | KWINDFB |
| KE113C | KJULKC | KF3B12 | KFR12 | KF38C | KWINDFC |
| KE113D | KJULKD | KF3B13 | KFR13 | KF38D | KWINDFD |
| KE113E | KJULKE | KF3B14 | KFR14 | KF38F | KWINDFF |
| KE114 | KJULKJB | KF3B15 | KFR15 | KF38G | KWINDFG |
| KE115 | KJUBGN | KF3B16 | KFR16 | KF38H | KWINDFH |
| KE116 | KJUSPEC | KF3B17 | KFR17 | KF39A | KWINDFAY |
| KE117 | KJUSOC | KF3B18 | KFR18 | KF39B | .KWINDFBY |
| KE117 | KJUSOC00 | KF3B19 | KFR19 | KF39C | KWINDFCY |
| KE118 | KJUHRSX | KF3B20 | KFR20 | KF39D | KWINDFDY |
| KE119 | . KJUPAYX | KF3BAL | KFRALL | KF39F | KWINDFFY |
| KE120 | KJUPAYL | KF3C | KFRNOW | KF39G | KWINDFGY |
| KE121 | KJUHRSL | KF3D | KFRVAL | KF39H | KWINDFHY |
| KE124 | KEPROSH | KF3EOC | KFRW | KF40A | KXPMEAL |
| KE129 | KEAAGE | KF3F | KFRJT | KF40B | KXPLEIS |
| KE130 | . KJBUB | KF3FPN. | KFRJTPN | KF41 | KFTEXHH |
| KE131 | . KJBUBY | KF3SEQ | KFISEQ | KF42A | KFTEXAV |


| KF42A | KFTEXA | KF103 | KF103 | KH21 | KMGNEW |
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| KF42B | KFTEXBV | KF104 | KF104 | KH22A | KMGXTY1 |
| KF42B | . KFTEXB | KF105 | KF105 | KH22B | KMGXTY2 |
| KF42C | KFTEXCV | KF106 | KF106 | KH22C | KMGXTY3 |
| KF42C | KFTEXC | KF116 | KF116 | KH22D | KMGXTY4 |
| KF43A | KFTEXAW | KF118 | KF118 | KH22E | KMGXTY5 |
| KF43A1 | KFTEXA1 | KF119 | KF119 | KH23 | KXPMG |
| KF43A2 | KFTEXA2 | KF121 | KF121 | KH24A | KXPMG1 |
| KF43A3 | KFTEXA3 | KF122 | . KF122 | KH24B | KXPMG2 |
| KF43A4 | KFTEXA4 | KF124 | . KF124 | KH24C | KXPMG3 |
| KF43A5 | KFTEXA5 | KF125 | KF125 | KH24D | KXPMG4 |
| KF43A6 | KFTEXA6 | KF126 | KF126 | KH25 | KHSJB |
| KF43B | KFTEXBW | KF127 | KF127 | KH26M1 | KRENTP1 |
| KF43B1 | KFTEXB1 | KF128 | KF128 | KH26M2 | KRENTP2 |
| KF43B2 | KFTEXB2 | KF132 | . KF132 | KH27 | KRENTLL |
| KF43B3 | KFTEXB3 | KF135 | KF135 | KH28 | KRENTF |
| KF43B4 | KFTEXB4 | KF136 | KF136 | KH30 | KRENT |
| KF43B5 | KFTEXB5 | KF137 | . KF137 | KH31 | KRENTW |
| KF43B6 | KFTEXB6 | KF138 | KF138 | KH32A | KRENT1 |
| KF43C | KFTEXCW | KF139 | KF139 | KH32B | KRENT7 |
| KF43C1 | KFTEXC1 | KF140 | KF140 | KH32C | KRENT2 |
| KF43C2 | KFTEXC2 | KF141 | . KF141 | KH32D | KRENT3 |
| KF43C3 | KFTEXC3 | KF142 | KF142 | KH32E | KRENT4 |
| KF43C4 | KFTEXC4 | KF151 | KF151 | KH32F | KRENT5 |
| KF43C5 | KFTEXC5 | KF152 | KF152 | KH32G | KRENT8 |
| KF43C6 | KFTEXC6 | KF153 | KF153 | KH32H | KRENT6 |
| KF47A | KHUBUYS | KF154 | KF154 | KH33 | KRENTHB |
| KF47B | KHUFRYS | KF155 | KF155 | KH34 | KRENTG |
| KF47C | KHUMOPS | KF156 | KF156 | KH35 | KRENTG |
| KF47D | KHUIRON | KF157 | KF157 | KH36 | KRENTGW |
| KF48 | KHHCH12 | KF158 | KF158 | KH37 | KXPHSDF |
| KF49 | . KHUSITS | KF159 | KF159 | KH38A | KXPHSD1 |
| KF50 | KHOWLNG | KH0AD | . KHHDOI | KH38B | KXPHSD2 |
| KF51 | KCARUSE | KHOAM | KHHMOI | KH39 | KXPHSDB |
| KF52 | KMOBUSE | KHOAY . | KHHYOI4 | KH40A | KHSKCH |
| KF53 | KAGEADV | KHOBH | KHHSOIH | KH40A | KHSBTH |
| KF53A1 | KAGEAD1 | KHOBM | KHHSOIM | KH40A | KHSTLT |
| KF53A2 | KAGEAD2 | KHOC | KHSTYPE | KH40A | KHSGDN |
| KF53A3 | KAGEAD3 | KH1A | KHSRINS | KH40B | KHSTLTS |
| KF53A4 | KAGEAD4 | KH2 | KHSROOM | KH40B | KHSKCHS |
| KF53M1 | KEVENT1S | KH3 | KHSOWND | KH40B | KHSGDNS |
| KF53M1 | KEVENT1 | KH4M1. | KHSOWR1 | KH40B | KHSBTHS |
| KF53M2 | KEVENT2 | KH4M2. | . KHSOWR2 | KH41A | KXPGASY |
| KF53M2 | KEVENT2S | KH5 | . KHSVAL | KH41B | KXPLECY |
| KF53M3 | KEVENT3 | KH6 | KMGHAVE | KH41C | KXPOILY |
| KF53M3 | KEVENT3S | KH7 | KHSOWRP | KH41D | KXPSFLY |
| KF53M4 | KEVENT4 | KH8 | KMGYNOT | KH42 | KHEATCH |
| KF53M4 | KEVENT4S | KH9 | KHSCOST | KH43 | KHEATYP |
| KF54A | KIVFA | KH10 | KHSYR04 | KH44A | KHSPRBG |
| KF54B | . KIVFB | KH11 | KHSCOST | KH44B | KHSPRBH |
| KF54C | KIVFC | KH12 | KMGYR04 | KH44C | KHSPRBI |
| KF54D | KIVFD | KH13 | KMGLY | KH44D | . KHSPRBJ |
| KF54E | . KIVFE | KH14 | KHSIVLW | KH44E | KHSPRBK |
| KF55H | KIVFOIH | KH15 | KMGYR04 | KH44F | KHSPRBL |
| KF55M | KIVFOIM | KH16 | KHSCOST | KH44G | KHSPRBM |
| KF56 | . KIVSC | KH17 | . KMGOLD | KH44H | KHSPRBN |
| KF701 | KPRF125 | KH18 | . KMGLIFE | KH44I | KHSPRBO |
| KF101 | . KF101 | KH19 | KMGTYPE | KH44J | KHSPRBP |
| KF102 | . KF102 | KH2O | KMGXTRA | KH44K | KHSPRBQ |


| KH45 |  |
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| KH46 | .KHS2OWND |
| KH47 | KHS2VALO |
| KH47A . | KHS2VALA |
| KH47B . | KHS2VALB |
| KH47C | KHS2VALC |
| KH47D | KHS2VALD |
| KH49 | T |
| KH50 | KCDHAVE |
| KH51A | KCD1USE |
| KH51B | KCD2USE |
| KH51C | KCD10USE |
| KH51D | KCD11USE |
| KH51E | KCD3USE |
| KH51F | KCD4USE |
| KH51G | KCD5USE |
| KH51H | KCD6USE |
| KH51I | KCD7USE |
| KH51J | KCD8USE |
| KH51K | KCD9USE |
| KH51L | KCD12USE |
| KH52 | KCDBGHT |
| KH53A | KCD1NEW |
| KH53B | KCD2NEW |
| KH53C | KCD10NEW |
| KH53D | KCD11NEW |
| KH53E | KCD3NEW |
| KH53F | KCD4NEW |
| KH53G | KCD5NEW |
| KH53H | KCD6NEW |
| KH53I | KCD7NEW |
| KH53J | KCD8NEW |
| KH53K | KCD9NEW |
| KH53L | KCD12NEW |
| KH54A | KCD1CST |
| KH54B | KCD2CST |
| KH54C . | KCD10CST |
| KH54D | KCD11CST |
| KH54E | KCD3CST |
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| KH54H | KCD6CST |
| KH54I | KCD7CST |
| KH54J | KCD8CST |
| KH54K | KCD9CST |
| KH54L | KCD12CST |
| KH55 | KPCNET |
| KH56 | KXPHP |
| KH57 | KXPHPDF |
| KH58A | KHSCANA |
| KH58B | KHSCANB |
| KH58C | KHSCANC |
| KH58D | KHSCAND |
| KH58E | KHSCANE |
| KH58F | KHSCANF |
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| KH59B | KHSCNTB |
| KH59C | KHSCNTC |
| KH59D | KHSCNTD |


| KH59E | KHSCNTE | KJ24 | PPAYL |
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| KH59F | KHSCNTF | KJ250C | KJHPYLW |
| KH60 | KXPFOOD | KJ26 | KJHPYLG |
| KH61 | KNCARS | KJ27 | KJHSTPY |
| KH62 | KCAROWN | KJ28 | KJBLKY |
| KH63 | KCARVAL | KJ31 | KJBHAD |
| KH64M1 | KIVH1 | KJ32 | KJLEND4 |
| KH64M2 | KIVH2 | KJ33 | KJLSOC00 |
| KH64M3 | KIVH3 | KJ33 | KJLSOC |
| KH65H | KHHFOIH | KJ34 | KJLSIC |
| KH65M | KHHFOIM | KJ34 | KJLSIC92 |
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| KHG3 | KHGSEX | KJ36 | KJLBOSS |
| KHG4M | KHGBM | KJ37 | KJLMNGR |
| KHG4Y | KHGBY | KJ38 | KJLSIZE |
| KHG8 | KMASTAT | KJ39A | KIVJA |
| KHG9 | KHGSPN | KJ39B | KIVJB |
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| KHG10 | KHGEMP | KJ39D | KIVJD |
| KHG11 | KHGFNO | KJ39E | KIVJE |
| KHG11 | KHGFNO | KL2 | KMLSTAT |
| KHG12 | KHGMNO | KL3 | KNMAR |
| KHG12 | KHGMNO | KL4M | KLMARM |
| KHG13 | . KHGRA | KL4M | KLMARY4 |
| KHG13 | . KHGRA | KL4M | KLCMARM |
| KI1 | . KIV1 | KL4Y | KLCMARY4 |
| KI2 | KIV2 | KL5 | . KMPNO |
| KI4 | KIV4 | KL5 | KMPNO |
| KI5 | KIV5 | KL6 | KLCMCOH |
| KI5A | KIV5AA | KL7M | KLCMCBM |
| KI5B | . KIV5AB | KL7Y | KLCMCBY4 |
| KI5C | KIV5AC | KL8M | KLCMSPM |
| KI6A | KIV6A | KL8Y | KLCMSPY4 |
| KI6B | KIV6B | KL10 | KLMCOH |
| KI6C | KIV6C | KL11M | KLMCBM |
| KI6D | . KIV6D | KL11Y | KLMCBY4 |
| KI6E | KIV6E | KL12 | KLMEND |
| KI7 | KIV6F | KL13M | KLMWWM |
| KI8 | KIV7 | KL13Y | KLMWWY4 |
| KJ5D | KCJSBGD | KL15M | KLMDVM |
| KJ5M | . KCJSBGM | KL15Y | KLMDVY4 |
| KJ5Y | KCJSBGY4 | KL16M | KLMSPM |
| KJ6 | KNEMST | KL16Y | KLMSPY4 |
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| KJ9 | . KJHSTAT | KL19 | KLNCOH |
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| KJ10M | KJHBGM | KL20Y | KLCSBY4 |
| KJ10Y | KJHBGY4 | KL21M | KLCSEM |
| KJ12 | KNJBS | KL21NE | KLCSNE |
| KJ14 | KJHSOC00 | KL21Y | KLCSEY4 |
| KJ14 | . KJHSOC | KL22 | KLADOPT |
| KJ16 | KJHSEMP | KL23 | KLNADOPT |
| KJ17 | KJHBOSS | KL24AM | KLACBM |
| KJ18 | KJHSECT | KL24AY | KLACBY4 |
| KJ19 | KJHMNGR | KL24B | . KLACSX |
| KJ21 | . KJHPLDF | KL24C | . KLACST |
| KJ22 | KJHSIC92 | KL24D | KLACYB4 |
| KJ22 | . KJHSIC | KL24E | KLACLV |
| KJ23 | KJHSIZE | KL24F | KLACNO |


| KL24G | KLACYD4 | KM10A | KHLLTA | KM36 | KHLCVRL |
| :---: | :---: | :---: | :---: | :---: | :---: |
| KL24H | KLACAL | KM10B | KHLLTB | KM37 | KHLSV |
| KL25 | KLPRNT | KM10C | KHLLTC | KM38A | KHLSVA |
| KL26 | KLNPRNT | KM10D | KHLLTD | KM38B | KHLSVB |
| KL27AM | KLCHBM | KM10E | KHLLTE | KM38C | KHLSVC |
| KL27AY | KLCHBY4 | KM11 | KHLLTW | KM38D | KHLSVD |
| KL27B | KLCHSX | KM11A | KHLENDW | KM38E | KHLSVE |
| KL27C | .KLCHLV | KM11B | KHLLTWA | KM38F | KHLSVF |
| KL27DNO | KLNCNO | KM12 | KHLPAIN | KM38G | KHLSVG |
| KL27E | KLCHYD4 | KM13 | KHLTRPN | KM38H | KHLSVH |
| KL27F | . KLCHAL | KM14 | KHLAVPN | KM381 | KHLSVI |
| KL28 | kcbage | KM15 | KHLWTPN | KM38J1 | KHLSVJ |
| KL30 | KLCHMORN | KM16 | KHLIV65 | KM38J2 | KHLSVK |
| KL31A | KIVLA | KM17A | KADLA | KM38L | KHLSVL |
| KL31B | KIVLB | KM17B | KADLAD | KM38M | KHLSVM |
| KL31C | KIVLC | KM18A | KADLB | KM39A | KHLSVAN |
| KL31D | KIVLD | KM18B | KADLBD | KM39B | KHLSVBN |
| KL31E | KIVLE | KM19A | KADLC | KM39C | KHLSVCN |
| KL32M | KLEDENDM | KM19B | KADLCD | KM39D | KHLSVDN |
| KL32NL | KLEDNOW | KM20A | KADLD | KM39E | KHLSVEN |
| KL33 | KLESHST | KM20B | KADLDD | KM39F | KHLSVFN |
| KL33SPN | KLESHNO | KM21A | .KADLE | KM39G | KHLSVGN |
| KL34M | KLESHEM | KM21B | KADLED | KM39H | KHLSVHN |
| KL34NE | KLESHNE | KM22A | KADLF | KM391 | KHLSVIN |
| KL34Y | KLESHEY4 | KM22B | .KADLFD | KM39J1 | KHLSVJN |
| KL37SPN | KLCSNO | KM23 | KRTRHM | KM39J2 | KHLSVKN |
| KM1 | KHLDSBL | KM24 | KLVLONG | KM39L | KHLSVLN |
| KM1A | KHLSTAT | KM25 | KHL2GP | KM39M | KHLSVMN |
| KM2A | KHLPRBA | KM26 | KHL2HOP | KM40A | KHLSVAF |
| KM2B | KHLPRBB | KM27 | KXDTS | KM40B | KHLSVBF |
| KM2C | KHLPRBC | KM28 | KNXDTS | KM40C | KHLSVCF |
| KM2D | KHLPRBD | KM29 | KHLCK | KM40D | KHLSVDF |
| KM2E | KHLPRBE | KM29 | KHOSP | KM40E | KHLSVEF |
| KM2F | KHLPRBF | KM2O | KHLPRBO | KM40F | KHLSVFF |
| KM2G | KHLPRBG | KM30 | KHOSPD | KM40G | KHLSVGF |
| KM2H | KHLPRBH | KM30A | KHLCKA | KM40H | KHLSVHF |
| KM2I | KHLPRBI | KM30B | KHLCKB | KM401 | KHLSVIF |
| KM2J | KHLPRBJ | KM30C | KHLCKC | KM40J1 | KHLSVJF |
| KM2K | KHLPRBK | KM30D | KHLCKD | KM40J2 | KHLSVKF |
| KM2L | KHLPRBL | KM30E | . KHLCKE | KM40L | .KHLSVLF |
| KM2M | KHLPRBM | KM30F | KHLCKI | KM40M | KHLSVMF |
| KM2M0 | KHLPRB | KM30G | . KHLCKF | KM47 | KAIDHH |
| KM2N | KHLPRBN | KM30H | KHLCKG | KM48P1 | . KAIDHUA |
| KM3A | KHLPRXA | KM301 | KHLCKH | KM48P2 | KAIDHUB |
| KM3B | KHLPRXB | KM31A | KHLCKAN | KM48P3. | KAIDHUC |
| KM3C | KHLPRXC | KM31B | KHLCKBN | KM49 | KAIDXHH |
| KM3D | KHLPRXD | KM31C | KHLCKCN | KM50 | KNAIDXHH |
| KM3E | KHLPRXE | KM31D | KHLCKDN | KM51M1 | KAIDHU1 |
| KM3F | KHLPRXF | KM31E | KHLCKEN | KM51M2 | KAIDHU2 |
| KM3G | KHLPRXG | KM31F | KHLCKIN | KM53 | KAIDHRS |
| KM3H | KHLPRXH | KM31G | KHLCKFN | KM54A | KIVMA |
| KM3I | KHLPRXI | KM31H | KHLCKGN | KM54B | KIVMB |
| KM3J | KHLPRXJ | KM31I | KHLCKHN | KM54C | KIVMC |
| KM3K | KHLPRXK | KM32 | KHOSPCH | KM54D | KIVMD |
| KM3L | KHLPRXL | KM33 | KHOSPNHS | KM54E | KIVME |
| KM3M | KHLPRXM | KM33 | KSMOKER | KP2B | KPRRS21 |
| KM3N | KHLPRXN | KM34 | KHLCVR | KP2C | KPRIPN |
| KM30 | KHLPRXO | KM34 | . KNCIGS | KP2D | KPRWHY |
| KM9 | . . KHLLT | KM35 | KHLCVRH | KP3 | KPPLEVR |


| KP10M | KPRESBGM | KS3N | KQLFN | KV12K | KORGAH |
| :---: | :---: | :---: | :---: | :---: | :---: |
| KP10Y | KPRESBY4 | KS3O | KQLFO | KV12L | KORGAI |
| KP11 | . KPRESLY | KS3P | . KQLFP | KV12M | KORGAJ |
| KP23 | KPRFEHQ | KS3Q | KQLFQ | KV12N | KORGAK |
| KP25 | KPRSEHQ | KS3R | KQLFR | KV12O | KORGAL |
| KP58 | . KPRJBFT | KS3S | KQLFS | KV12P | KORGAM |
| KP59M | KPRJBBGM | KS4A | KXSUPA | KV13 | KOPRLG2 |
| KP59Y | . KPRJBBY4 | KS4B | KXSUPB | KV14 | KFRNA |
| KP60 | . KPRJBLY | KS4C | KXSUPC | KV15 | KFRNB |
| KP61 | KPREARN | KS5A | KSSUPA | KV16 | KFRNC |
| KP70A | KPRF101 | KS5B | KSSUPB | KV16A | KOPRLG1 |
| KP70B | KPRF102 | KS5C | KSSUPC | KV16C | KOPRLG3 |
| KP70C | KPRF116 | KS5D | KSSUPD | KV17A | KNOLVREL |
| KP70D | KPRF131 | KS5E | KSSUPE | KV17A | KLVGGPA |
| KP70F | KPRF135 | KS6A | KSSUP1 | KV17A | KLVMA |
| KP70G | . KPRF137 | KS6B | KSSUPR2R | KV17A | KLVGGCH |
| KP70H | . KPRF139 | KT2B | KTELWHY | KV17A | KLVGPAR |
| KP70J | KPRF141 | KT45 | KTLFIYRL | KV17A | KLVSIB |
| KP70NON | KPRFIRN | KT50 | KTLFIYR | KV17A | KLVPA |
| KP71 | KPRFITB | KV1A | KOPPOLA | KV17A | KLVGCH |
| KPI1A | . KIVPA | KV1B | KOPPOLB | KV17A | KLVCH |
| KPI1B | . KIVPB | KV1C | KOPPOLC | KV17B | KMAAGE |
| KPI1C | . KIVPC | KV1D | KOPPOLD | KV17B | KPAAGE |
| KPI1D | . KIVPD | KV2 | KVOTE1 | KV17C | KNLVGGPA |
| KPI1E | KIVPE | KV3 | KVOTE2 | KV17C | KNLVGGCH |
| KS1A | . KGHQA | KV4 | KVOTE3 | KV17C | KNLVGPA |
| KS1B | . KGHQB | KV5 | KVOTE4 | KV17C | KNLVGCH |
| KS1C | . KGHQC | KV6 | KVOTE5 | KV17C | KNLVSIB |
| KS1D | . KGHQD | KV7 | KVOTE7 | KV17C | KNLVCH |
| KS1E | KGHQE | KV8 | KVOTE8 | KV18 | KPARMAR |
| KS1F | . KGHQF | KV9 | KVOTE6 | KV19 | KMALONE |
| KS1G | . KGHQG | KV10 | KORGM | KV20 | KPALONE |
| KS1H | . KGHQH | KV11A | KORGMA | KV21A | KMASEE |
| KS1I | . KGHQI | KV11B | KORGMB | KV21B | KMATEL |
| KS1J | . KGHQJ | KV11C | KORGMC | KV21C | KMAMAIL |
| KS1K | . KGHQK | KV11D | KORGMD | KV22 | KMAFAR |
| KS1L | . KGHQL | KV11E | KORGME | KV23A | KPASEE |
| KS2A | KOPFAMA | KV11F | KORGMF | KV23B | KPATEL |
| KS2B | KOPFAMB | KV11G | KORGMG | KV23C | KPAMAIL |
| KS2C | . KOPFAMC | KV11H | KORGMP | KV24 | KPAFAR |
| KS2D | KOPFAMD | KV11I | KORGMQ | KV25A | KCHSEE |
| KS2E | KOPFAME | KV11J | KORGMO | KV25B | KCHTEL |
| KS2F | KOPFAMF | KV11K | KORGMH | KV25C | KCHMAIL |
| KS2G | KOPFAMG | KV11L | KORGMI | KV26 | KCHFAR |
| KS2H | . KOPFAMH | KV11M | KORGMJ | KV27A | KCHAIDA |
| KS2I | . .KOPFAMI | KV11N | KORGMK | KV27B | KCHAIDB |
| KS3A | . KQLFA | KV110 | KORGML | KV27C | KCHAIDC |
| KS3B | . KQLFB | KV11P | KORGMM | KV27D | KCHAIDD |
| KS3C | KQLFC | KV120 | KORGA | KV27E | KCHAIDE |
| KS3D | . . KQLFD | KV12A | KORGAA | KV27F | KCHAIDF |
| KS3E | . . KQLFE | KV12B | KORGAB | KV27G | KCHAIDG |
| KS3F | KQLFF | KV12C | KORGAC | KV27H | KCHAIDH |
| KS3G | . KQLFG | KV12D | KORGAD | KV27I | KCHAIDI |
| KS3H | KQLFH | KV12E | KORGAE | KV27NON | KNOCHAID |
| KS3I | . KQLFI | KV12F | KORGAF | KV28A | KCAIDUA |
| KS3J | . KQLFJ | KV12G | KORGAG | KV28B | KCAIDUB |
| KS3K | . KQLFK | KV12H | KORGAP | KV28C | KCAIDUC |
| KS3L | . KQLFL | KV12I | KORGAQ | KV28D | KCAIDUD |
| KS3M | . . KQLFM | KV12J | KORGAO | KV28E | KCAIDUE |


| KV28F | KCAIDUF | KY34 | KYPESTI | LD10M2 | LMOVY2 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| KV28G | KCAIDUG | KY35 | KYPESTB | LD11M | LDOBM |
| KV28H | KCAIDUH | KY36 | KYPESTJ | LD11Y | LDOBY |
| KV28I | KCAIDUI | KY37 | KYPESTC | LD12 | LSEX |
| KV28NON | KNOCAIDU | KY38 | KYPESTK | LD14 | LMLSTAT |
| KV29A | KPAAIDA | KY39 | KYPESTE | LD15 | LMLCHNG |
| KV29B | KPAAIDB | KY40 | KYPESTF | LD16M | LMLCHM |
| KV29C | KPAAIDC | KY41 | KYPESTH | LD16Y | LMLCHY4 |
| KV29D | KPAAIDD | KY42 | KYPTCHA | LD17 | LJBSTAT |
| KV29E | KPAAIDE | KY43 | KYPTCHB | LD17A | LHIFUED |
| KV29F | KPAAIDF | KY44 | KYPHSW | LD18 | LEDLYR |
| KV29G | KPAAIDG | KY45 | KYPHAP | LD19 | LEDTYPE1 |
| KV29H | KPAAIDH | KY46 | KYPHFM | LD19 | LEDTYPE2 |
| KV291 | KPAAIDI | KY47 | KYPHFR | LD20 | LEDBLYR1 |
| KV29NON | KNOPAAID | KY48 | KYPHLF | LD20 | LEDBLYR2 |
| KV30A | KPAIDUA | KY49 | KYPOPFF | LD21M | LEDBGM1 |
| KV30B | KPAIDUB | KY50 | KYPOPFB | LD21Y | LEDBGY1 |
| KV30C | KPAIDUC | KY51 | KYPOPFJ | LD21M2 | LEDBGM2 |
| KV30D | KPAIDUD | KY52 | KYPOPPL | LD21Y2 | LEDBGY2 |
| KV30E | KPAIDUE | KY53 | . KYPVTE6 | LD22 | LEDENNE1 |
| KV30F | KPAIDUF | KY54 | KYPVTE3 | LD22M | LEDENM1 |
| KV30G | KPAIDUG | KY55 | KYPCRWRA | LD22Y | LEDENY1 |
| KV30H | KPAIDUH | KY56 | KYPCRWRB | LD22M2 | LEDENM2 |
| KV301 | KPAIDUI | KY57 | KYPEXPL | LD22Y2 | LEDENY2 |
| KV30NON | KNOPAIDU | KY58 | KYPVAND | LD22NE | LEDENNE2 |
| KY1 | KYTVHRS | KY59 | KYPTRUN | LD23A1 | LEDFEEA1 |
| KY2 | KYTVSTP | KY60 | KYPOPSC | LD23A2 | LEDFEEA2 |
| KY3 | KYPFPC | KY61 | KYPLVSC | LD23B1 | LEDFEEB1 |
| KY4 | KYPFPCGM | KY62 | KYPLVHM | LD23B2 | LEDFEEB2 |
| KY5 | KYPPALS | KY63 | KYPWHRS | LD23C1 | LEDFEEC1 |
| KY6 | KYPPALO | KY64 | KYPPAY | LD23C2 | LEDFEEC2 |
| KY7 | KYPUTEL | KY65 | KYPFSOC | LD23D1 | LEDFEED1 |
| KY8 | KYPLATE | KY67 | KYPDLFA | LD23D2 | LEDFEED2 |
| KY9 | KYPFBEAU | KY67 | KYPDLFB | LD23E1 | LEDFEEE1 |
| KY10 | KYPFCLUB | LDOAD | LDOID | LD23E2 | LEDFEEE2 |
| KY11 | . KYPFDISC | LDOAM | LDOIM | LD23F1 | LEDFEEF1 |
| KY12 | KYPFSPOR | LDOAY | LDOIY4 | LD23F2 | LEDFEEF2 |
| KY13 | . KYPARGM | LDOBA | LIVLYR | LD23G1 | LEDFEEG1 |
| KY14 | KYPARGF | LDOBB | LIVSTAT2 | LD23G2 | LEDFEEG2 |
| KY15 | . KYPTLKM | LD1H | LIVSOIH | LD24 | LEDQUAL1 |
| KY16 | .KYPTLKF | LD1M | LIVSOIM | LD24 | LEDQUAL2 |
| KY17 | KYPNPAL | LD2 | LLKNBRD | LD25A1 | LEDQLA1 |
| KY18 | KYPMKFRN | LD3 | LLKMOVE | LD25A2 | LEDQLA2 |
| KY19 | KYPFGHT | LD4 | LLKMOVY | LD25B1 | LEDQLB1 |
| KY20 | . KYPEATN | LD5 | LXPMOVE | LD25B2 | LEDQLB2 |
| KY21 | KYPSAVE | LD6 | LPLNEW | LD25C1 | LEDQLC1 |
| KY22L | KYPPKML | LD7M | LPLNOWM | LD25C2 | LEDQLC2 |
| KY22P | KYPPKMP | LD7Y | LPLNOWY4 | LD25D1 | LEDQLD1 |
| KY23 | KYPSMEV | LD8 | LMOVJB | LD25D2 | LEDQLD2 |
| KY24 | KYPSMOF | LD9A | LMOVJBA | LD25E1 | LEDQLE1 |
| KY25 | KYPSMLW | LD9B | LMOVJBB | LD25E2 | LEDQLE2 |
| KY26 | KYPOPSM | LD9C | LMOVJBC | LD25F1 | LEDQLF1 |
| KY27 | KYPDGFR | LD9D | LMOVJBD | LD25F2 | LEDQLF2 |
| KY28 | . KYPSAD | LD9E | . LMOVJBE | LD25G1 | LEDQLG1 |
| KY29 | . KYPWOR | LD9F | LMOVJBF | LD25G2 | LEDQLG2 |
| KY30 | .KYPBULL | LD9G | LMOVJBG | LD25H1 | LEDQLH1 |
| KY31 | . KYPLONE | LD9H | LMOVJBH | LD25H2 | LEDQLH2 |
| KY32 | KYPBORED | LD91 | LMOVJBI | LD25I1 | LEDQLI1 |
| KY33 | KYPESTA | LD10M1 | LMOVY1 | LD25I2 | LEDQLI2 |


| LD25J1 | LEDQLJ1 | LD51M | LCOH1EM | LD66G | LNQFEDG |
| :---: | :---: | :---: | :---: | :---: | :---: |
| LD25J2 | LEDQLJ2 | LD51Y | LCOH1EY | LD66H | LNQFEDH |
| LD25NA | LEDQNN2 | LD52 | LNMAR | LD66I | LNQFEDI |
| LD25NO | LEDQNN1 | LD53M | LLMAR1M | LD66J | LNQFEDJ |
| LD26A1 | LEDQLAN1 | LD53Y | LLMAR1Y | LD66K | LNQFEDK |
| LD26A2 | LEDQLAN2 | LD54 | LLPRNT | LD66L | LNQFEDL |
| LD26B1 | LEDQLBN1 | LD55 | LLNPRNT | LD66M | LNQFEDM |
| LD26B2 | LEDQLBN2 | LD56M | LCH1BM | LD66N | LNQFEDN |
| LD26C1 | LEDQLCN1 | LD56Y | LCH1BY | LD660 | LNQFEDO |
| LD26C2 | LEDQLCN2 | LD57 | LSCEND | LD66P | LNQFEDP |
| LD26D1 | LEDQLDN1 | LD57NA | LSCHOOL | LD66Q | LNQFEDQ |
| LD26D2 | LEDQLDN2 | LD58 | LSCTYPE | LD66R | LNQFEDR |
| LD26E1 | LEDQLEN1 | LD59 | LSCNOW | LD66S | LNQFEDS |
| LD26E2 | LEDQLEN2 | LD60 | LFETYPE | LD66T | LNQFEDT |
| LD26F1 | LEDQLFN1 | LD61 | LFEEND | LD66U | LNQFEDU |
| LD26F2 | LEDQLFN2 | LD61NA | LFENOW | LD67 | LTRAIN |
| LD26G1 | LEDQLGN1 | LD62 | LQFHAS | LD68 | LNTRAIN |
| LD26G2 | LEDQLGN2 | LD63A | LQFA | LD69 | LTRPLCE1 |
| LD26H1 | LEDQLHN1 | LD63B | LQFB | LD69 | LTRPLCE2 |
| LD26H2 | LEDQLHN2 | LD63C | LQFC | LD69 | LTRPLCE3 |
| LD26I1 | LEDQLIN1 | LD63D | LQFD | LD70A1 | LTRWHYA1 |
| LD26I2 | LEDQLIN2 | LD63E | LQFE | LD70B1 | LTRWHYB1 |
| LD26J1 | LEDQLJN1 | LD63F | . LQFF | LD70C1 | LTRWHYC1 |
| LD26J2 | LEDQLJN2 | LD63G | . LQFG | LD70D1 | LTRWHYD1 |
| LD27 | LEDOQL1 | LD63H | LQFH | LD70E1 | LTRWHYE1 |
| LD27 | LEDOQL2 | LD63I | LQFI | LD70A2 | LTRWHYA2 |
| LD27NO | LEDOQLN1 | LD63J | LQFJ | LD70B2 | LTRWHYB2 |
| LD27NO | LEDOQLN2 | LD63K | LQFK | LD70C2 | LTRWHYC2 |
| LD28 | LEDMORE1 | LD63L | LQFL | LD70D2 | LTRWHYD2 |
| LD28 | LEDMORE2 | LD63M | LQFM | LD70E2 | LTRWHYE2 |
| LD29 | LLCHMOR | LD63N | LQFN | LD70A3 | LTRWHYA3 |
| LD29DS | LPLBORND | LD64 | LQFED | LD70B3 | LTRWHYB3 |
| LD290S | LPLBORNC | LD65A | LQFEDA | LD70C3 | LTRWHYC3 |
| LD30 | LYR2UK4 | LD65B | LQFEDB | LD70D3 | LTRWHYD3 |
| LD32M1 | LCITZN1 | LD65C | LQFEDC | LD70E3 | LTRWHYE3 |
| LD32M2 | LCITZN2 | LD65D | LQFEDD | LD71 | LTRQ1 |
| LD33 | LRACE | LD65E | LQFEDE | LD71 | . LTRQ2 |
| LD36 | LPASOC | LD65F | LQFEDF | LD71 | LTRQ3 |
| LD36 | . LPASOC00 | LD65G | LQFEDG | LD71 | . LTRU1 |
| LD36AN | LPAJU | LD65H | LQFEDH | LD71 | LTRU2 |
| LD37 | LPASEMP | LD65I | LQFEDI | LD71 | LTRU3 |
| LD38 | LPABOSS | LD65J | LQFEDJ | LD72A1 | LTRFEEA1 |
| LD39 | LPAMNGR | LD65K | LQFEDK | LD72B1 | LTRFEEB1 |
| LD40 | . LMAJU | LD65L | LQFEDL | LD72C1 | LTRFEEC1 |
| LD40 | LMASOC | LD65M | LQFEDM | LD72E1 | LTRFEEE1 |
| LD40 | LMASOC00 | LD65N | LQFEDN | LD72F1 | LTRFEEF1 |
| LD41 | LMASEMP | LD650 | LQFEDO | LD72G1 | LTRFEEG1 |
| LD42 | LMABOSS | LD65P | LQFEDP | LD72A2 | LTRFEEA2 |
| LD43 | LMAMNGR | LD65Q | LQFEDQ | LD72B2 | LTRFEEB2 |
| LD44 | LJ1SOC | LD65R | LQFEDR | LD72C2 | LTRFEEC2 |
| LD44 | LJ1SOC00 | LD65S | LQFEDS | LD72E2 | LTRFEEE2 |
| LD44NA | LJ1NONE | LD65T | . LQFEDT | LD72F2 | LTRFEEF2 |
| LD45 | LJ1SEMP | LD65U | LQFEDU | LD72G2 | LTRFEEG2 |
| LD46 | . LJ1BOSS | LD66A | LNQFEDA | LD72A3 | LTRFEEA3 |
| LD47 | LJ1MNGR | LD66B | LNQFEDB | LD72B3 | LTRFEEB3 |
| LD48 | . . LLCOH | LD66C | LNQFEDC | LD72C3 | LTRFEEC3 |
| LD49M | LCOH1BM | LD66D | LNQFEDD | LD72E3 | LTRFEEE3 |
| LD49Y | LCOH1BY | LD66E | LNQFEDE | LD72F3 | LTRFEEF3 |
| LD50 | . LCOH1MR | LD66F | LNQFEDF | LD72G3 | . LTRFEEG3 |


| LD73 | LTRQLXP1 | LD76GN3 | LTRQLGN3 | LD92E | LCRRACE |
| :---: | :---: | :---: | :---: | :---: | :---: |
| LD73 | LTRQLXP2 | LD76HN1 | LTRQLHN1 | LD92F | LCRBURG |
| LD73 | LTRQLXP3 | LD76HN2 | LTRQLHN2 | LD92G | LCRCAR |
| LD74 | LTRQLAC1 | LD76HN3 | LTRQLHN3 | LD92H | LCRMUGG |
| LD74 | LTRQLAC2 | LD76IN1 | LTRQLIN1 | LD93 | LPCUSE |
| LD74 | LTRQLAC3 | LD76IN2 | LTRQLIN2 | LD94A | LPCUSEA |
| LD75A1 | LTRQLA1 | LD76IN3 | LTRQLIN3 | LD94B | LPCUSEB |
| LD75A2 | LTRQLA2 | LD76JN3 | LTRQLJN3 | LD94C | LPCUSEC |
| LD75A3 | LTRQLA3 | LD76JN1 | LTRQLJN1 | LD94D | LPCUSED |
| LD75B1 | LTRQLB1 | LD76JN2 | LTRQLJN2 | LD94E | LPCUSEE |
| LD75B2 | LTRQLB2 | LD77 | .LTROQL1 | LD94F | LPCUSEF |
| LD75B3 | LTRQLB3 | LD77 | .LTROQL2 | LD94G | LPCUSEG |
| LD75C1 | LTRQLC1 | LD77 | . LTROQL3 | LD94H | LPCUSEH |
| LD75C2 | LTRQLC2 | LD77NO | LTROQLN1 | LD94I | LPCUSEI |
| LD75C3 | LTRQLC3 | LD77NO | LTROQLN2 | LD95 | LPCUSEM |
| LD75D1 | LTRQLD1 | LD77NO | LTROQLN3 | LD96 | LPCOFTN |
| LD75D2 | LTRQLD2 | LD78 | LTRMORE1 | LD97A | LBIRHH |
| LD75D3 | LTRQLD3 | LD78 | LTRMORE2 | LD97B | LMABWLY |
| LD75E1 | LTRQLE1 | LD79 | LAGLT20 | LD98 | LMABWNLY |
| LD75E2 | LTRQLE2 | LD80 | LSCNOW2 | LD99AG | LBWTAGM1 |
| LD75E3 | LTRQLE3 | LD81 | LINFTED | LD99AG | LBWTAGM2 |
| LD75F1 | LTRQLF1 | LD82 | LEDASP | LD99AG | LBWTAGM3 |
| LD75F2 | LTRQLF2 | LD83 | LFEDASP | LD99PN | LBWTPN1 |
| LD75F3 | . LTRQLF3 | LD83A | LFEDTYP | LD99PN | LBWTPN2 |
| LD75G1 | . LTRQLG1 | LD84 | LFEDLIK | LD99PN | LBWTPN3 |
| LD75G2 | LTRQLG2 | LD85M1 | LFEDNT1 | LD100 | LBWTXP1 |
| LD75G3 | LTRQLG3 | LD85M2 | LFEDNT2 | LD100 | LBWTXP2 |
| LD75H3 | LTRQLH3 | LD86 | LOCFUT | LD100 | LBWTXP3 |
| LD75H1 | LTRQLH1 | LD87A | LOCIMPA | LD101 | LBWTEL1 |
| LD75H2 | LTRQLH2 | LD87B | LOCIMPB | LD101 | LBWTEL2 |
| LD7511 | LTRQLI1 | LD87C | LOCIMPC | LD101 | LBWTEL3 |
| LD7512 | LTRQLI2 | LD87D | LOCIMPD | LD102 | LBWTWK1 |
| LD7513 | LTRQLI3 | LD87E | LOCIMPE | LD102 | LBWTWK2 |
| LD75J1 | LTRQLJ1 | LD87F | LOCIMPF | LD102 | LBWTWK3 |
| LD75J2 | LTRQLJ2 | LD87G | LOCIMPG | LD103 | LBWTKN1 |
| LD75J3 | LTRQLJ3 | LD87H | LOCIMPH | LD103 | LBWTKN2 |
| LD75NO | LTRQLNN1 | LD871 | LOCIMPI | LD103 | LBWTKN3 |
| LD75NO | LTRQLNN2 | LD87J | LOCIMPJ | LD104L | LBWTLB1 |
| LD75NO | LTRQLNN3 | LD87K | LOCIMPK | LD104L | LBWTLB2 |
| LD76AN1 | LTRQLAN1 | LD87L | LOCIMPL | LD104L | LBWTLB3 |
| LD76AN2 | LTRQLAN2 | LD88A | . .LFUTRA | LD104O | LBWTOZ1 |
| LD76AN3 | LTRQLAN3 | LD88B | . LFUTRB | LD1040 | LBWTOZ2 |
| LD76BN1 | LTRQLBN1 | LD88C | LFUTRC | LD104O | LBWTOZ3 |
| LD76BN2 | LTRQLBN2 | LD88D | LFUTRD | LD105 | LBWTGM1 |
| LD76BN3 | LTRQLBN3 | LD88E | . LFUTRE | LD105 | LBWTGM2 |
| LD76CN1 | LTRQLCN1 | LD88F | LFUTRF | LD105 | LBWTGM3 |
| LD76CN2 | LTRQLCN2 | LD88G | LFUTRG | LD106 | LBWTG51 |
| LD76CN3 | LTRQLCN3 | LD88H | LFUTRH | LD106 | LBWTG52 |
| LD76DN1 | LTRQLDN1 | LD881 | LFUTRI | LD106 | LBWTG53 |
| LD76DN2 | LTRQLDN2 | LD88J | . LFUTRJ | LD110A | LNATIDA |
| LD76DN3 | LTRQLDN3 | LD88K | . LFUTRK | LD110B | LNATIDB |
| LD76EN1 | LTRQLEN1 | LD88L | LFUTRL | LD110C | LNATIDC |
| LD76EN2 | LTRQLEN2 | LD89 | LCRWORA | LD110D | LNATIDD |
| LD76EN3 | LTRQLEN3 | LD90 | LCRWORB | LD110E | LNATIDE |
| LD76FN1 | LTRQLFN1 | LD91 | LCRDARK | LD110F | LNATIDF |
| LD76FN2 | LTRQLFN2 | LD92A | LCRGRAF | LD110G | LNATIDG |
| LD76FN3 | LTRQLFN3 | LD92B | LCRTEEN | LD110H | LNATIDH |
| LD76GN1 | LTRQLGN1 | LD92C | LCRDRNK | LD110I | LNATIDI |
| LD76GN2 | LTRQLGN2 | LD92D | LCRVAND | LD111 | LNATIDMN |


| LD113A | LWLSHA | LE30D | LPAYDF4 | LE91 | SPAYU |
| :---: | :---: | :---: | :---: | :---: | :---: |
| LD113B | LWLSHB | LE30E | LPAYDF5 | LE92 | LJSPAYW |
| LD113C | LWLSHC | LE30F | LPAYDF6 | LE93 | LJSPYTX |
| LD113D | LWLSHD | LE30G | . LPAYDF7 | LE94 | LJSPYNI |
| LD113E | LWLSHE | LE30H | LPAYDF9 | LE95 | LJSPL |
| LD114A | LWLSHUA | LE30I | LPAYDF8 | LE96 | LJSTTWT |
| LD114B | LWLSHUB | LE31 | LPAYTYP | LE97 | LJSTTWM |
| LD114C | LWLSHUC | LE32 | LOVTPAY | LE98A | LJSSAT1 |
| LD114D | LWLSHUD | LE33 | LEXTRATE | LE98B | LJSSAT2 |
| LD114E | LWLSHUE | LE33 | LEXTREST | LE98D | LJSSAT4 |
| LD115A | LIVDA | LE34 | LBASRATE | LE98E | LJSSAT5 |
| LD115B | LIVDB | LE34 | LBASREST | LE99 | LJSSAT |
| LD115C | LIVDC | LE35 | LOVTRATE | LE100D | LJSBGD |
| LD115D | LIVDD | LE35 | LOVTREST | LE100M | LJSBGM |
| LD115E | LIVDE | LE39 | LJBPERFP | LE100Y | LJSBGY4 |
| LDA67 | . LUNIB | LE40 | LJBONUS | LE101A | LJBLKCHA |
| LDA68 | LUNIM | LE41 | LJBONAM | LE102A | LJBXPCHA |
| LE1 | LJBHAS | LE42 | LJBONG | LE101B | LJBLKCHB |
| LE2 | LJBOFF | LE43 | LJBRISE | LE102B | LJBXPCHB |
| LE3 | LJBOFFY | LE44 | LTUJBPL | LE101C | LJBLKCHC |
| LE4 | LJBTERM1 | LE45 | LTUIN1 | LE102C | LJBXPCHC |
| LE4A | LJBTERM2 | LE46 | LJBOPPS | LE101D | LJBLKCHD |
| LE5 | LJBSOC | LE47 | LJBTIME | LE102D | LJBXPCHD |
| LE5 | LJBSOC00 | LE48 | LJBWKHRA | LE101E | LJBLKCHE |
| LE6 | LJBSIC | LE48 | LJBWKHRB | LE102E | LJBXPCHE |
| LE6 | LJBSIC92 | LE48 | LJBWKHRC | LE104 | LRACH12 |
| LE7 | LJBSEMP | LE48 | LJBWKHRD | LE105M | LJBCHC1 |
| LE8 | LJBMNGR | LE48 | LJBWKHRE | LE105M | LJBCHC2 |
| LE9 | LJBSECT | LE48 | LJBWKHRF | LE105M | LJBCHC3 |
| LE10 | LJBSIZE | LE48 | LJBWKHRG | LE107 | LXPCHCF |
| LE11 | LJBHRS | LE48 | LJBWKHRH | LE108 | LXPCHC |
| LE12 | LJBOT | LE49 | LJBPEN | LE109 | LHUXPCH |
| LE13 | LJBOTPD | LE50 | LJBPENM | LE110 | LHUNURS |
| LE14 | LJBHRLK | LE52D | . LJBBGD | LE111 | LJULK1 |
| LE15 | LJBPL | LE52M | . LJBBGM | LE112 | LJULK4 |
| LE16 | LJBTTWT | LE52Y | LJBBGY4 | LE113A | LJULKA |
| LE17 | LJBTTWM | LE53 | LJBBGLY | LE113B | LJULKB |
| LE18B | LJBSAT2 | LE54 | LPAYS | LE113C | LJULKC |
| LE18D | LJBSAT4 | LE550C | LPAYSW | LE113D | LJULKD |
| LE18F | LJBSAT6 | LE56 | LPAYSG | LE113E | LJULKE |
| LE18G | LJBSAT7 | LE59 | . LPAYLY | LE114 | LJULKJB |
| LE19 | LJBSAT | LE600C | LPAYLYW | LE115 | LJUBGN |
| LE20 | LPAYGL | LE61 | LPAYLYG | LE116 | LJUSPEC |
| LE21OC | LPAYGW | LE73 | LJSBOSS | LE117 | LJUSOC |
| LE22 | LPAYNL | LE74 | . LJSSIZE | LE117 | LJUSOC00 |
| LE23OC | LPAYNW | LE75 | . LJSHRS | LE118 | LJUHRSX |
| LE23A | . . LPYTC | LE76 | LJSHRLK | LE119 | LJUPAYX |
| LE23B | LPYWFTC | LE77 | LJSTIME | LE120 | LJUPAYL |
| LE23C | LPYWFTCW | LE78 | LJSTYPEB | LE121 | LJUHRSL |
| LE23D | LPYDPTC | LE79 | LJSACCS | LE124 | LEPROSH |
| LE23E | LPYDPTCW | LE80 | LJSPART | LE129 | LEAAGE |
| LE24 | LPAYSLP | LE81BM | LJSPRBM | LE130 | LJBUB |
| LE26 | LPAYUSL | LE81BY | LJSPRBY4 | LE131 | LJBUBY |
| LE27 | . LPAYU | LE81EM | LJSPREM | LE132 | LJ2HAS |
| LE28OC | LPAYUW | LE81EY | LJSPREY4 | LE133 | LJ2SOC |
| LE29 | . LPAYUG | LE82 | . LJSPRF | LE133 | LJ2SOC00 |
| LE30A | LPAYDF1 | LE83 | LJSPRLS | LE134 | LJ2SEMP |
| LE30B | LPAYDF2 | LE84 | LJSPRTX | LE135 | LJ2HRS |
| LE30C | LPAYDF3 | LE85 | LJSPRNI | LE136 | LJ2PAY |


| LE137A | LIVEA | LF9B | LFIYRDB2 | LF43C3 | LFTEXC3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| LE137B | LIVEB | LF9C | LFIYRDB3 | LF43C4 | LFTEXC4 |
| LE137C | LIVEC | LF9D | LFIYRDB4 | LF43C5 | LFTEXC5 |
| LE137D | LIVED | LF9E | LFIYRDB5 | LF43C6 | LFTEXC6 |
| LE137E | LIVEE | LF9F | LFIYRDB6 | LF44C | LFTEXCV |
| LEG3 | . PID | LF10 | LSAVE | LF45C | LFTEXCW |
| LEG4 | LHGSEX | LF11 | LSAVED | LF46 | LSPINHH |
| LEG5M | LHGBM | LF11AM | LSAVEY1 | LF47A | LHUBUYS |
| LEG5Y | LHGBY | LF11AM | LSAVEY2 | LF47B | LHUFRYS |
| LEG6 | LIVIOLW | LF12 | LSAVREG | LF47C | LHUMOPS |
| LEG7 | LIVSTAT1 | LF13 | LSAVLT | LF47D | LHUIRON |
| LEG8 | LIVELIG | LF14 | . LPPPEN | LF48 | LHHCH12 |
| LEG9 | LHHMEM | LF15 | LPENB4 | LF49 | LHUSITS |
| LEG10 | LNEWHY | LF16 | LPENB4Y4 | LF50 | LHOWLNG |
| LEG11 | LLVWHY | LF17 | LPENB4V | LF51 | LCARUSE |
| LEG12M | LLVMN | LF18 | LPENB4W | LF52 | LMOBUSE |
| LEG12M | LNEMNJN | LF19 | LPENYR4 | LF53 | LQALLIF1 |
| LEG12Y | . LLVYR4 | LF20 | LPENADD | LF53 | LQALLIF2 |
| LEG12Y | LNEYRJN4 | LF21 | LPENADV | LF53 | LQALLIF3 |
| LEG13 | LLVLOC | LF22 | LPENADW | LF53 | LQALLIF4 |
| LEG14 | LIVFIO | LF37 | LWINDF | LF54A | LIVFA |
| LEG16 | LIVRREF | LF38A | LWINDFA | LF54B | LIVFB |
| LEG17 | LIVIREIS | LF39A | LWINDFAY | LF54C | LIVFC |
| LEG18 | LIVFIO | LF38B | LWINDFB | LF54D | LIVFD |
| LF2 | . LNF1 | LF39B | LWINDFBY | LF54E | LIVFE |
| LF3A | LFICODE | LF38C | LWINDFC | LF55H | LIVFOIH |
| LF3BAL | LFRALL | LF39C | LWINDFCY | LF55M | LIVFOIM |
| LF3B01 | LFR01 | LF38D | LWINDFD | LF56 | LIVSC |
| LF3B02 | . LFR02 | LF39D | LWINDFDY | LF101 | LF101 |
| LF3B03 | . LFR03 | LF38F | LWINDFF | LF102 | LF102 |
| LF3B04 | . LFR04 | LF39F | . LWINDFFY | LF103 | LF103 |
| LF3B05 | LFR05 | LF38G | LWINDFG | LF104 | LF104 |
| LF3B06 | LFR06 | LF39G | LWINDFGY | LF105 | LF105 |
| LF3B07 | . LFR07 | LF38H | LWINDFH | LF106 | LF106 |
| LF3B08 | LFR08 | LF39H | LWINDFHY | LF116 | LF116 |
| LF3B09 | . LFR09 | LF40A | LXPMEAL | LF118 | LF118 |
| LF3B10 | LFR10 | LF40B | LXPLEIS | LF119 | LF119 |
| LF3B11 | LFR11 | LF41 | LFTEXHH | LF121 | LF121 |
| LF3B12 | . LFR12 | LF42A | LFTEXA | LF122 | . LF122 |
| LF3B13 | . LFR13 | LF43A1 | LFTEXA1 | LF124 | LF124 |
| LF3B14 | . LFR14 | LF43A2 | LFTEXA2 | LF125 | LF125 |
| LF3B15 | LFR15 | LF43A3 | LFTEXA3 | LF126 | LF126 |
| LF3B16 | . LFR16 | LF43A4 | LFTEXA4 | LF127 | LF127 |
| LF3B17 | LFR17 | LF43A5 | LFTEXA5 | LF128 | LF128 |
| LF3B18 | . LFR18 | LF43A6 | LFTEXA6 | LF132 | . LF132 |
| LF3B19 | LFR19 | LF44A | LFTEXAV | LF142 | LF142 |
| LF3B20 | LFR20 | LF45A | LFTEXAW | LF135 | LF135 |
| LF3C | LFRNOW | LF42B | LFTEXB | LF136 | LF136 |
| LF3D | . LFRVAL | LF43B1 | LFTEXB1 | LF137 | . LF137 |
| LF3EOC | LFRW | LF43B2 | LFTEXB2 | LF138 | LF138 |
| LF3F | LFRJT | LF43B3 | LFTEXB3 | LF139 | LF139 |
| LF3FPN | LFRJTPN | LF43B4 | LFTEXB4 | LF140 | LF140 |
| LF3SEQ | LFISEQ | LF43B5 | LFTEXB5 | LF141 | LF141 |
| LF4 | LFISIT | LF43B6 | LFTEXB6 | LF151 | . LF151 |
| LF5 | . LFISITC | LF44B | LFTEXBV | LF152 | LF152 |
| LF6 | . LFISITY | LF45B | LFTEXBW | LF153 | LF153 |
| LF7 | . LFISITX | LF42C | LFTEXC | LF154 | LF154 |
| LF8 | . LFIYRDIA | LF43C1 | . LFTEXC1 | LF155 | LF155 |
| LF9A | LFIYRDB1 | LF43C2 | . LFTEXC2 | LF156 | LF156 |


| LF157 | LF157 | LH36 | LRENTGW | LH53H | LCD6NEW |
| :---: | :---: | :---: | :---: | :---: | :---: |
| LF158 | LF158 | LH37 | LXPHSDF | LH53I | LCD7NEW |
| LF159 | LF159 | LH38A | LXPHSD1 | LH53J | LCD8NEW |
| LHOAD | LHHDOI | LH38B | LXPHSD2 | LH53K | LCD9NEW |
| LHOAM . | . LHHMOI | LH39 | LXPHSDB | LH53L | LCD12NEW |
| LHOAY | LHHYOI4 | LH40A | LHSKCH | LH54A | LCD1CST |
| LHOBH | LHHSOIH | LH40B | LHSKCHS | LH54B | LCD2CST |
| LHOBM . | . LHHSOIM | LH40A | LHSBTH | LH54C | LCD10CST |
| LHOC | LHSTYPE | LH40B | LHSBTHS | LH54D | LCD11CST |
| LH1A | LHSRINS | LH40A | LHSTLT | LH54E | LCD3CST |
| LH2 | . LHSROOM | LH40B | LHSTLTS | LH54F | LCD4CST |
| LH3 | . LHSOWND | LH40A | LHSGDN | LH54G | LCD5CST |
| LH4M1 | . LHSOWR1 | LH40B | LHSGDNS | LH54H | LCD6CST |
| LH4M2 | LHSOWR2 | LH41A | LXPGASY | LH54I | LCD7CST |
| LH5 | LHSVAL | LH41B | LXPLECY | LH54J | LCD8CST |
| LH6 | LMGHAVE | LH41C | LXPOILY | LH54K | LCD9CST |
| LH7 | . LHSOWRP | LH41D | LXPSFLY | LH54L | LCD12CST |
| LH8 | . LMGYNOT | LH42 | LHEATCH | LH55 | LPCNET |
| LH9 | LHSCOST | LH43 | LHEATYP | LH56 | LXPHP |
| LH10 | LHSYR04 | LH44A | LHSPRBG | LH57 | LXPHPDF |
| LH11 | LHSCOST | LH44B | LHSPRBH | LH58A | LHSCANA |
| LH12 | LMGYR04 | LH44C | LHSPRBI | LH58B | LHSCANB |
| LH13 | LMGLY | LH44D | LHSPRBJ | LH58C | LHSCANC |
| LH14 | LHSIVLW | LH44E | LHSPRBK | LH58D | LHSCAND |
| LH15 | LMGYR04 | LH44F | LHSPRBL | LH58E | LHSCANE |
| LH16 | LHSCOST | LH44G | LHSPRBM | LH58F | LHSCANF |
| LH17 | LMGOLD | LH44H | LHSPRBN | LH59A | LHSCNTA |
| LH18 | LMGLIFE | LH44I | LHSPRBO | LH59B | LHSCNTB |
| LH19 | LMGTYPE | LH44J | LHSPRBP | LH59C | LHSCNTC |
| LH20 | LMGXTRA | LH44K | LHSPRBQ | LH59D | LHSCNTD |
| LH21 | LMGNEW | LH45 | LHSCTAX | LH59E | LHSCNTE |
| LH22A | LMGXTY1 | LH46 | LHS2OWND | LH59F | LHSCNTF |
| LH22B | LMGXTY2 | LH47 | LHS2VALO | LH60 | LXPFOOD |
| LH22C | LMGXTY3 | LH47A | LHS2VALA | LH61 | LNCARS |
| LH22D | LMGXTY4 | LH47B | LHS2VALB | LH62 | LCAROWN |
| LH22E | LMGXTY5 | LH47C | LHS2VALC | LH63 | LCARVAL |
| LH23 | LXPMG | LH47D | LHS2VALD | LH64M1 | LIVH1 |
| LH24A | LXPMG1 | LH49 | LMGTOT | LH64M2 | LIVH2 |
| LH24B | LXPMG2 | LH50 | LCDHAVE | LH64M3 | LIVH3 |
| LH24C | LXPMG3 | LH51A | LCD1USE | LH65H | LHHFOIH |
| LH24D | LXPMG4 | LH51B | LCD2USE | LH65M | LHHFOIM |
| LH25 | . . LHSJB | LH51C | LCD10USE | LHG2 | LHGR2R |
| LH26M1 | LRENTP1 | LH51D | . LCD11USE | LHG3 | LHGSEX |
| LH26M2 | LRENTP2 | LH51E | LCD3USE | LHG4M | LHGBM |
| LH27 | LRENTLL | LH51F | . LCD4USE | LHG4Y . | LHGBY |
| LH28 | . LRENTF | LH51G | LCD5USE | LHG8 | LMASTAT |
| LH30 | . LRENT | LH51H | LCD6USE | LHG9 | LHGSPN |
| LH31 | LRENTW | LH51I | LCD7USE | LHG10 | LHGEMP |
| LH32A | LRENT1 | LH51J | LCD8USE | LHG11 | LHGFNO |
| LH32C | LRENT2 | LH51K | LCD9USE | LHG12 | LHGMNO |
| LH32D | LRENT3 | LH51L | LCD12USE | LHG13 | LHGRA |
| LH32E | LRENT4 | LH52 | LCDBGHT | LII | LIV1 |
| LH32F | LRENT5 | LH53A | LCD1NEW | LI2 | LIV2 |
| LH32H | LRENT6 | LH53B | LCD2NEW | LI4 | . LIV4 |
| LH32B | . LRENT7 | LH53C | LCD10NEW | LI5 | LIV5 |
| LH32G | . LRENT8 | LH53D | LCD11NEW | LI5A | LIV5AA |
| LH33 | LRENTHB | LH53E | LCD3NEW | LI5B | LIV5AB |
| LH34 | . LRENTG | LH53F | LCD4NEW | LI5C | LIV5AC |
| LH35 | . LRENTG | LH53G | LCD5NEW | LI6A | LIV6A |


| LI6B | LIV6B | LL13Y | LLMWWY4 | LM2N | LHLPRBN |
| :---: | :---: | :---: | :---: | :---: | :---: |
| LI6C | LIV6C | LL15M | LLMDVM | LM2O . | LHLPRBO |
| LI6D | LIV6D | LL15Y | LLMDVY4 | LM2M | LHLPRBM |
| LI6E | LIV6E | LL16M | LLMSPM | LM2M0 | LHLPRB |
| LI7 | LIV6F | LL16Y | LLMSPY4 | LM9 | LHLLT |
| LI8 | LIV7 | LL19 | LLNCOH | LM10A | LHLLTA |
| LJ5D | LCJSBGD | LL20M | LLCSBM | LM10B | LHLLTB |
| LJ5M | LCJSBGM | LL20Y | LLCSBY4 | LM10C | LHLLTC |
| LJ5Y | LCJSBGY4 | LL21M | LLCSEM | LM10D | LHLLTD |
| LJ6 | LNEMST | LL21Y | LLCSEY4 | LM10E | LHLLTE |
| LJ8 | LCJSBLY | LL21NE | LLCSNE | LM11 | LHLLTW |
| LJ9 | LJHSTAT | LL20SP | LLCSNO | LM11A | LHLENDW |
| LJ10D | LJHBGD | LL22 | LLADOPT | LM11B | LHLLTWA |
| LJ10M | LJHBGM | LL23 | LLNADOPT | LM12 | LHLIV65 |
| LJ10Y | LJHBGY4 | LL24AM | LLACBM | LM13A | LADLA |
| LJ12 | LNJBS | LL24AY | LLACBY4 | LM13B | LADLAD |
| LJ14 | LJHSOC | LL24B | LLACSX | LM14A | LADLB |
| LJ14 | . LJHSOCOO | LL24C | LLACST | LM14B | LADLBD |
| LJ16 | LJHSEMP | LL24D | LLACYB4 | LM15A | LADLC |
| LJ17 | LJHBOSS | LL24E | LLACLV | LM15B | LADLCD |
| LJ18 | LJHSECT | LL24G | LLACYD4 | LM16A | LADLD |
| LJ19 | LJHMNGR | LL24H | LLACAL | LM16B | LADLDD |
| LJ21 | LJHPLDF | LL24F | LLACNO | LM17A | LADLE |
| LJ22 | LJHSIC | LL27AM | LLCHBM | LM17B | LADLED |
| LJ22 | LJHSIC92 | LL27AY | LLCHBY4 | LM18A | LADLF |
| LJ23 | LJHSIZE | LL27B | LLCHSX | LM18B | LADLFD |
| LJ24 | LJHPAYL | LL27C | LLCHLV | LM21 | LHL2GP |
| LJ250C | LJHPYLW | LL27E | LLCHYD4 | LM22 | LHL2HOP |
| LJ26 | LJHPYLG | LL27F | LLCHAL | LM23 | LXDTS |
| LJ27 | LJHSTPY | LL28 | LCBAGE | LM24 | LNXDTS |
| LJ28 | . LJBLKY | LL30 | LLCHMORN | LM25 | LHOSP |
| LJ31 | LJBHAD | LL31A | LIVLA | LM26 | LHOSPD |
| LJ32 | LJLEND4 | LL31B | LIVLB | LM28 | LHOSPCH |
| LJ33 | . LJLSOC | LL31C | LIVLC | LM29 | LHOSPNHS |
| LJ33 | LJLSOC00 | LL31D | LIVLD | LM30 | LHLCVR |
| LJ34 | LJLSIC | LL31E | LIVLE | LM31 | LHLCVRH |
| LJ34 | LJLSIC92 | LL32M | LLEDENDM | LM32 | LHLCVRL |
| LJ35 | LJLSEMP | LL32Y | LLEDENY4 | LM33 | LHLSV |
| LJ36 | LJLBOSS | LL32NL | LLEDNOW | LM34A | LHLSVA |
| LJ37 | LJLMNGR | LL27DN | LLNCNO | LM35A | LHLSVAN |
| LJ38 | LJLSIZE | LL33SP | LLESHNO | LM36A | LHLSVAF |
| LJ39A | LIVJA | LL33 | LLESHST | LM34B | LHLSVB |
| LJ39B | LIVJB | LL34M | LLESHEM | LM35B | LHLSVBN |
| LJ39C | LIVJC | LL34Y | . LLESHEY4 | LM36B | LHLSVBF |
| LJ39D | LIVJD | LL34NE | LLESHNE | LM34C | LHLSVC |
| LJ39E | LIVJE | LM1 | LHLDSBL | LM35C | LHLSVCN |
| LL4M | LLMARM | LM1A | LHLSTAT | LM36C | LHLSVCF |
| LL4M | LLMARY4 | LM2A | LHLPRBA | LM34D | LHLSVD |
| LL5 | LMPNO | LM2B | LHLPRBB | LM35D | LHLSVDN |
| LL6 | . LLCMCOH | LM2C | LHLPRBC | LM36D | LHLSVDF |
| LL7M | LLCMCBM | LM2D | LHLPRBD | LM34E | LHLSVE |
| LL7Y | LLCMCBY4 | LM2E | LHLPRBE | LM35E | LHLSVEN |
| LL8M | LLCMSPM | LM2F | LHLPRBF | LM36E | .LHLSVEF |
| LL8Y | LLCMSPY4 | LM2G | LHLPRBG | LM34F | LHLSVF |
| LL10 | LLMCOH | LM2H | LHLPRBH | LM35F | LHLSVFN |
| LL11M | LLMCBM | LM21 | LHLPRBI | LM36F | LHLSVFF |
| LL11Y | LLMCBY4 | LM2J | LHLPRBJ | LM34G | LHLSVG |
| LL12 | LLMEND | LM2K | LHLPRBK | LM35G | LHLSVGN |
| LL13M | LLMWWM | LM2L | LHLPRBL | LM36G | LHLSVGF |


| LM34H | LHLSVH | LP10M | LPRESBGM | LS5B | LNET3RL |
| :---: | :---: | :---: | :---: | :---: | :---: |
| LM35H | LHLSVHN | LP10Y | LPRESBY4 | LS5BOC | LNET1WR |
| LM36H | LHLSVHF | LP11 | LPRESLY | LS5BOC | LNET2WR |
| LM34I | LHLSVI | LP23 | LPRFEHQ | LS5BOC | LNET3WR |
| LM35I | LHLSVIN | LP25 | LPRSEHQ | LS5C | LNET1AG |
| LM36I | LHLSVIF | LP58 | LPRJBFT | LS5C | LNET2AG |
| LM34L | LHLSVL | LP59M | LPRJBBGM | LS5C | LNET3AG |
| LM35L | . LHLSVLN | LP59Y | LPRJBBY4 | LS5D | LNET1KN |
| LM36L | LHLSVLF | LP60 | LPRJBLY | LS5D | LNET2KN |
| LM34M | LHLSVM | LP61 | LPREARN | LS5D | LNET3KN |
| LM35M | LHLSVMN | LP70A | LPRF101 | LS5E | LNET1PH |
| LM36M . | LHLSVMF | LP70B | LPRF102 | LS5E | LNET2PH |
| LM34J1 | LHLSVJ | LP70C | LPRF116 | LS5E | LNET3PH |
| LM35J1 | LHLSVJN | LP70D | LPRF131 | LS5F | LNET1LV |
| LM36J1 | LHLSVJF | LP70F | LPRF135 | LS5F | LNET2LV |
| LM34J2 | LHLSVK | LP70G | LPRF137 | LS5F | LNET3LV |
| LM35J2 | LHLSVKN | LP70H | LPRF139 | LS5G | LNET1JB |
| LM36J2 | LHLSVKF | LF701 | LPRF125 | LS5G | LNET2JB |
| LM37 | LHLCK | LP70J | LPRF141 | LS5G | LNET3JB |
| LM38A | LHLCKA | LP70NO | LPRFIRN | LS6A | LNETSOC |
| LM39A | LHLCKAN | LP71 | LPRFITB | LT2B | LTELWHY |
| LM38B | LHLCKB | LPI1A | LIVPA | LT45 | LTLFIYRL |
| LM39B | LHLCKBN | LPI1B | LIVPB | LT50 | LTLFIYR |
| LM38C | LHLCKC | LPI1C | LIVPC | LV1A | LOPNATA |
| LM39C | LHLCKCN | LPI1D | . LIVPD | LV1B | LOPNATB |
| LM38D | . LHLCKD | LPI1E | . LIVPE | LV1C | LOPNATC |
| LM39D | LHLCKDN | LS1A | LGHQA | LV1D | LOPNATD |
| LM38E | LHLCKE | LS1B | LGHQB | LV1E | LOPNATE |
| LM39E | LHLCKEN | LS1C | LGHQC | LV1F | LOPNATF |
| LM38F | LHLCKI | LS1D | LGHQD | LV2 | LVOTE1 |
| LM39F | LHLCKIN | LS1E | . LGHQE | LV3 | LVOTE2 |
| LM38G | LHLCKF | LS1F | . LGHQF | LV4 | LVOTE3 |
| LM39G | . LHLCKFN | LS1G | . LGHQG | LV5 | LVOTE4 |
| LM38H | LHLCKG | LS1H | LGHQH | LV6 | LVOTE5 |
| LM39H | LHLCKGN | LS1I. | . . LGHQI | LV7 | LVOTE7 |
| LM38I | LHLCKH | LS1J | . .LGHQJ | LV8 | . LVOTE8 |
| LM391 | LHLCKHN | LS1K | . LGHQK | LV9 | LVOTE6 |
| LM40 | LSMOKER | LS1L | LGHQL | LV10 | LOPDEV1 |
| LM41 | . LNCIGS | LS2A | LOPFAMO | LV11 | LOPDEV2 |
| LM42 | LSMCIGS | LS2B | LOPFAML | LV12 | LOPEUR1 |
| LM43 | LAGLQUT | LS2C | LOPFAMP | LV13 | LOPEUR2 |
| LM45 | LAIDHH | LS2D | LOPFAMQ | LV14 | LOPEUR3 |
| LM46P1 | LAIDHUA | LS2E | LOPFAMK | LV15 | LOPEUR4 |
| LM46P2 | LAIDHUB | LS2F | LOPFAMR | LV16A | LLACTA |
| LM46P3 | LAIDHUC | LS3A | LLFSAT1 | LV16B | LLACTB |
| LM47 | . LAIDXHH | LS3B | LLFSAT2 | LV16C | LLACTC |
| LM48 | LNAIDXHH | LS3C | LLFSAT3 | LV16D | LLACTD |
| LM49M1 | LAIDHU1 | LS3D | LLFSAT4 | LV16E | LLACTE |
| LM49M2 | LAIDHU2 | LS3E | LLFSAT5 | LV16F | LLACTF |
| LM51 | LAIDHRS | LS3F | LLFSAT6 | LV16H | LLACTH |
| LM52A | . LIVMA | LS3G | LLFSAT7 | LV16I | LLACTI |
| LM52B | LIVMB | LS3H | LLFSAT8 | LV16J | LLACTJ |
| LM52C | LIVMC | LS4A | LLFSATO | LV16K | LLACTK |
| LM52D | . LIVMD | LS4B | LLFSATL | LV16L | LLACTL |
| LM52E | . LIVME | LS5A | LNETSX1 | LV17 | LFRNA |
| LP2B | LPRRS2I | LS5A | LNETSX2 | LV18 | LFRNB |
| LP2C | LPRIPN | LS5A | LNETSX3 | LV19 | LFRNC |
| LP2D | LPRWHY | LS5B | LNET1RL | LV20A | . LLVMA |
| LP3 | .LPPLEVR | LS5B | LNET2RL | LV20B | LMAAGE |


| LV20A | LLVPA | LV48 | LSCTUTL | LY13 | LYPARGM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| LV20B | LPAAGE | LV48 | . LSCTUTH | LY14 | LYPARGF |
| LV20A | LLVCH | LV48 | LSCTUTO | LY15 | LYPTLKM |
| LV20C | LNLVCH | LV49A | LSC2UNI | LY16 | LYPTLKF |
| LV20A | LNOLVREL | LV49B | LSCLUNI | LY17 | LYPNPAL |
| LV21 | LPARMAR | LV50 | LSCARG | LY18 | LYPFGHT |
| LV22 | LMALONE | LV51 | LSCTALK | LY19 | LYPEATN |
| LV23 | LPALONE | LV52 | . LSCPRAZ | LY20 | LYPSMEV |
| LV24A | LMASEE | LV53 | LSCSMAK | LY21 | LYPSMOF |
| LV24B | LMATEL | LV54 | LSCCUDL | LY22 | LYPSMLW |
| LV24C | LMAMAIL | LV55 | LSCYELL | LY23 | LYPDGFR |
| LV25 | LMAFAR | LV56 | LSCHOSA | LY24 | LYPESTA |
| LV26A | LPASEE | LV57 | LSCHOS1 | LY25 | LYPESTI |
| LV26B | LPATEL | LV57 | LSCHOS2 | LY26 | LYPESTB |
| LV26C | LPAMAIL | LV58 | LHSCIMP | LY27 | LYPESTJ |
| LV27 | LPAFAR | LV59 | LPLYKID | LY28 | LYPESTC |
| LV28A | LCHSEE | LV60 | LLEIKID | LY29 | LYPESTK |
| LV28B | LCHTEL | LV61 | LKIDOPA | LY30 | LYPESTE |
| LV28C | LCHMAIL | LV62 | LKIDSEE | LY31 | LYPESTF |
| LV29 | LCHFAR | LV63 | LKIDWE | LY32 | LYPTCHA |
| LV30A | LCHAIDA | LV64 | LKIDHOL | LY33 | LYPTCHB |
| LV30B | LCHAIDB | LV64A | LKIDFAR | LY34 | LYPHSW |
| LV30C | LCHAIDC | LV65 | LKIDREL | LY35 | LYPHAP |
| LV30D | LCHAIDD | LV66 | . LOHCH16 | LY36 | LYPHFM |
| LV30E | LCHAIDE | LV67 | LSEEKID | LY37 | LYPHFR |
| LV30F | LCHAIDF | LV68 | LWEKID | LY38 | LYPHSC |
| LV30G | LCHAIDG | LV69 | LHOLKID | LY39 | LYPHLF |
| LV30H | LCHAIDH | LV69A | LFARKID | LY40 | LYPVTE6 |
| LV301 | LCHAIDI | LV70 | LRELKID | LY41 | LYPVTE3 |
| LV30NO | LNOCHAID | LV71A | . LIVVA | LY42 | LYPVT11 |
| LV31A | LCAIDUA | LV71B | LIVVB | LY43 | LYPTRUN |
| LV31B | LCAIDUB | LV71C | LIVVC | LY44 | LYPBULL |
| LV31C | LCAIDUC | LV71D | LIVVD | LY45 | LYPOPSC |
| LV31D | LCAIDUD | LV71E | LIVVE | LY46 | LYPLVSC |
| LV31E | LCAIDUE | LVN12 | LNIPOP1 | LY47 | LYPACVS |
| LV31F | LCAIDUF | LVN13 | LNIPOP2 | LY49 | LYPSOC |
| LV31G | LCAIDUG | LVN14 | LNIPOP3 | LY50 | LYPWKLW |
| LV31H | LCAIDUH | LVN15 | LNIPOP4 | LY51M1 | LYPSOC1 |
| LV31I | . LCAIDUI | LVN16 | LNIPOP5 | LY51M2 | LYPSOC2 |
| LV31NO | LNOCAIDU | LVN17 | LNIPOP6 | LY52 | LYPWHRS |
| LV32 | LHHCH16 | LY1 | LYTVHRS | LY53 | LYPPAY |
| LV34 | LPNO | LY2 | LYTVSTP | LY54A | LYPWKM |
| LV35 | LSCAGE | LY3A | LYPACTA | LY54B | LYPWKT |
| LV36 | . LSCTEX | LY3B | LYPACTB | LY54C | LYPWKW |
| LV37 | . LSCAGE4 | LY3C | LYPACTC | LY54D | LYPWKTH |
| LV38 | . LSCTYP | LY3D | LYPACTD | LY54E | LYPWKF |
| LV39Y | LSCHBGY | LY3E | LYPACTE | LY54F | LYPWKSA |
| LV39M | LSCHBGM | LY3F | LYPACTM | LY54G | LYPWKSU |
| LV40 | . LSCHSTA | LY3G | LYPACTN | LY55 | LYPLVHM |
| LV41 | LSCHLNG | LY3H | LYPACTL | LY56 | LYP2UNI |
| LV42 | . LSCHSAT | LY4 | LYPCHOR | LY57M1 | LYPNUNA |
| LV43 | LSCHHW | LY5 | LYPCOMP | LY57M2 | LYPNUNB |
| LV44 | LSCACVS | LY6 | LYPPCHW | LY58A | LYPJBQA |
| LV45 | LSCACH | LY7 | LYPPCG | LY58B | LYPJBQD |
| LV46 | LSCAG11 | LY8 | LYPPCNT | LY58C | LYPJBQB |
| LV47 | . LSCTUT | LY9 | LYPMOBU | LY58D | LYPJBQF |
| LV48 | LSCTUTE | LY10 | LYPPALS | LY58E | LYPJBQG |
| LV48 | LSCTUTM | LY11 | LYPPALO | LY58F | LYPJBQH |
| LV48 | . LSCTUTS | LY12 | LYPLATE | LY59A | LYPFUTA |


| LY59B | LYPFUTB | MD24 | MEDQUAL1 | MD33B | MOPRLG5 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| MDOAD | MDOID | MD24 | MEDQUAL2 | MD33C | MOPRLG6 |
| MDOAM | MDOIM | MD25A1 | MEDQLA1 | MD34 | MJBSTAT |
| MDOAY | MDOIY4 | MD25A2 | MEDQLA2 | MD36 | MPASOC |
| MDOBA | MIVLYR | MD25B1 | MEDQLB1 | MD36 | MPASOC00 |
| MDOBB | MIVSTAT2 | MD25B2 | MEDQLB2 | MD36ANA | MPAJU |
| MD1H | MIVSOIH | MD25C1 | MEDQLC1 | MD37 | MPASEMP |
| MD1M | MIVSOIM | MD25C2 | MEDQLC2 | MD38 | MPABOSS |
| MD2 | MLKNBRD | MD25D1 | MEDQLD1 | MD39 | MPAMNGR |
| MD9A | MMOVJBA | MD25D2 | MEDQLD2 | MD4 | MLKMOVY |
| MD9B | MMOVJBB | MD25E1 | MEDQLE1 | MD40 | MMASOCOO |
| MD9C | MMOVJBC | MD25E2 | MEDQLE2 | MD40 | MMASOC |
| MD9D | MMOVJBD | MD25F1 | MEDQLF1 | MD40 | MMAJU |
| MD9E | MMOVJBE | MD25F2 | MEDQLF2 | MD41 | MMASEMP |
| MD9F | MMOVJBF | MD25G1 | MEDQLG1 | MD42 | MMABOSS |
| MD9G | MMOVJBG | MD25G2 | MEDQLG2 | MD43 | MMAMNGR |
| MD9H | MMOVJBH | MD25H1 | MEDQLH1 | MD44 | MJ1SOC |
| MD91 | MMOVJBI | MD25H2 | MEDQLH2 | MD44 | MJ1SOC00 |
| MD10M1 | MMOVY1 | MD2511 | MEDQLI1 | MD44NA | MJ1NONE |
| MD10M2 | MMOVY2 | MD2512 | MEDQLI2 | MD45 | MJ1SEMP |
| MD11M | MDOBM | MD25J1 | MEDQLJ1 | MD46 | MJ1BOSS |
| MD11Y | MDOBY | MD25J2 | MEDQLJ2 | MD47 | MJ1MNGR |
| MD12 | MSEX | MD25NA | MEDQNN2 | MD48 | MLCOH |
| MD12 | MSEX | MD25NONE | MEDQNN1 | MD49M | MCOH1BM |
| MD14 | MMLSTAT | MD26A1 | MEDQLAN1 | MD49Y | MCOH1BY |
| MD15 | . MMLCHNG | MD26A2 | MEDQLAN2 | MD5 | MXPMOVE |
| MD16M | . MMLCHM | MD26B1 | MEDQLBN1 | MD50 | MCOH1MR |
| MD16Y | MMLCHY4 | MD26B2 | MEDQLBN2 | MD51M | MCOH1EM |
| MD17 | . MJBSTAT | MD26C1 | MEDQLCN1 | MD51Y | MCOH1EY |
| MD17A | MRACEL | MD26C2 | MEDQLCN2 | MD52 | MNMAR |
| MD18 | MEDLYR | MD26D1 | MEDQLDN1 | MD53M | MLMAR1M |
| MD19 | MEDTYPE2 | MD26D2 | MEDQLDN2 | MD53Y | MLMAR1Y |
| MD19 | MEDTYPE1 | MD26E1 | MEDQLEN1 | MD54 | MLPRNT |
| MD20 | MEDBLYR2 | MD26E2 | MEDQLEN2 | MD55 | MLNPRNT |
| MD20 | MEDBLYR1 | MD26F1 | MEDQLFN1 | MD56M | MCH1BM |
| MD21M | MEDBGM1 | MD26F2 | MEDQLFN2 | MD56Y | MCH1BY |
| MD21M2 | MEDBGM2 | MD26G1 | MEDQLGN1 | MD57 | MSCEND |
| MD21Y | MEDBGY1 | MD26G2 | MEDQLGN2 | MD57NA | MSCHOOL |
| MD21Y2 | MEDBGY2 | MD26H1 | MEDQLHN1 | MD58 | MSCTYPE |
| MD22 | MEDENNE1 | MD26H2 | MEDQLHN2 | MD59 | MSCNOW |
| MD22M | MEDENM1 | MD26I1 | MEDQLIN1 | MD6 | MPLNEW |
| MD22M2 | MEDENM2 | MD2612 | MEDQLIN2 | MD60 | MFETYPE |
| MD22NE2 | MEDENNE2 | MD26J1 | MEDQLJN1 | MD61 | MFEEND |
| MD22Y | MEDENY1 | MD26J2 | MEDQLJN2 | MD61NA | MFENOW |
| MD22Y2 | MEDENY2 | MD27 | MEDOQL1 | MD62 | MQFHAS |
| MD23A | MEDFEEA1 | MD27 | MEDOQL2 | MD63A | MQFA |
| MD23A2 | MEDFEEA2 | MD27NONE | MEDOQLN1 | MD63B | MQFB |
| MD23B | MEDFEEB1 | MD27NONE | MEDOQLN2 | MD63C | . MQFC |
| MD23B2 | MEDFEEB2 | MD28 | MEDMORE2 | MD63D | . MQFD |
| MD23C | MEDFEEC1 | MD28 | MEDMORE1 | MD63E | MQFE |
| MD23C2 | MEDFEEC2 | MD29DST | MPLBORND | MD63F | MQFF |
| MD23D | MEDFEED1 | MD290S | MPLBORNC | MD63G | MQFG |
| MD23D2 | MEDFEED2 | MD3 | MLKMOVE | MD63H | MQFH |
| MD23E | MEDFEEE1 | MD30 | MYR2UK4 | MD63I | MQFI |
| MD23E2 | MEDFEEE2 | MD31 | MMLSTAT | MD63J | . . MQFJ |
| MD23F | MEDFEEF1 | MD32M1 | MCITZN1 | MD63K | . MQFK |
| MD23F2 | MEDFEEF2 | MD32M2 | MCITZN2 | MD63L | MQFL |
| MD23G | MEDFEEG1 | MD33 | MRACEL | MD63M | MQFM |
| MD23G2 | MEDFEEG2 | MD33A | MOPRLG4 | MD63N | MQFN |


| MD64 | MQFED |
| :---: | :---: |
| MD65A | MQFEDA |
| MD65B | MQFEDB |
| MD65C | MQFEDC |
| MD65D | MQFEDD |
| MD65E | MQFEDE |
| MD65F | MQFEDF |
| MD65G | MQFEDG |
| MD65H | MQFEDH |
| MD65I | MQFEDI |
| MD65J | MQFEDJ |
| MD65K | MQFEDK |
| MD65L | MQFEDL |
| MD65M | MQFEDM |
| MD65N | MQFEDN |
| MD65O | MQFEDO |
| MD65P | MQFEDP |
| MD65Q | MQFEDQ |
| MD65R | MQFEDR |
| MD65S | MQFEDS |
| MD65T | MQFEDT |
| MD65U | MQFEDU |
| MD66A | MNQFEDA |
| MD66B | MNQFEDB |
| MD66C | MNQFEDC |
| MD66D | MNQFEDD |
| MD66E | MNQFEDE |
| MD66F | MNQFEDF |
| MD66G | MNQFEDG |
| MD66H | MNQFEDH |
| MD66I | MNQFEDI |
| MD66J | MNQFEDJ |
| MD66K | MNQFEDK |
| MD66L | MNQFEDL |
| MD66M | MNQFEDM |
| MD66N | MNQFEDN |
| MD660 | MNQFEDO |
| MD66P | MNQFEDP |
| MD66Q | MNQFEDQ |
| MD66R | MNQFEDR |
| MD66S | MNQFEDS |
| MD66T | MNQFEDT |
| MD66U | MNQFEDU |
| MD67 | MTRAIN |
| MD68 | . MNTRAIN |
| MD69 | MTRPLCE2 |
| MD69 | MTRPLCE3 |
| MD69 | MTRPLCE1 |
| MD70A1 | MTRWHYA1 |
| MD70A2 | MTRWHYA2 |
| MD70A3 | MTRWHYA3 |
| MD70B1 | MTRWHYB1 |
| MD70B2 | MTRWHYB2 |
| MD70B3 | MTRWHYB3 |
| MD70C1 | MTRWHYC1 |
| MD70C2 | MTRWHYC2 |
| MD70C3 | MTRWHYC3 |
| MD70D1 | MTRWHYD1 |
| MD70D2 | MTRWHYD2 |


| D3 | 3 |
| :---: | :---: |
| MD70E1 . | MTRWHYE1 |
| MD70E2 . | MTRWHYE2 |
| MD70E3 . | MTRWHYE3 |
| MD71 | MTRQ3 |
| MD71 | MTRQ1 |
| MD71 | MTRU3 |
| MD71 | MTRQ2 |
| MD71 | MTRU1 |
| MD71 | MTRU2 |
| MD72A1 | MTRFEEA1 |
| MD72A2 . | MTRFEEA2 |
| MD72A3 | MTRFEEA3 |
| MD72B1. | MTRFEEB1 |
| MD72B2 . | MTRFEEB2 |
| MD72B3 . | MTRFEEB3 |
| MD72C1 | MTRFEEC1 |
| MD72C2 | MTRFEEC2 |
| MD72C3 | MTRFEEC3 |
| MD72E1 . | MTRFEEE1 |
| MD72E2 . | MTRFEEE2 |
| MD72E3 | MTRFEEE3 |
| MD72F1 | MTRFEEF1 |
| MD72F2 | MTRFEEF2 |
| MD72F3 | MTRFEEF3 |
| MD72G1 | MTRFEEG1 |
| MD72G2 | MTRFEEG2 |
| MD72G3 | MTRFEEG3 |
| MD73 | MTRQLXP3 |
| MD73 | MTRQLXP1 |
| MD73 | MTRQLXP2 |
| MD74 | MTRQLAC3 |
| MD74 | MTRQLAC2 |
| MD74 | MTRQLAC1 |
| MD75A1 . | MTRQLA1 |
| MD75A2 . | MTRQLA2 |
| MD75A3 . | MTRQLA3 |
| MD75B1 | MTRQLB1 |
| MD75B2 . | MTRQLB2 |
| MD75B3 . | MTRQLB3 |
| MD75C1 | MTRQLC1 |
| MD75C2 | MTRQLC2 |
| MD75C3 | MTRQLC3 |
| MD75D1 | MTRQLD1 |
| MD75D2 | MTRQLD2 |
| MD75D3 | MTRQLD3 |
| MD75E1 . | MTRQLE1 |
| MD75E2 . | MTRQLE2 |
| MD75E3 . | MTRQLE3 |
| MD75F1 | MTRQLF1 |
| MD75F2 | MTRQLF2 |
| MD75F3 | MTRQLF3 |
| MD75G1 | MTRQLG1 |
| MD75G2 | MTRQLG2 |
| MD75G3 | MTRQLG3 |
| MD75H1 | MTRQLH1 |
| MD75H2 | MTRQLH2 |
| MD75H3 | MTRQLH3 |
| MD75I1 | . MTROLI1 |


| MD75I2 | 1 |
| :---: | :---: |
| MD7513 | MTRQLI3 |
| MD75J1 | MTRQLJ1 |
| MD75J2 | MTRQLJ2 |
| MD75J3 | MTRQLJ3 |
| MD75NONE | MTRQLNN1 |
| MD75NONE | MTRQLNN3 |
| MD75NONE | MTRQLNN2 |
| MD76AN1 | MTRQLAN1 |
| MD76AN2 | MTRQLAN2 |
| MD76AN3 | MTRQLAN3 |
| MD76BN1 | MTRQLBN1 |
| MD76BN2 | MTRQLBN2 |
| MD76BN3 | MTRQLBN3 |
| MD76CN1 | MTRQLCN1 |
| MD76CN2 | MTRQLCN2 |
| MD76CN3 | MTRQLCN3 |
| MD76DN1 | MTRQLDN1 |
| MD76DN2 | MTRQLDN2 |
| MD76DN3 | MTRQLDN3 |
| MD76EN1 | MTRQLEN1 |
| MD76EN2 | MTRQLEN2 |
| MD76EN3 | MTRQLEN3 |
| MD76FN1 | MTRQLFN1 |
| MD76FN2 | MTRQLFN2 |
| MD76FN3 | MTRQLFN3 |
| MD76GN1 | MTRQLGN1 |
| MD76GN2 | MTRQLGN2 |
| MD76GN3 | MTRQLGN3 |
| MD76HN1 | MTRQLHN1 |
| MD76HN2 | MTRQLHN2 |
| MD76HN3 | MTRQLHN3 |
| MD76IN1 | MTRQLIN1 |
| MD76IN2 | MTRQLIN2 |
| MD76IN3 | MTRQLIN3 |
| MD76JN1 | MTRQLJN1 |
| MD76JN2 | MTRQLJN2 |
| MD76JN3 | MTRQLJN3 |
| MD77 | MTROQL1 |
| MD77 | MTROQL3 |
| MD77 | MTROQL2 |
| MD77NO | MTROQLN3 |
| MD77NONE | MTROQLN1 |
| MD77NONE | MTROQLN2 |
| MD78 | MTRMORE1 |
| MD78 | MTRMORE2 |
| MD79 | MIVLPAR |
| MD7M | MPLNOWM |
| MD7Y | MPLNOWY4 |
| MD8 | MMOVJB |
| MD80 | MNRPART |
| MD81 | MNRPTIM |
| MD82 | MNRPXPM1 |
| MD83 | MNRPXPM2 |
| MD84 | MCOHADV |
| MD85 | MCOHAD1 |
| MD85 | MCOHAD2 |
| MD86 | MCOHDIS |
| MD87 | MCOHDS2 |

MD87 . . . . . . . MCOHDS1
MD88 . . . . MCOHXPM1
MD89 . . . . MCOHXPM2
MD90A . . . . . . MBIRHH
MD90B . . . . . MMABWLY
MD91 . . . . MMABWNLY
MD92AGM1
MDWWTAGM1
MD92AG2 MBWTAGM2

| MD117E | MWLSHE | ME15 | L |
| :---: | :---: | :---: | :---: |
| MD118A | MWLSHUA | ME16 | MJBTTWT |
| MD118B | MWLSHUB | ME17 | MJBTTWM |
| MD118C | MWLSHUC | ME18B | MJBSAT2 |
| MD118D | MWLSHUD | ME18D | MJBSAT4 |
| MD118E | MWLSHUE | ME18F | MJBSAT6 |
| MD119 | MAGLT20 | ME18G | MJBSAT7 |
| MD120 | MSCNOW2 | ME19 | MJBSAT |
| MD121 | MINFTED | ME20 | MPAYGL |
| MD122 | MEDASP | ME21OC | MPAYGW |
| MD123 | MFEDASP | ME22 | MPAYNL |
| MD123A | MFEDTYP | ME23A | MPYTC |
| MD124 | MFEDLIK | ME23B | MPYWFTC |
| MD125M1 | MFEDNT1 | ME23C | MPYWFTCW |
| MD125M2 | MFEDNT2 | ME23OC | MPAYNW |
| MD126 | MOCFUT | ME24 | MPAYSLP |
| MD127A | MOCIMPA | ME26 | MPAYUSL |
| MD127B | MOCIMPB | ME27 | MPAYU |
| MD127C | MOCIMPC | ME28OC | MPAYUW |
| MD127D | MOCIMPD | ME29 | MPAYUG |
| MD127E | MOCIMPE | ME30A | MPAYDF1 |
| MD127F | MOCIMPF | ME30B | MPAYDF2 |
| MD127G | MOCIMPG | ME30C | MPAYDF3 |
| MD127H | MOCIMPH | ME30D | MPAYDF4 |
| MD127I | MOCIMPI | ME30E | MPAYDF5 |
| MD127J | MOCIMPJ | ME30F | MPAYDF6 |
| MD127K | MOCIMPK | ME30G | MPAYDF7 |
| MD127L | MOCIMPL | ME30H | MPAYDF9 |
| MD128A | MFUTRA | ME301 | MPAYDF8 |
| MD128B | MFUTRB | ME31 | MPAYTYP |
| MD128C | MFUTRC | ME32 | MOVTPAY |
| MD128D | MFUTRD | ME33 | MEXTRATE |
| MD128E | MFUTRE | ME33 | MEXTREST |
| MD128F | MFUTRF | ME34 | MBASRATE |
| MD128G | MFUTRG | ME34 | MBASREST |
| MD128H | MFUTRH | ME35 | MOVTRATE |
| MD128I | MFUTRI | ME35 | MOVTREST |
| MD128J | MFUTRJ | ME39 | MJBPERFP |
| MD129A | MIVDA | ME40 | MJBONUS |
| MD129B | MIVDB | ME41 | MJBONAM |
| MD129C | MIVDC | ME42 | MJBONG |
| MD129D | MIVDD | ME43 | MJBRISE |
| MD129E | MIVDE | ME44 | MTUJBPL |
| ME1 | MJBHAS | ME45 | MTUIN1 |
| ME2 | . MJBOFF | ME46 | MJBOPPS |
| ME3 | MJBOFFY | ME47 | MJBPEN |
| ME4 | MJBTERM1 | ME48 | MJBPENM |
| ME4A | MJBTERM2 | ME49A | MJBWKHRC |
| ME5 | MJBSOC | ME49A | MJBWKHRH |
| ME5 | MJBSOC00 | ME49A | MJBWKHRG |
| ME6 | MJBSIC92 | ME49A | MJBWKHRF |
| ME7 | MJBSEMP | ME49A | MJBWKHRD |
| ME8 | MJBMNGR | ME49A | MJBWKHRB |
| ME9 | MJBSECT | ME49A | MJBWKHRA |
| ME10 | . MJBSIZE | ME49A | MJBWKHRE |
| ME11 | MJBHRS | ME49B | MJBWKPAT |
| ME12 | MJBOT | ME49C | MJBEN2M |
| ME13 | MJBOTPD | ME49C | MJBEN3M |
| ME14 | MJBHRLK | ME49C | MJBEN2H |


| ME49C | MJ |
| :---: | :---: |
| ME49C | MJBST1M |
| ME49C | MJBEN1H |
| ME49C | MJBEN3H |
| ME49C | MJBEN1M |
| ME49C | MJBST2H |
| ME49C | MJBST3M |
| ME49C | MJBST3H |
| ME49C | MJBST1H |
| ME49D | MLWEN7M |
| ME49D | MLWEN4H |
| ME49D | MLWEN4M |
| ME49D | MLWDNW4 |
| ME49D | MLWST5H |
| ME49D | MLWST5M |
| ME49D | MLWEN5H |
| ME49D | MLWEN5M |
| ME49D | MLWDNW5 |
| ME49D | MLWST6H |
| ME49D | MLWDNW6 |
| ME49D | MLWEN6H |
| ME49D | MLWEN6M |
| ME49D | MLWST1H |
| ME49D | MLWST7H |
| ME49D | MLWDNW7 |
| ME49D | MLWST4M |
| ME49D | MLWST7M |
| ME49D | MLWEN7H |
| ME49D | MLWST6M |
| ME49D | MLWDNW1 |
| ME49D | MLWEN1H |
| ME49D | MLWST4H |
| ME49D | MLWEN1M |
| ME49D | MLWST2H |
| ME49D | MLWST2M |
| ME49D | MLWEN2H |
| ME49D | MLWEN3M |
| ME49D | MLWST1M |
| ME49D | MLWDNW3 |
| ME49D | MLWEN2M |
| ME49D | MLWEN3H |
| ME49D | MLWST3M |
| ME49D | MLWST3H |
| ME49D | MLWDNW2 |
| ME49E | MJBPATW |
| ME52D | MJBBGD |
| ME52M | MJBBGM |
| ME52Y | MJBBGY4 |
| ME53 | MJBBGLY |
| ME54 | MPAYS |
| ME550C | MPAYSW |
| ME56 | MPAYSG |
| ME57D | MJBBGD |
| ME57M | MJBBGM |
| ME57Y | MJBBGY4 |
| ME58 | MJBBGLY |
| ME59 | . MPAYLY |
| ME600C | MPAYLYW |
| ME61 | MPAYLYG |


| ME62 | MPAYS | ME81BY | MJSPRBY4 |
| :---: | :---: | :---: | :---: |
| ME63OC | MPAYSW | ME81EM | MJSPREM |
| ME64 | MPAYSG | ME81EY | MJSPREY4 |
| ME73 | MJSBOSS | ME82 | MJSPRF |
| ME74 | MJSSIZE | ME83 | MJSPRLS |
| ME75 | MJSHRS | ME84 | MJSPRTX |
| ME76 | MJSHRLK | ME85 | MJSPRNI |
| ME77A | MJSWKPAT | ME86BM | MJSPRBM |
| ME77B | MJSEN2H | ME86BY | MJSPRBY4 |
| ME77B | MJSST1M | ME86EM | MJSPREM |
| ME77B | MJSEN1H | ME86EY | MJSPREY4 |
| ME77B | MJSEN1M | ME87 | MJSPRF |
| ME77B | MJSST2H | ME88 | MJSPRLS |
| ME77B | MJSST2M | ME89 | MJSPRTX |
| ME77B | MJSEN3M | ME90 | MJSPRNI |
| ME77B | MJSEN3H | ME91 | MJSPAYU |
| ME77B | MJSST3M | ME92 | MJSPAYW |
| ME77B | MJSST3H | ME93 | MJSPYTX |
| ME77B | MJSEN2M | ME94 | MJSPYNI |
| ME77B | MJSST1H | ME95 | MJSPL |
| ME77C | MLWSST6H | ME96 | MJSTTWT |
| ME77C | MLWSEN6M | ME97 | MJSTTWM |
| ME77C | MLWSEN4M | ME98A | MJSSAT1 |
| ME77C | MLWSDNW4 | ME98B | MJSSAT2 |
| ME77C | MLWSST5H | ME98D | MJSSAT4 |
| ME77C | MLWSST5M | ME98E | MJSSAT5 |
| ME77C | MLWSEN5H | ME99 | MJSSAT |
| ME77C | MLWSDNW5 | ME100D | MJSBGD |
| ME77C | MLWSEN4H | ME100M | MJSBGM |
| ME77C | MLWSEN6H | ME100Y | MJSBGY4 |
| ME77C | MLWSST7M | ME101A | MJBLKCHA |
| ME77C | MLWSDNW6 | ME101B | MJBLKCHB |
| ME77C | MLWSST7H | ME101C | MJBLKCHC |
| ME77C | MLWSEN7H | ME101D | MJBLKCHD |
| ME77C | MLWSEN5M | ME101E | MJBLKCHE |
| ME77C | MLWSDNW7 | ME102A | MJBXPCHA |
| ME77C | MLWSST1H | ME102B | MJBXPCHB |
| ME77C | MLWSST6M | ME102C | MJBXPCHC |
| ME77C | MLWSST1M | ME102D | MJBXPCHD |
| ME77C | MLWSEN7M | ME102E | MJBXPCHE |
| ME77C | MLWSST4M | ME104 | MRACH12 |
| ME77C | MLWSEN1H | ME105M1 | MJBCHC1 |
| ME77C | MLWSDNW1 | ME105M2 | MJBCHC2 |
| ME77C | MLWSST2H | ME105M3 | MJBCHC3 |
| ME77C | MLWSST2M | ME107 | MXPCHCF |
| ME77C | MLWSEN2H | ME108 | MXPCHC |
| ME77C | MLWSEN2M | ME109 | MHUXPCH |
| ME77C | MLWSST3H | ME110 | MHUNURS |
| ME77C | MLWSST3M | ME111 | MJULK1 |
| ME77C | MLWSST4H | ME112 | MJULK4 |
| ME77C | MLWSEN3H | ME113A | MJULKA |
| ME77C | MLWSDNW3 | ME113B | MJULKB |
| ME77C | MLWSEN3M | ME113C | . MJULKC |
| ME77C | MLWSDNW2 | ME113D | MJULKD |
| ME77C | MLWSEN1M | ME113E | MJULKE |
| ME78 | MJSTYPEB | ME114 | . MJULKJB |
| ME79 | MJSACCS | ME115 | MJUBGN |
| ME80 | MJSPART | ME116 | MJUSPEC |
| ME81BM | MJSPRBM | ME117 | MJUSOC00 |


| ME117 | MJUSOC |
| :---: | :---: |
| ME118 | MJUHRSX |
| ME119 | MJUPAYX |
| ME120 | MJUPAYL |
| ME121 | MJUHRSL |
| ME124 | MEPROSH |
| ME129 | MEAAGE |
| ME130 | MJBUB |
| ME131 | MJBUBY |
| ME132 | MJ2HAS |
| ME133 | MJ2SOC00 |
| ME133 | MJ2SOC |
| ME134 | MJ2SEMP |
| ME135 | MJ2HRS |
| ME136 | MJ2PAY |
| ME137A | MIVEA |
| ME137B | MIVEB |
| ME137C | MIVEC |
| ME137D | MIVED |
| ME137E | MIVEE |
| MEG3 | ID |
| MEG4 | MHGSEX |
| MEG5M | MHGBM |
| MEG5Y | MHGBY |
| MEG6 | MIVLYR |
| MEG6 | MIVIOLW |
| MEG7 | MIVSTAT1 |
| MEG8 | MIVELIG |
| MEG9 | MHHMEM |
| MEG10 | MNEWHY |
| MEG11 | MLVWHY |
| MEG12M | MLVMN |
| MEG12M | MNEMNJN |
| MEG12Y | MLVYR4 |
| MEG12Y | MNEYRJN4 |
| MEG13 | MLVLOC |
| MEG14 | MIVFIO |
| MEG16 | MIVRREF |
| MEG17 | MIVIREIS |
| MEG18 | . MIVFIO |
| MF2 | MNF1 |
| MF3A | MFICODE |
| MF3B01 | MFR01 |
| MF3B02 | MFR02 |
| MF3B03 | MFR03 |
| MF3B04 | MFR04 |
| MF3B05 | MFR05 |
| MF3B06 | MFR06 |
| MF3B07 | MFR07 |
| MF3B08 | MFR08 |
| MF3B09 | MFR09 |
| MF3B10 | MFR10 |
| MF3B11 | MFR11 |
| MF3B12 | MFR12 |
| MF3B13 | MFR13 |
| MF3B14 | MFR14 |
| MF3B15 | MFR15 |
| MF3B16 | MFR16 |
| F3B17 | MFR17 |


| MF3B18 | MFR18 | MF43A3 | EXA3 |
| :---: | :---: | :---: | :---: |
| MF3B19 | MFR19 | MF43A4 | MFTEXA4 |
| MF3B20 | MFR20 | MF43A5 | MFTEXA5 |
| MF3BAL | MFRALL | MF43A6 | MFTEXA6 |
| MF3C | MFRNOW | MF43B1 | MFTEXB1 |
| MF3D | MFRVAL | MF43B2 | MFTEXB2 |
| MF3EOC | MFRW | MF43B3 | MFTEXB3 |
| MF3F | MFRJT | MF43B4 | MFTEXB4 |
| MF3FPN | MFRJTPN | MF43B5 | MFTEXB5 |
| MF3SEQ | . MFISEQ | MF43B6 | MFTEXB6 |
| MF4 | MFISIT | MF43C1 | MFTEXC1 |
| MF5 | MFISITC | MF43C2 | MFTEXC2 |
| MF6 | MFISITY | MF43C3 | MFTEXC3 |
| MF7 | MFISITX | MF43C4 | MFTEXC4 |
| MF8 | MFIYRDIA | MF43C5 | MFTEXC5 |
| MF9A | MFIYRDB1 | MF43C6 | MFTEXC6 |
| MF9B | MFIYRDB2 | MF44A | MFTEXAV |
| MF9C | MFIYRDB3 | MF44B | MFTEXBV |
| MF9D | MFIYRDB4 | MF44C | MFTEXCV |
| MF9E | MFIYRDB5 | MF45A | MFTEXAW |
| MF9F | MFIYRDB6 | MF45B | MFTEXBW |
| MF10 | MSAVE | MF45C | MFTEXCW |
| MF11 | MSAVED | MF46 | MSPINHH |
| MF11AM1 | MSAVEY1 | MF47A | MHUBUYS |
| MF11AM2 | MSAVEY2 | MF47B | MHUFRYS |
| MF12 | . MSAVREG | MF47C | MHUMOPS |
| MF13 | . MSAVLT | MF47D | MHUIRON |
| MF14 | MPPPEN | MF48 | MHHCH12 |
| MF15 | MPENB4 | MF49 | MHUSITS |
| MF16 | MPENB4Y4 | MF50 | MHOWLNG |
| MF17 | MPENB4V | MF51 | . MCARUSE |
| MF18 | MPENB4W | MF52 | MMOBUSE |
| MF19 | MPENYR4 | MF53 | MNEIGH |
| MF20 | MPENADD | MF54 | MNEIGH3 |
| MF21 | MPENADV | MF54 | MNEIGH4 |
| MF22 | . MPENADW | MF54 | MNEIGH2 |
| MF37 | MWINDF | MF54 | MNEIGH1 |
| MF38A | MWINDFA | MF63 | MDFWLD |
| MF38B | MWINDFB | MF648A3 | MDFWLD3 |
| MF38C | MWINDFC | MF64A1 | MDFWLD1 |
| MF38D | MWINDFD | MF64A2 | MDFWLD2 |
| MF38F | MWINDFF | MF64A4 | MDFWLD4 |
| MF38G | MWINDFG | MF65A | MIVFA |
| MF38H | MWINDFH | MF65B | MIVFB |
| MF39A | MWINDFAY | MF65C | MIVFC |
| MF39B | MWINDFBY | MF65D | MIVFD |
| MF39C | MWINDFCY | MF65E | MIVFE |
| MF39D | MWINDFDY | MF66H | MIVFOIH |
| MF39F | MWINDFFY | MF66M | MIVFOIM |
| MF39G | MWINDFGY | MF67 | MIVSC |
| MF39H | MWINDFHY | MF701 | MPRF125 |
| MF40A | MXPMEAL | MF101 | MF101 |
| MF40B | . MXPLEIS | MF102 | MF102 |
| MF41 | MFTEXHH | MF103 | MF103 |
| MF42A | . MFTEXA | MF104 | MF104 |
| MF42B | MFTEXB | MF105 | MF105 |
| MF42C | MFTEXC | MF106 | MF106 |
| MF43A1 | MFTEXA1 | MF116 | MF116 |
| MF43A2 | MFTEXA2 | MF118 | MF118 |


| MF119 | 相 |
| :---: | :---: |
| MF121 | MF121 |
| MF122 | MF122 |
| MF124 | MF124 |
| MF125 | MF125 |
| MF126 | MF126 |
| MF127 | MF127 |
| MF128 | MF128 |
| MF132 | MF132 |
| MF135 | MF135 |
| MF136 | MF136 |
| MF137 | MF137 |
| MF138 | MF138 |
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| MF140 | MF140 |
| MF141 | MF141 |
| MF142 | MF142 |
| MF143 | MF143 |
| MF151 | MF151 |
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| MF153 | MF153 |
| MF154 | MF154 |
| MF155 | MF155 |
| MF156 | MF156 |
| MF157 | MF157 |
| MF158 | MF158 |
| MF159 | MF159 |
| MH0AD | MHHDOI |
| MHOAM | MHHMOI |
| M ${ }^{\text {MOAY }}$ | M MHYOI 4 |
| MHOBH | MHHSOIH |
| M ${ }^{\text {MOBM }}$ | MHHSOIM |
| M ${ }^{\text {MOC }}$ | MHSTYPE |
| MH1A | MHSRINS |
| MH2 | MHSROOM |
| MH3 | MHSOWND |
| MH4M1 | MHSOWR1 |
| MH4M2 | MHSOWR2 |
| MH5 | MHSVAL |
| MH6 | MMGHAVE |
| MH7 | MHSOWRP |
| MH8 | MMGYNOT |
| MH9 | . MHSCOST |
| MH10 | MHSYR04 |
| MH11 | MHSCOST |
| MH12 | MMGYR04 |
| MH13 | MMGLY |
| MH14 | MHSIVLW |
| MH15 | MMGYR04 |
| MH16 | MHSCOST |
| MH17 | . MMGOLD |
| MH18 | . MMGLIFE |
| MH19 | MMGTYPE |
| MH20 | MMGXTRA |
| MH21 | MMGNEW |
| MH22A . | MMGXTY1 |
| MH22B . | MMGXTY2 |
| MH22C | MMGXTY3 |
| MH22D | MMGXTY4 |


| MH22E | MMGXTY5 | MH47C | MHS2VALC |
| :---: | :---: | :---: | :---: |
| MH23 | MXPMG | MH47D | MHS2VALD |
| MH24A | MXPMG1 | MH49 | MMGTOT |
| MH24B | MXPMG2 | MH50 | MCDHAVE |
| MH24C | MXPMG3 | MH51A . | MCD1USE |
| MH24D | MXPMG4 | M ${ }^{\text {c }}$ 51B . | MCD2USE |
| MH25 | MHSJB | MH51C | MCD10USE |
| MH26M1 | MRENTP1 | MH51D | MCD11USE |
| MH26M2 | MRENTP2 | MH51E . | MCD3USE |
| MH27 | MRENTLL | MH51F | MCD4USE |
| MH28 | MRENTF | MH51G | MCD5USE |
| MH30 | MRENT | MH51H | MCD6USE |
| MH31 | MRENTW | MH51I | MCD7USE |
| MH32A | MRENT1 | MH51J | MCD8USE |
| MH32B | MRENT7 | MH51K . | MCD9USE |
| MH32C | MRENT2 | MH51L | MCD12USE |
| MH32D | MRENT3 | MH52 | MCDBGHT |
| MH32E | MRENT4 | MH53A . | MCD1NEW |
| MH32F | MRENT5 | MH53B . | MCD2NEW |
| MH32G | MRENT8 | MH53C | MCD10NEW |
| MH32H | MRENT6 | MH53D | MCD11NEW |
| MH33 | MRENTHB | MH53E . | MCD3NEW |
| MH34 | MRENTG | MH53F . | MCD4NEW |
| MH35 | MRENTG | MH53G | MCD5NEW |
| MH36 | MRENTGW | MH53H | MCD6NEW |
| MH37 | MXPHSDF | MH53I | MCD7NEW |
| MH38A | MXPHSD1 | MH53J | MCD8NEW |
| MH38B | MXPHSD2 | MH53K . | MCD9NEW |
| MH39 | MXPHSDB | MH53L | MCD12NEW |
| MH40A | MHSBTH | MH54A . | MCD1CST |
| MH40A | MHSTLT | MH54B . | MCD2CST |
| MH40A | MHSGDN | MH54C | MCD10CST |
| MH40A | MHSKCH | MH54D | MCD11CST |
| MH40B | MHSKCHS | MH54E . | MCD3CST |
| M 4 40B | MHSTLTS | MH54F | MCD4CST |
| M 4 40B | MHSGDNS | MH54G | MCD5CST |
| MH40B | MHSBTHS | MH54H | MCD6CST |
| MH41A | MXPGASY | MH54I | MCD7CST |
| MH41B | MXPLECY | MH54J | MCD8CST |
| MH41C | MXPOILY | MH54K. | MCD9CST |
| MH41D | MXPSFLY | MH54L | MCD12CST |
| MH42 | MHEATCH | MH55 | MPCNET |
| MH43 | MHEATYP | MH56 | MXPHP |
| MH44A | MHSPRBG | MH57 | MXPHPDF |
| MH44B | MHSPRBH | MH58A. | MHSCANA |
| MH44C | MHSPRBI | M 458 B | MHSCANB |
| MH44D | MHSPRBJ | MH58C | MHSCANC |
| MH44E | MHSPRBK | MH58D | MHSCAND |
| MH44F | MHSPRBL | MH58E | MHSCANE |
| MH44G | MHSPRBM | MH58F . | MHSCANF |
| MH44H | MHSPRBN | MH59A | MHSCNTA |
| MH44I | MHSPRBO | M 459 B | MHSCNTB |
| MH44J | MHSPRBP | MH59C | MHSCNTC |
| MH44K | MHSPRBQ | MH59D | MHSCNTD |
| MH45 | MHSCTAX | MH59E | MHSCNTE |
| MH46 | MHS2OWND | MH59F . | MHSCNTF |
| MH47 | MHS2VALO | MH60 | MXPFOOD |
| MH47A | MHS2VALA | MH61 | MNCARS |
| MH47B | VALB | MH62 | MCAROWN |


| MH63 | MCARVAL | MJ31 | MJBHAD | MM23 | MXDTS |
| :---: | :---: | :---: | :---: | :---: | :---: |
| MH64M1 | MIVH1 | MJ32 | MJLEND4 | MM24 | MNXDTS |
| MH64M2 | MIVH2 | MJ33 | MJLSOC | MM25 | MHOSP |
| MH64M3 | MIVH3 | MJ33 | . MJLSOC00 | MM26 | MHOSPD |
| MH65H | MHHFOIH | MJ34 | MJLSIC92 | MM28 | MHOSPCH |
| MH65M | MHHFOIM | MJ35 | MJLSEMP | MM29 | MHOSPNHS |
| MHG2 | MHGR2R | MJ36 | MJLBOSS | MM2O | MHLPRBO |
| MHG3 | MHGSEX | MJ37 | MJLMNGR | MM30 | MHLCVR |
| MHG4M | MHGBM | MJ38 | MJLSIZE | MM31 | MHLCVRH |
| MHG4Y | MHGBY | MJ39A | MIVJA | MM32 | MHLCVRL |
| MHG8 | MMASTAT | MJ39B | MIVJB | MM33 | MHLSV |
| MHG9 | MHGSPN | MJ39C | MIVJC | MM34A | MHLSVA |
| MHG10 | MHGEMP | MJ39D | MIVJD | MM34B | MHLSVB |
| MHG11 | MHGFNO | MJ39E | MIVJE | MM34C | MHLSVC |
| MHG12 | MHGMNO | ML2 | MMLSTAT | MM34D | MHLSVD |
| MHG13 | MHGRA | ML3 | MNMAR | MM34E | MHLSVE |
| MI1 | MIV1 | ML18 | MLCOH | MM34F | MHLSVF |
| MI2 | MIV2 | ML26 | MLNPRNT | MM34G | MHLSVG |
| MI4 | . MIV4 | MM1 | MHLDSBL1 | MM34H | MHLSVH |
| MI5 | MIV5 | MM1A | MHLSTAT | MM34I | MHLSVI |
| MI6A | MIV6A | MM2A | MHLPRBA | MM34J1 | MHLSVJ |
| MI6B | . MIV6B | MM2B | MHLPRBB | MM34J2 | MHLSVK |
| MI6C | MIV6C | MM2C | MHLPRBC | MM34L | MHLSVL |
| MI6D | MIV6D | MM2D | MHLPRBD | MM34M | MHLSVM |
| MI6E | MIV6E | MM2E | MHLPRBE | MM35A | MHLSVAN |
| MI7 | MIV6F | MM2F | MHLPRBF | MM35B | MHLSVBN |
| M18 | MIV7 | MM2G | MHLPRBG | MM35C | MHLSVCN |
| MJ5D | MCJSBGD | MM2H | MHLPRBH | MM35D | MHLSVDN |
| MJ5M | MCJSBGM | MM2I | MHLPRBI | MM35E | MHLSVEN |
| MJ5Y | MCJSBGY4 | MM2J | MHLPRBJ | MM35F | MHLSVFN |
| MJ6 | MNEMST | MM2K | MHLPRBK | MM35G | MHLSVGN |
| MJ7D | MCJSBGD | MM2L | MHLPRBL | MM35H | MHLSVHN |
| MJ7M | MCJSBGM | MM2M | MHLPRBM | MM35I | MHLSVIN |
| MJ7Y | MCJSBGY4 | MM2M0 | MHLPRB | MM35J1 | MHLSVJN |
| MJ8 | MCJSBLY | MM2N | MHLPRBN | MM35J2 | MHLSVKN |
| MJ9 | MJHSTAT | MM9 | MHLLT | MM35L | MHLSVLN |
| MJ10D | MJHBGD | MM10A | MHLLTA | MM35M | MHLSVMN |
| MJ10M | MJHBGM | MM10B | MHLLTB | MM36A | MHLSVAF |
| MJ10Y | MJHBGY4 | MM10C | MHLLTC | MM36B | MHLSVBF |
| MJ12 | . MNJBS | MM10D | MHLLTD | MM36C | MHLSVCF |
| MJ13 | MJHSTAT | MM10E | MHLLTE | MM36D | MHLSVDF |
| MJ13M | MJHBGM | MM11 | MHLLTW | MM36E | MHLSVEF |
| MJ13Y | MJHBGY4 | MM11A | MHLENDW | MM36F | MHLSVFF |
| MJ14 | MJHSOC | MM11B | MHLLTWA | MM36G | MHLSVGF |
| MJ14 | MJHSOC00 | MM12 | MHLIV65 | MM36H | MHLSVHF |
| MJ15 | MJHSTAT | MM13A | MADLA | MM36I | MHLSVIF |
| MJ16 | MJHSEMP | MM13B | MADLAD | MM36J1 | MHLSVJF |
| MJ17 | MJHBOSS | MM14A | MADLB | MM36J2 | MHLSVKF |
| MJ18 | MJHSECT | MM14B | MADLBD | MM36L | MHLSVLF |
| MJ19 | MJHMNGR | MM15A | MADLC | MM36M | MHLSVMF |
| MJ20 | MJHSTAT | MM15B | MADLCD | MM37 | MHLCK |
| MJ21 | MJHPLDF | MM16A | MADLD | MM38A | MHLCKA |
| MJ22 | MJHSIC92 | MM16B | MADLDD | MM38B | . MHLCKB |
| MJ23 | . MJHSIZE | MM17A | MADLE | MM38C | MHLCKC |
| MJ24 | MJHPAYL | MM17B | MADLED | MM38D | MHLCKD |
| MJ25OC . | MJHPYLW | MM18A | MADLF | MM38E | MHLCKE |
| MJ26 | MJHPYLG | MM18B | MADLFD | MM38F | MHLCKI |
| MJ27 | MJHSTPY | MM21 | MHL2GP | MM38G | MHLCKF |
| MJ28 | . MJBLKY | MM22 | MHL2HOP | MM38H | MHLCKG |


| MM38I | MHLCKH | MS1A . | MGHQA | MV13 | MSWPOP1 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| MM39A | MHLCKAN | MS1B . | MGHQB | MV14 | MSWPOP2 |
| MM39B | MHLCKBN | MS1C | MGHQC | MV15 | MSWPOP3 |
| MM39C | MHLCKCN | MS1D | MGHQD | MV16 | MSWPOP4 |
| MM39D | MHLCKDN | MS1E . | MGHQE | MV18 | MOPDEV2 |
| MM39E | MHLCKEN | MS1F . | MGHQF | MV19 | MORGM |
| MM39F | MHLCKIN | MS1G | MGHQG | MV20A | MORGMA |
| MM39G | MHLCKFN | MS1H | MGHQH | MV20B | MORGMB |
| MM39H | MHLCKGN | MS1I | MGHQI | MV20C | MORGMC |
| MM39I | MHLCKHN | MS1J | MGHQJ | MV20D | MORGMD |
| MM40 | MSMOKER | MS1K. | MGHQK | MV20E | MORGME |
| MM41 | MNCIGS | MS1L | MGHQL | MV20F | MORGMF |
| MM43 | MAIDHH | MS2A . | MOPFAMA | MV20G | MORGMG |
| MM44P1 | MAIDHUA | MS2B . | MOPFAMB | MV20H | MORGMP |
| MM44P2 | MAIDHUB | MS2C | MOPFAMC | MV201 | MORGMQ |
| MM44P3 | MAIDHUC | MS2D | MOPFAMD | MV20J | MORGMO |
| MM45 | MAIDXHH | MS2E . | MOPFAME | MV20K | . MORGMH |
| MM46 | MNAIDXHH | MS2F | MOPFAMF | MV20L | MORGMI |
| MM47M1 | MAIDHU1 | MS2G | MOPFAMG | MV20M | MORGMJ |
| MM47M2 | MAIDHU2 | MS2H | MOPFAMH | MV20N | MORGMK |
| MM49 | MAIDHRS | MS2I | MOPFAMI | MV200 | MORGML |
| MM50A | MIVMA | MS3A . | . MLFSAT1 | MV20P | MORGMM |
| MM50B | MIVMB | MS3B . | . MLFSAT2 | MV21 | MORGA |
| MM50C | MIVMC | MS3C | . MLFSAT3 | MV21A | MORGAA |
| MM50D | MIVMD | MS3D | . MLFSAT4 | MV21B | MORGAB |
| MM50E | . MIVME | MS3E . | . MLFSAT5 | MV21C | MORGAC |
| MNF3 | MNIPENS | MS3F . | . MLFSAT6 | MV21D | MORGAD |
| MNF4 | MNISERPS | MS3G | MLFSAT7 | MV21E | MORGAE |
| MP2B | MPRRS2I | MS3H | . MLFSAT8 | MV21F | MORGAF |
| MP2C | MPRIPN | MS4A . | MLFSATO | MV21G | MORGAG |
| MP2D | . MPRWHY | MS4B . | . MLFSATL | MV21H | MORGAP |
| MP3 | MPPLEVR | MS5A . | MXSUPA | MV21I | MORGAQ |
| MP10M | MPRESBGM | MS5B . | MXSUPB | MV21J | MORGAO |
| MP10Y | MPRESBY4 | MS5C | MXSUPC | MV21K | MORGAH |
| MP11 | MPRESLY | MS6A . | MSSUPA | MV21L | MORGAI |
| MP23 | MPRFEHQ | MS6B . | MSSUPB | MV21M | MORGAJ |
| MP25 | MPRSEHQ | MS6C | MSSUPC | MV21N | MORGAK |
| MP27 | MHLDSBL | MS6D | MSSUPD | MV21O | MORGAL |
| MP58 | . MPRJBFT | MS6E . | MSSUPE | MV21P | MORGAM |
| MP59M | MPRJBBGM | MS7A . | MSSUP1 | MV22 | MFRNA |
| MP59Y | MPRJBBY4 | MS7B . | MSSUPR2R | MV23 | MFRNB |
| MP60 | . MPRJBLY | MT2B . | MTELWHY | MV24 | MFRNC |
| MP61 | MPREARN | MT45 | MTLFIYRL | MV25 | MTRUST |
| MP70A | MPRF101 | MT50 | MTLFIYR | MV26A | MLFIMPA |
| MP70B | MPRF102 | MV1A . | MOPPOLA | MV26B | MLFIMPB |
| MP70C | MPRF116 | MV1B . | MOPPOLB | MV26C | MLFIMPC |
| MP70D | MPRF131 | MV1C | MOPPOLC | MV26D | MLFIMPD |
| MP70F | MPRF135 | MV1D | MOPPOLD | MV26E | MLFIMPE |
| MP70G | MPRF137 | MV2 | MVOTE1 | MV26F | MLFIMPF |
| MP70H | . MPRF139 | MV3 | MVOTE2 | MV26G | MLFIMPG |
| MP70J | . MPRF141 | MV4 | MVOTE3 | MV26H | MLFIMPH |
| MP70K | MPRF143 | MV5 | MVOTE4 | MV27A | MLOCSERA |
| MP70NONE | MPRFIRN | MV6 | MVOTE5 | MV27B | MLOCSERB |
| MP71 | MPRFITB | MV7 | MVOTE7 | MV27C | MLOCSERC |
| MPI1A | MIVPA | MV8 | . MVOTE8 | MV27D | MLOCSERD |
| MPI1B | . MIVPB | MV9 | MVOTE6 | MV27E | MLOCSERE |
| MPI1C | . MIVPC | MV10 . | MSWVT1 | MV28 | MLOCCHD |
| MPI1D | . MIVPD | MV11 . | MSWVT2 | MV29A | MOPNGBHA |
| MPI1E | . . MIVPE | MV12 . | . MSWVT3 | MV29B | MOPNGBHB |


| MV29C | MOPNGBHC | MY1 | MYTVHRS |
| :---: | :---: | :---: | :---: |
| MV29D | MOPNGBHD | MY2 | MYTVSTP |
| MV29E | . MOPNGBHE | MY3A | MYPACTA |
| MV29F | MOPNGBHF | MY3B | MYPACTB |
| MV29G | MOPNGBHG | MY3C | MYPACTC |
| MV29H | MOPNGBHH | MY3D | MYPACTD |
| MV30A | MHHCH16 | MY3E | MYPACTE |
| MV32 | MSCPNO | MY3F | MYPACTM |
| MV33 | MSCAGE | MY3G | MYPACTN |
| MV34 | . MSCSEX | MY3H | MYPACTL |
| MV35 | . MSCAGE4 | MY4 | MYPCHOR |
| MV36 | MSCTYP | MY5 | MYPCOMP |
| MV37M | . MSCHBGM | MY6 | MYPPCHW |
| MV37Y | MSCHBGY | MY7 | MYPPCG |
| MV38 | MSCHSTA | MY8 | MYPPCNT |
| MV39 | . MSCHSAT | MY9 | MYPMOBU |
| MV40 | . MSCHHW | MY10 | MYPPALS |
| MV41 | . MSCACVS | MY11 | MYPPALO |
| MV42 | MSCACH | MY12 | MYPLATE |
| MV43 | MSCAG11 | MY13 | MYPARGM |
| MV44 | . MSCTUT | MY14 | . MYPARGF |
| MV45 | . MSCTUTO | MY15 | MYPTLKM |
| MV45 | MSCTUTE | MY16 | MYPTLKF |
| MV45 | MSCTUTM | MY17 | MYPNPAL |
| MV45 | MSCTUTS | MY18 | . MYPFGHT |
| MV45 | MSCTUTL | MY19 | MYPEATN |
| MV45 | . MSCTUTH | MY20 | MYPSMEV |
| MV46A | MSC2UNI | MY21 | MYPSMOF |
| MV46B | MSCLUNI | MY22 | MYPSMLW |
| MV47 | MSCARG | MY23 | MYPDGFR |
| MV48 | MSCTALK | MY24 | MYPESTA |
| MV49 | . MSCPRAZ | MY25 | MYPESTI |
| MV50 | MSCSMAK | MY26 | MYPESTB |
| MV51 | MSCCUDL | MY27 | MYPESTJ |
| MV52 | MSCYELL | MY28 | MYPESTC |
| MV53 | MSCHOSA | MY29 | MYPESTK |
| MV54M1 | MSCHOS2 | MY30 | MYPESTE |
| MV54M1 | MSCHOS1 | MY31 | MYPESTF |
| MV55 | MHSCIMP | MY32 | MYPTCHA |
| MV56 | MPLYKID | MY33 | MYPTCHB |
| MV57 | MLEIKID | MY34 | MYPHSW |
| MV58 | . MKIDOPA | MY35 | MYPHAP |
| MV59 | . MKIDSEE | MY36 | MYPHFM |
| MV60 | . MKIDWE | MY37 | MYPHFR |
| MV61 | MKIDHOL | MY38 | MYPHSC |
| MV61A | . MKIDFAR | MY39 | MYPHLF |
| MV62 | MKIDREL | MY40 | MYPVTE6 |
| MV63 | . MOHCH16 | MY41 | MYPVTE3 |
| MV64 | MSEEKID | MY42 | MYPVT11 |
| MV65 | . . MWEKID | MY43 | . MYPTRUN |
| MV66 | . MHOLKID | MY44 | MYPBULL |
| MV66A | . MFARKID | MY45 | MYPOPSC |
| MV67 | MRELKID | MY46 | MYPLVSC |
| MV68A | MIVVA | MY47 | . MYPACVS |
| MV68B | MIVVB | MY49 | MYPSOC |
| MV68C | . MIVVC | MY50 | MYPWKLW |
| MV68D | . MIVVD | MY51M1 | MYPSOC1 |
| MV68E | . . MIVVE | MY51M2 | MYPSOC2 |
| MVN17 | MNIPOP5 | MY52 | MYPWHRS |


| MY53 | MYPPAY |
| :---: | :---: |
| MY54A | MYPWKM |
| MY54B | MYPWKT |
| MY54C | MYPWKW |
| MY54D | MYPWKTH |
| MY54E | MYPWKF |
| MY54F | MYPWKSA |
| MY54G | MYPWKSU |
| MY55 | MYPLVHM |
| MY56 | MYP2UNI |
| MY57M1 | MYPNUNA |
| MY57M2 | MYPNUNB |
| MY58A | MYPJBQA |
| MY58B | MYPJBQD |
| MY58C | MYPJBQB |
| MY58D | MYPJBQF |
| MY58E | MYPJBQG |
| MY58F | MYPJBQH |
| MY59A | MYPFUTA |
| MY59B | MYPFUTB |
| NDOAD | NDOID |
| NDOAM | NDOIM |
| NDOAY | NDOIY4 |
| NDOBA | NIVLYR |
| NDOBB | NIVSTAT2 |
| ND1H | NIVSOIH |
| ND1M | NIVSOIM |
| ND2 | NLKNBRD |
| ND3 | NLKMOVE |
| ND4 | NLKMOVY |
| ND5 | NXPMOVE |
| ND6 | NPLNEW |
| ND7M | NPLNOWM |
| ND7Y | NPLNOWY4 |
| ND8 | NMOVJB |
| ND9A | NMOVJBA |
| ND9B | NMOVJBB |
| ND9C | MOVJBC |
| ND9D | MOVJBD |
| ND9E | MMOVJBE |
| ND9F | NMOVJBF |
| ND9G | NMOVJBG |
| ND9H | NMOVJBH |
| ND91 | NMOVJBI |
| ND10M1. | NMOVY1 |
| ND10M2 . | NMOVY2 |
| ND11M | NDOBM |
| ND11Y | NDOBY |
| ND12 | NSEX |
| ND12 | NSEX |
| ND14 | NMLSTAT |
| ND15 | NMLCHNG |
| ND16M | NMLCHM |
| ND16Y | NMLCHY4 |
| ND17 | NJBSTAT |
| ND18 | NEDLYR |
| ND18 | NLCOH |
| ND19 | EDTYPE2 |
| ND19 | DT |


| 19 | NEDTYPE3 |
| :---: | :---: |
| ND20 | NEDBLYR1 |
| ND20 | NEDBLYR2 |
| ND20 | NEDBLYR3 |
| ND21M | NEDBGM1 |
| ND21M2 | NEDBGM2 |
| ND21M3 | NEDBGM3 |
| ND21Y | NEDBGY1 |
| ND21Y2 | NEDBGY2 |
| ND21Y3 | NEDBGY3 |
| ND22 | NEDENNE1 |
| ND22M | NEDENM1 |
| ND22M2 | NEDENM2 |
| ND22M3 | NEDENM3 |
| ND22NE2 | NEDENNE2 |
| ND22NE3 | NEDENNE3 |
| ND22Y | NEDENY1 |
| ND22Y2 | NEDENY2 |
| ND22Y3 | NEDENY3 |
| ND23A | NEDFEEA1 |
| ND23A2 | NEDFEEA2 |
| ND23A3 | NEDFEEA3 |
| ND23B | NEDFEEB1 |
| ND23B2 | NEDFEEB2 |
| ND23B3 | NEDFEEB3 |
| ND23C | NEDFEEC1 |
| ND23C2 | NEDFEEC2 |
| ND23C3 | NEDFEEC3 |
| ND23D | NEDFEED1 |
| ND23D2 | NEDFEED2 |
| ND23D3 | NEDFEED3 |
| ND23E | NEDFEEE1 |
| ND23E2 | NEDFEEE2 |
| ND23E3 | NEDFEEE3 |
| ND23F | NEDFEEF1 |
| ND23F2 | NEDFEEF2 |
| ND23F3 | . NEDFEEF3 |
| ND23G | NEDFEEG1 |
| ND23G2 | NEDFEEG2 |
| ND23G3 | NEDFEEG3 |
| ND24 | NEDQUAL1 |
| ND24 | NEDQUAL2 |
| ND24 | NEDQUAL3 |
| ND25A1 | NEDQLA1 |
| ND25A2 | NEDQLA2 |
| ND25A3 | NEDQLA3 |
| ND25B1 | NEDQLB1 |
| ND25B2 | NEDQLB2 |
| ND25B3 | NEDQLB3 |
| ND25C1 | NEDQLC1 |
| ND25C2 | NEDQLC2 |
| ND25C3 | NEDQLC3 |
| ND25D1 | NEDQLD1 |
| ND25D2 | NEDQLD2 |
| ND25D3 | NEDQLD3 |
| ND25E1 | NEDQLE1 |
| ND25E2 | NEDQLE2 |
| ND25E3 | NEDQLE3 |
| ND25F1 | NEDQLF1 |


| 25F2 |  |
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| ND25F3 | NEDQLF3 |
| ND25G1 | NEDQLG1 |
| ND25G2 | NEDQLG2 |
| ND25G3 | NEDQLG3 |
| ND25H1 | NEDQLH1 |
| ND25H2 | NEDQLH2 |
| ND25H3 | NEDQLH3 |
| ND25I1 | NEDQLI1 |
| ND25I2 | LI2 |
| ND25I3 | NEDQLI3 |
| ND25J1 | NEDQLJ1 |
| ND25J2 | EEDQLJ2 |
| ND25J3 | NEDQLJ3 |
| ND25NA | NEDQNN2 |
| ND25NA | NEDQNN3 |
| ND25NONE | NEDQNN1 |
| ND26A1 | NEDQLAN1 |
| ND26A2 | NEDQLAN2 |
| ND26A3 | NEDQLAN3 |
| ND26B1 | NEDQLBN1 |
| ND26B2 | NEDQLBN2 |
| ND26B3 | NEDQLBN3 |
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| ND26C2 | NEDQLCN2 |
| ND26C3 | NEDQLCN3 |
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| ND26D2 | EDQLDN2 |
| ND26D3 | NEDQLDN3 |
| D26E1 | NEDQLEN1 |
| ND26E2 | NEDQLEN2 |
| ND26E3 | NEDQLEN3 |
| ND26F1 | NEDQLFN1 |
| ND26F2 | NEDQLFN2 |
| ND26F3 | NEDQLFN3 |
| ND26G1 | NEDQLGN1 |
| ND26G2 | NEDQLGN2 |
| ND26G3 | NEDQLGN3 |
| ND26H1 | NEDQLHN1 |
| ND26H2 | NEDQLHN2 |
| ND26H3 | NEDQLHN3 |
| ND26I1 | NEDQLIN1 |
| ND26I2 | NEDQLIN2 |
| ND26I3 | NEDQLIN3 |
| ND26J1 | NEDQLJN1 |
| ND26J2 | NEDQLJN2 |
| ND26J3 | NEDQLJN3 |
| ND27 | NEDOQL1 |
| ND27 | NEDOQL2 |
| ND27 | NEDOQL3 |
| ND27NONE | NEDOQLN1 |
| ND27NONE | NEDOQLN2 |
| ND27NONE | NEDOQLN3 |
| ND28 | NEDMORE1 |
| ND28 | NEDMORE2 |
| ND29DST | NPLBORND |
| ND290S | NPLBORNC |
| ND30 | 2UK4 |
| ND31 | NMLSTAT |


| ND32M1 | NCITZN1 |
| :---: | :---: |
| ND32M2 | NCITZN2 |
| ND33 | NRACEL |
| ND34 | NJBSTAT |
| ND36 | NPASOC |
| ND36 | NPASOC00 |
| ND36ANA | NPAJU |
| ND37 | NPASEMP |
| ND38 | NPABOSS |
| ND39 | NPAMNGR |
| ND40 | NMAJU |
| ND40 | NMASOC |
| ND40 | NMASOC00 |
| ND41 | . NMASEMP |
| ND42 | . NMABOSS |
| ND43 | NMAMNGR |
| ND44 | NJ1SOC |
| ND44 | . NJ1SOC00 |
| ND44NA | NJ1NONE |
| ND45 | NJ1SEMP |
| ND46 | NJ1BOSS |
| ND47 | NJ1MNGR |
| ND48 | NLCOH |
| ND49M | NCOH1BM |
| ND49Y | NCOH1BY |
| ND50 | . NCOH1MR |
| ND51M | NCOH1EM |
| ND51Y | NCOH1EY |
| ND52 | NNMAR |
| ND53M | NLMAR1M |
| ND53Y | NLMAR1Y |
| ND54 | . NLPRNT |
| ND55 | NLNPRNT |
| ND56M | NCH1BM |
| ND56Y | NCH1BY |
| ND57 | NSCEND |
| ND57NA | NSCHOOL |
| ND58 | NSCTYPE |
| ND59 | NSCNOW |
| ND60 | NFETYPE |
| ND61 | NFEEND |
| ND61NA | NFENOW |
| ND62 | NQFHAS |
| ND63A | NQFA |
| ND63B | NQFB |
| ND63C | . NQFC |
| ND63D | NQFD |
| ND63E | NQFE |
| ND63F | . NQFF |
| ND63G | . NQFG |
| ND63H | NQFH |
| ND63I | . NQFI |
| ND63J | NQFJ |
| ND63K | NQFK |
| ND63L | NQFL |
| ND63M | NQFM |
| ND63N | NQFN |
| ND64 | NQFED |
| ND65A | NQFEDA |


| ND65B |  |
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| ND65C | NQFEDC |
| ND65D | NQFEDD |
| ND65E | NQFEDE |
| ND65F | NQFEDF |
| ND65G | NQFEDG |
| ND65H | NQFEDH |
| ND651 | NQFEDI |
| ND65J | NQFEDJ |
| ND65K | NQFEDK |
| ND65L | NQFEDL |
| ND65M | NQFEDM |
| ND65N | NQFEDN |
| ND650 | NQFEDO |
| ND65P | NQFEDP |
| ND65Q | NQFEDQ |
| ND65R | NQFEDR |
| ND65S | NQFEDS |
| ND65T | NQFEDT |
| ND65U | NQFEDU |
| ND66A | NNQFEDA |
| ND66B | NNQFEDB |
| ND66C | NNQFEDC |
| ND66D | NNQFEDD |
| ND66E | NNQFEDE |
| ND66F | NNQFEDF |
| ND66G | NNQFEDG |
| ND66H | NNQFEDH |
| ND66I | NNQFEDI |
| ND66J | NNQFEDJ |
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| ND66N | NNQFEDN |
| ND66O | NNQFEDO |
| ND66P | NNQFEDP |
| ND66Q | NNQFEDQ |
| ND66R | NNQFEDR |
| ND66S | NNQFEDS |
| ND66T | NNQFEDT |
| ND66U | NNQFEDU |
| ND67 | NTRAIN |
| ND68 | NNTRAIN |
| ND69 | NTRPLCE1 |
| ND69 | NTRPLCE2 |
| ND69 | NTRPLCE3 |
| ND70A1 | TRWHYA1 |
| ND70A2 | NTRWHYA2 |
| ND70A3 | NTRWHYA3 |
| ND70B1 | TRWHYB1 |
| ND70B2 | TRWHYB2 |
| ND70B3 | NTRWHYB3 |
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| ND70C2 | ITRWHYC2 |
| ND70C3 | ITRWHYC3 |
| ND70D1 | NTRWHYD1 |
| ND70D2 | NTRWHYD2 |
| ND70D3 | TRWHYD3 |
| ND70E1 | NTRWHYE1 |


| OE2 | NTRWHYE2 |
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| ND70E3 | NTRWHYE3 |
| ND71 | NTRQ1 |
| ND71 | NTRQ2 |
| ND71 | NTRQ3 |
| ND71 | NTRU1 |
| ND71 | NTRU2 |
| ND71 | J3 |
| ND72A1 | NTRFEEA1 |
| ND72A2 | NTRFEEA2 |
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| ND72B2 | NTRFEEB2 |
| ND72B3 | NTRFEEB3 |
| ND72C1 | NTRFEEC1 |
| ND72C2 | NTRFEEC2 |
| ND72C3 | NTRFEEC3 |
| ND72E1 | NTRFEEE1 |
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| ND72E3 | NTRFEEE3 |
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| ND73 | NTRQLXP3 |
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| ND74 | NTRQLAC2 |
| ND74 | NTRQLAC3 |
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| ND75A2 | NTRQLA2 |
| ND75A3 | NTRQLA3 |
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| ND75C2 | NTRQLC2 |
| ND75C3 | NTRQLC3 |
| ND75D1 | NTRQLD1 |
| ND75D2 | NTRQLD2 |
| ND75D3 | NTRQLD3 |
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| ND75E2 . | NTRQLE2 |
| ND75E3 . | NTRQLE3 |
| ND75F1 | NTRQLF1 |
| ND75F2 | NTRQLF2 |
| ND75F3 . | NTRQLF3 |
| ND75G1 | NTRQLG1 |
| ND75G2 | NTRQLG2 |
| ND75G3 | NTRQLG3 |
| ND75H1 | NTRQLH1 |
| ND75H2 | NTRQLH2 |
| ND75H3 | NTRQLH3 |
| ND75I1 | NTRQLI1 |
| ND75I2 | NTRQLI2 |
| ND75I3 | NTRQLI3 |

ND75J1 . . . . . . NTRQLJ1
ND75J2 . . . . NTRQLJ2
ND75J3 . . . . . NTRQLJ3
ND75NONE . NTRQLNN1
ND75NONE .
NTRQLNN2
ND75NONE .
NTRTRQLNN3
ND76AN1 . . .

| ND86 | NBWTEL1 | NE13 | NJBOTPD | NE52D | NJBBGD |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ND86 | NBWTEL2 | NE14 | NJBHRLK | NE52M | NJBBGM |
| ND86 | NBWTEL3 | NE15 | NJBPL | NE52Y | NJBBGY4 |
| ND87 | NBWTWK1 | NE16 | NJBTTWT | NE53 | NJBBGLY |
| ND87 | NBWTWK2 | NE17 | NJBTTWM | NE54 | NPAYS |
| ND87 | NBWTWK3 | NE18B | NJBSAT2 | NE550C | NPAYSW |
| ND88 | . NBWTKN1 | NE18D | NJBSAT4 | NE56 | NPAYSG |
| ND88 | . NBWTKN2 | NE18F | NJBSAT6 | NE57D | NJBBGD |
| ND88 | . NBWTKN3 | NE18G | NJBSAT7 | NE57M | NJBBGM |
| ND89LB1 | NBWTLB1 | NE19 | NJBSAT | NE57Y | NJBBGY4 |
| ND89LB2 | NBWTLB2 | NE20 | NPAYGL | NE58 | NJBBGLY |
| ND89LB3 | NBWTLB3 | NE210C | NPAYGW | NE59 | NPAYLY |
| ND890Z1 | NBWTOZ1 | NE22 | . NPAYNL | NE600C | NPAYLYW |
| ND89OZ2 | NBWTOZ2 | NE23A | NPYTC | NE61 | NPAYLYG |
| ND890Z3 | NBWTOZ3 | NE23B | NPYWFTC | NE62 | NPAYS |
| ND90 | NBWTGM1 | NE23C | NPYWFTCW | NE63OC | NPAYSW |
| ND90 | NBWTGM2 | NE23OC | NPAYNW | NE64 | NPAYSG |
| ND90 | NBWTGM3 | NE24 | NPAYSLP | NE74 | NJSBOSS |
| ND91 | . NBWTG51 | NE26 | NPAYUSL | NE75 | NJSSIZE |
| ND91 | NBWTG52 | NE27 | NPAYU | NE76 | NJSHRS |
| ND91 | NBWTG53 | NE280C | NPAYUW | NE77 | NJSHRLK |
| ND93A | . NWLSHA | NE29 | NPAYUG | NE78 | NJSTYPEB |
| ND93B | . NWLSHB | NE30A | NPAYDF1 | NE79 | NJSACCS |
| ND93C | NWLSHC | NE30B | NPAYDF2 | NE80 | NJSPART |
| ND93D | NWLSHD | NE30C | NPAYDF3 | NE81BM | NJSPRBM |
| ND93E | . NWLSHE | NE30D | NPAYDF4 | NE81BY. | NJSPRBY4 |
| ND94A | . NWLSHUA | NE30E | NPAYDF5 | NE81EM | NJSPREM |
| ND94B | . NWLSHUB | NE30F | NPAYDF6 | NE81EY . | NJSPREY4 |
| ND94C | NWLSHUC | NE30G | NPAYDF7 | NE82 | NJSPRF |
| ND94D | NWLSHUD | NE30H | NPAYDF9 | NE83 | NJSPRLS |
| ND94E | . NWLSHUE | NE301 | NPAYDF8 | NE84 | NJSPRTX |
| ND95 | NAGLT20 | NE31 | NPAYTYP | NE85 | NJSPRNI |
| ND96 | NSCNOW2 | NE32 | NOVTPAY | NE86BM | NJSPRBM |
| ND97 | NINFTED | NE33 | NEXTRATE | NE86BY | NJSPRBY4 |
| ND98 | NEDASP | NE33 | NEXTREST | NE86EM | NJSPREM |
| ND99 | NFEDASP | NE34 | NBASRATE | NE86EY . | NJSPREY4 |
| ND99A | NFEDTYP | NE34 | NBASREST | NE87 | NJSPRF |
| ND100 | NFEDLIK | NE35 | NOVTRATE | NE88 | NJSPRLS |
| ND101M1 | NFEDNT1 | NE35 | NOVTREST | NE89 | NJSPRTX |
| ND101M2 | NFEDNT2 | NE39 | NJBPERFP | NE90 | NJSPRNI |
| ND102 | NOCFUT | NE40 | NJBONUS | NE91 | NJSPAYU |
| ND105A | NIVDA | NE41 | NJBONAM | NE92 | NJSPAYW |
| ND105B | NIVDB | NE42 | NJBONG | NE93 | NJSPYTX |
| ND105C | NIVDC | NE43 | NJBRISE | NE94 | NJSPYNI |
| ND105D. | NIVDD | NE44 | NTUJBPL | NE95 | NJSPL |
| ND105E | NIVDE | NE45 | . . NTUIN1 | NE96 | NJSTTWT |
| NE1 | . NJBHAS | NE46 | NJBOPPS | NE97 | NJSTTWM |
| NE2 | NJBOFF | NE47 | NJBPEN | NE98A | NJSSAT1 |
| NE3 | NJBOFFY | NE48 | NJBPENM | NE98B | NJSSAT2 |
| NE4 | NJBTERM1 | NE49 | njbtime | NE98D | NJSSAT4 |
| NE5 | NJBSOC | NE4A | NJBTERM2 | NE98E | NJSSAT5 |
| NE5 | NJBSOC00 | NE50A | NJBWKHRA | NE99 | NJSSAT |
| NE6 | NJBSIC92 | NE50A | NJBWKHRB | NE100D | NJSBGD |
| NE7 | NJBSEMP | NE50A | NJBWKHRC | NE100M | NJSBGM |
| NE8 | . NJBMNGR | NE50A | NJBWKHRD | NE100Y | . NJSBGY4 |
| NE9 | . NJBSECT | NE50A | NJBWKHRE | NE101A | . NJBLKCHA |
| NE10 | NJBSIZE | NE50A | NJBWKHRF | NE101B | . NJBLKCHB |
| NE11 | NJBHRS | NE50A | NJBWKHRG | NE101C . | NJBLKCHC |
| NE12 | NJBOT | NE50A | NJBWKHRH | NE101D . | NJBLKCHD |


| NE101E | NJBLKCHE | NEG7 | NIVSTAT1 | NF13 | SAVLT |
| :---: | :---: | :---: | :---: | :---: | :---: |
| NE102A | NJBXPCHA | NEG8 | NIVELIG | NF14 | NPPPEN |
| NE102B | NJBXPCHB | NEG9 | NHHMEM | NF15 | NPENB4 |
| NE102C | NJBXPCHC | NEG10 | NNEWHY | NF16 | NPENB4Y4 |
| NE102D | NJBXPCHD | NEG11 | NLVWHY | NF17 | NPENB4V |
| NE102E | NJBXPCHE | NEG12M | NLVMN | NF18 | NPENB4W |
| NE103A | NJBSTRNA | NEG12M | NNEMNJN | NF19 | NPENYR4 |
| NE103B | NJBSTRNB | NEG12Y . | NLVYR4 | NF20 | NPENADD |
| NE103C | NJBSTRNC | NEG12Y | NNEYRJN4 | NF21 | NPENADV |
| NE103D | NJBSTRND | NEG13 | NLVLOC | NF22 | NPENADW |
| NE104 | NRACH12 | NEG14 | NIVFIO | NF37 | NWINDF |
| NE105M1 | NJBCHC1 | NEG16 | NIVRREF | NF38A | NWINDFA |
| NE105M2 | NJBCHC2 | NEG17 | NIVIREIS | NF38B | NWINDFB |
| NE105M3 | NJBCHC3 | NEG18 | NIVFIO | NF38C | NWINDFC |
| NE107 | NXPCHCF | NF2 | NNF1 | NF38D | NWINDFD |
| NE108 | NXPCHC | NF3A | NFICODE | NF38F | . NWINDFF |
| NE109 | NHUXPCH | NF3B01 | NFR01 | NF38G | NWINDFG |
| NE110 | NHUNURS | NF3B02 | NFR02 | NF38H | NWINDFH |
| NE111 | . NJULK1 | NF3B03 | NFR03 | NF39A | NWINDFAY |
| NE112 | NJULK4 | NF3B04 | . NFR04 | NF39B | NWINDFBY |
| NE113A | . NJULKA | NF3B05 | NFR05 | NF39C | NWINDFCY |
| NE113B | . NJULKB | NF3B06 | NFR06 | NF39D | NWINDFDY |
| NE113C | NJULKC | NF3B07 | NFR07 | NF39F | NWINDFFY |
| NE113D | NJULKD | NF3B08 | NFR08 | NF39G | NWINDFGY |
| NE113E | . NJULKE | NF3B09 | . NFR09 | NF39H | NWINDFHY |
| NE114 | NJULKJB | NF3B10 | . NFR10 | NF40A | NXPMEAL |
| NE115 | NJUBGN | NF3B11 | NFR11 | NF40B | NXPLEIS |
| NE116 | NJUSPEC | NF3B12 | NFR12 | NF41 | NFTEXHH |
| NE117 | NJUSOC | NF3B13 | NFR13 | NF42A | NFTEXA |
| NE117 | . NJUSOC00 | NF3B14 | NFR14 | NF42B | NFTEXB |
| NE118 | NJUHRSX | NF3B15 | . NFR15 | NF42C | NFTEXC |
| NE119 | NJUPAYX | NF3B16 | NFR16 | NF43A1 | NFTEXA1 |
| NE120 | NJUPAYL | NF3B17 | NFR17 | NF43A2 | NFTEXA2 |
| NE121 | NJUHRSL | NF3B18 | NFR18 | NF43A3 | NFTEXA3 |
| NE124 | NEPROSH | NF3B19 | . NFR19 | NF43A4 | NFTEXA4 |
| NE125 | . NJBASP1 | NF3B20 | . NFR20 | NF43A5 | NFTEXA5 |
| NE126 | NJBASP2 | NF3BAL | NFRALL | NF43A6 | NFTEXA6 |
| NE127 | NJBLKY1 | NF3C | NFRNOW | NF43B1 | NFTEXB1 |
| NE128 | NJBLKY2 | NF3D | . NFRVAL | NF43B2 | NFTEXB2 |
| NE129 | NEAAGE | NF3EOC | NFRW | NF43B3 | NFTEXB3 |
| NE130 | NJBUB | NF3F | NFRJT | NF43B4 | NFTEXB4 |
| NE131 | NJBUBY | NF3FPN . | NFRJTPN | NF43B5 | NFTEXB5 |
| NE132 | . NJ2HAS | NF3SEQ | NFISEQ | NF43B6 | NFTEXB6 |
| NE133 | . NJ2SOC | NF4 | NFISIT | NF43C1 | NFTEXC1 |
| NE133 | . NJ2SOC00 | NF5 | NFISITC | NF43C2 | NFTEXC2 |
| NE134 | NJ2SEMP | NF6 | NFISITY | NF43C3 | NFTEXC3 |
| NE135 | . NJ2HRS | NF7 | NFISITX | NF43C4 | NFTEXC4 |
| NE136 | NJ2PAY | NF8 | NFIYRDIA | NF43C5 | NFTEXC5 |
| NE137A | NIVEA | NF9A | NFIYRDB1 | NF43C6 | NFTEXC6 |
| NE137B | NIVEB | NF9B | NFIYRDB2 | NF44A | NFTEXAV |
| NE137C | . NIVEC | NF9C | NFIYRDB3 | NF44B | NFTEXBV |
| NE137D | NIVED | NF9D | NFIYRDB4 | NF44C | NFTEXCV |
| NE137E | NIVEE | NF9E | NFIYRDB5 | NF45A | NFTEXAW |
| NEG3 | . . PID | NF9F | NFIYRDB6 | NF45B | NFTEXBW |
| NEG4 | NHGSEX | NF10 | NSAVE | NF45C | NFTEXCW |
| NEG5M | . NHGBM | NF11 | NSAVED | NF46 | NSPINHH |
| NEG5Y | NHGBY | NF11AM1 | NSAVEY1 | NF47A | NHUBUYS |
| NEG6 | NIVIOLW | NF11AM2 | . NSAVEY2 | NF47B | NHUFRYS |
| NEG6 | . NIVLYR | NF12 | NSAVREG | NF47C | NHUMOPS |


| NF47D | NHUIRON | NHOAM | NHHMOI | NH39 | NXPHSDB |
| :---: | :---: | :---: | :---: | :---: | :---: |
| NF48 | NHHCH12 | NHOAY | NHHYOI4 | NH40A | NHSBTH |
| NF49 | . NHUSITS | NHOBH | NHHSOIH | NH40A | NHSGDN |
| NF50 | NHOWLNG | NHOBM | NHHSOIM | NH40A | NHSKCH |
| NF51 | NCARUSE | NHOC | NHSTYPE | NH40A | NHSTLT |
| NF52 | NMOBUSE | NH1A | NHSRINS | NH40B | NHSBTHS |
| NF53M1 | NEVENT1 | NH2 | NHSROOM | NH40B | NHSGDNS |
| NF53M1 | NEVENT1S | NH3 | NHSOWND | NH40B | NHSKCHS |
| NF53M2 | NEVENT2 | NH4M1 | NHSOWR1 | NH40B | NHSTLTS |
| NF53M2 | NEVENT2S | NH4M2 | NHSOWR2 | NH41A | NXPGASY |
| NF53M3 | . NEVENT3 | NH5 | NHSVAL | NH41B | NXPLECY |
| NF53M3 | NEVENT3S | NH6 | NMGHAVE | NH41C | NXPOILY |
| NF53M4 | NEVENT4 | NH7 | NHSOWRP | NH41D | NXPSFLY |
| NF53M4 | NEVENT4S | NH8 | NMGYNOT | NH42 | NHEATCH |
| NF64A | NIVFA | NH9 | NHSCOST | NH43 | NHEATYP |
| NF64B | NIVFB | NH10 | NHSYR04 | NH44A | NHSPRBG |
| NF64C | . NIVFC | NH11 | NHSCOST | NH44B | NHSPRBH |
| NF64D | . NIVFD | NH12 | NMGYR04 | NH44C | NHSPRBI |
| NF64E | NIVFE | NH13 | NMGLY | NH44D | NHSPRBJ |
| NF65H | NIVFOIH | NH14 | NHSIVLW | NH44E | NHSPRBK |
| NF65M | NIVFOIM | NH15 | NMGYR04 | NH44F | NHSPRBL |
| NF66 | . NIVSC | NH16 | NHSCOST | NH44G | NHSPRBM |
| NF701 | NPRF125 | NH17 | NMGOLD | NH44H | NHSPRBN |
| NF101 | NF101 | NH18 | NMGLIFE | NH44I | NHSPRBO |
| NF102 | NF102 | NH19 | NMGTYPE | NH44J | NHSPRBP |
| NF103 | NF103 | NH20 | NMGXTRA | NH44K | NHSPRBQ |
| NF104 | NF104 | NH21 | NMGNEW | NH45 | NHSCTAX |
| NF105 | NF105 | NH22A | NMGXTY1 | NH46 | NHS2OWND |
| NF106 | NF106 | NH22B | NMGXTY2 | NH47 | NHS2VALO |
| NF107 | NF107 | NH22C | NMGXTY3 | NH47A | NHS2VALA |
| NF116 | NF116 | NH22D | NMGXTY4 | NH47B | NHS2VALB |
| NF118 | . NF118 | NH22E | NMGXTY5 | NH47C | NHS2VALC |
| NF119 | NF119 | NH23 | NXPMG | NH47D | NHS2VALD |
| NF121 | NF121 | NH24A | NXPMG1 | NH49 | NMGTOT |
| NF122 | NF122 | NH24B | NXPMG2 | NH50 | NCDHAVE |
| NF125 | NF125 | NH24C | NXPMG3 | NH51A | NCD1USE |
| NF126 | . NF126 | NH24D | NXPMG4 | NH51B | NCD2USE |
| NF127 | NF127 | NH25 | NHSJB | NH51C | NCD10USE |
| NF128 | NF128 | NH26M1 | NRENTP1 | NH51D | NCD11USE |
| NF132 | NF132 | NH26M2 | NRENTP2 | NH51E | NCD3USE |
| NF135 | NF135 | NH27 | NRENTLL | NH51F | NCD4USE |
| NF136 | . NF136 | NH28 | NRENTF | NH51G | NCD5USE |
| NF137 | NF137 | NH30 | NRENT | NH51H | NCD6USE |
| NF138 | NF138 | NH31 | NRENTW | NH51I | NCD7USE |
| NF139 | NF139 | NH32A | . NRENT1 | NH51J | NCD8USE |
| NF140 | . NF140 | NH32B | . NRENT7 | NH51K | NCD9USE |
| NF141 | NF141 | NH32C | NRENT2 | NH51L | NCD12USE |
| NF142 | NF142 | NH32D | NRENT3 | NH52 | NCDBGHT |
| NF143 | NF143 | NH32E | . NRENT4 | NH53A | NCD1NEW |
| NF151 | . NF151 | NH32F | . NRENT5 | NH53B | NCD2NEW |
| NF152 | . NF152 | NH32G | NRENT8 | NH53C | NCD10NEW |
| NF153 | . NF153 | NH32H | NRENT6 | NH53D | NCD11NEW |
| NF154 | NF154 | NH33 | NRENTHB | NH53E | NCD3NEW |
| NF155 | NF155 | NH34 | NRENTG | NH53F | NCD4NEW |
| NF156 | . NF156 | NH35 | . NRENTG | NH53G | NCD5NEW |
| NF157 | . NF157 | NH36 | NRENTGW | NH53H | NCD6NEW |
| NF158 | . NF158 | NH37 | NXPHSDF | NH53I | NCD7NEW |
| NF159 | . NF159 | NH38A | NXPHSD1 | NH53J | NCD8NEW |
| NHOAD | . NHHDOI | NH38B | NXPHSD2 | NH53K | NCD9NEW |


| NH53L | NCD12NEW | NI6B | NIV6B | NM3B | NHLPRBB |
| :---: | :---: | :---: | :---: | :---: | :---: |
| NH54A | NCD1CST | NI6C | NIV6C | NM3C | NHLPRBC |
| NH54B | NCD2CST | NI6D | NIV6D | NM3D | NHLPRBD |
| NH54C | NCD10CST | NI6E | NIV6E | NM3E | NHLPRBE |
| NH54D | NCD11CST | NI7 | NIV6F | NM3F | NHLPRBF |
| NH54E | NCD3CST | NI8 | NIV7 | NM3G | NHLPRBG |
| NH54F | NCD4CST | NJ5D | NCJSBGD | NM3H | NHLPRBH |
| NH54G | NCD5CST | NJ5M | NCJSBGM | NM3I | NHLPRBI |
| NH54H | NCD6CST | NJ5Y | NCJSBGY4 | NM3J | NHLPRBJ |
| NH54I | NCD7CST | NJ6 | NNEMST | NM3K | NHLPRBK |
| NH54J | NCD8CST | NJ7D | NCJSBGD | NM3L | NHLPRBL |
| NH54K | NCD9CST | NJ7M | NCJSBGM | NM3M | NHLPRBM |
| NH54L | NCD12CST | NJ7Y | NCJSBGY4 | NM3M0 | NHLPRB |
| NH55 | NPCNET | NJ8 | . NCJSBLY | NM3N | NHLPRBN |
| NH56 | . NXPHP | NJ9 | NJHSTAT | NM4 | NHLSF1 |
| NH57 | NXPHPDF | NJ10D | NJHBGD | NM5 | NHLSF2 |
| NH58A | NHSCANA | NJ10M | NJHBGM | NM6A | NHLSF3A |
| NH58B | NHSCANB | NJ10Y | NJHBGY4 | NM6B | NHLSF3B |
| NH58C | NHSCANC | NJ12 | . . NNJBS | NM6C | NHLSF3C |
| NH58D | NHSCAND | NJ13 | NJHSTAT | NM6D | NHLSF3D |
| NH58E | NHSCANE | NJ13M | NJHBGM | NM6E | NHLSF3E |
| NH58F | NHSCANF | NJ13Y | NJHBGY4 | NM6F | NHLSF3F |
| NH59A | NHSCNTA | NJ14 | NJHSOC | NM6G | NHLSF3G |
| NH59B | NHSCNTB | NJ14 | . NJHSOCOO | NM6H | NHLSF3H |
| NH59C | NHSCNTC | NJ15 | NJHSTAT | NM6I | NHLSF31 |
| NH59D | NHSCNTD | NJ16 | NJHSEMP | NM6J | NHLSF3J |
| NH59E | NHSCNTE | NJ17 | NJHBOSS | NM7A | NHLSF4A |
| NH59F | NHSCNTF | NJ18 | NJHSECT | NM7B | NHLSF4B |
| NH60 | NXPFOOD | NJ19 | NJHMNGR | NM7C | NHLSF4C |
| NH61 | NNCARS | NJ20 | NJHSTAT | NM7D | NHLSF4D |
| NH62 | NCAROWN | NJ21 | NJHPLDF | NM8A | NHLSF5A |
| NH63 | NCARVAL | NJ22 | NJHSIC92 | NM8B | NHLSF5B |
| NH64M1 | NIVH1 | NJ23 | NJHSIZE | NM8C | NHLSF5C |
| NH64M2 | NIVH2 | NJ24 | NJHPAYL | NM9 | NHLSF6 |
| NH64M3 | NIVH3 | NJ25OC | NJHPYLW | NM10 | NHLSF7 |
| NH65H | NHHFOIH | NJ26 | NJHPYLG | NM11 | NHLSF8 |
| NH65M | NHHFOIM | NJ27 | NJHSTPY | NM12A. | NHLSF9A |
| NHG2 | . NHGR2R | NJ28 | . NJBLKY | NM12B . | NHLSF9B |
| NHG3 | NHGSEX | NJ31 | NJBHAD | NM12C | NHLSF9C |
| NHG4M | NHGBM | NJ32 | NJLEND4 | NM12D | NHLSF9D |
| NHG4Y | NHGBY | NJ33 | . NJLSOC | NM12E . | NHLSF9E |
| NHG8 | NMASTAT | NJ33 | NJLSOC00 | NM12F . | NHLSF9F |
| NHG9 | . NHGSPN | NJ34 | . NJLSIC92 | NM12G | NHLSF9G |
| NHG10 | . NHGEMP | NJ35 | . NJLSEMP | NM12H | NHLSF9H |
| NHG10 | . NHGEMP | NJ36 | . NJLBOSS | NM12I | NHLSF91 |
| NHG11 | . NHGFNO | NJ37 | NJLMNGR | NM12J | NHLSF9J |
| NHG11 | NHGFNO | NJ38 | NJLSIZE | NM13A . | NHLSF10A |
| NHG12 | . NHGMNO | NJ39A | . NIVJA | NM13B . | NHLSF10B |
| NHG12 | . NHGMNO | NJ39B | . NIVJB | NM13C | NHLSF10C |
| NHG13 | NHGRA | NJ39C | . NIVJC | NM13D | NHLSF10D |
| NHG13 | NHGRA | NJ39D | . NIVJD | NM16 | NHL2GP |
| NII | . NIV1 | NJ39E | . . NIVJE | NM17 | NHL2HOP |
| NI2 | . NIV2 | NL2 | NMLSTAT | NM18 | NXDTS |
| NI4 | . NIV4 | NL3 | NNMAR | NM19 | NNXDTS |
| NI5 | . . NIV5 | NL25 | NLPRNT | NM20 | . NHOSP |
| NI5A | NIV5AA | NL26 | NLNPRNT | NM21 | NHOSPD |
| NI5B | . NIV5AB | NM1 | NHLDSBL1 | NM23 | NHOSPCH |
| NI5C | . NIV5AC | NM2 | NHLSTAT | NM24 | NHOSPNHS |
| NI6A | . NIV6A | NM3A | NHLPRBA | NM25 | . NHLCVR |


| NM26 | , |
| :---: | :---: |
| NM27 | NHLCVRL |
| NM28 | NHLSV |
| NM29A . | NHLSVA |
| NM29B | NHLSVB |
| NM29C | NHLSVC |
| NM29D | NHLSVD |
| NM29E . | NHLSVE |
| NM29F | NHLSVF |
| NM29G | NHLSVG |
| NM29H | NHLSVH |
| NM291 | NHLSVI |
| NM29J1 | NHLSVJ |
| NM29J2 | NHLSVK |
| NM29L | NHLSVL |
| NM29M | NHLSVM |
| NM30A . | NHLSVAN |
| NM30B | NHLSVBN |
| NM30C | NHLSVCN |
| NM30D | NHLSVDN |
| NM30E . | NHLSVEN |
| NM30F | NHLSVFN |
| NM30G | NHLSVGN |
| NM30H | NHLSVHN |
| NM301 | NHLSVIN |
| NM30J1 | NHLSVJN |
| NM30J2 | NHLSVKN |
| NM30L | NHLSVLN |
| NM30M | NHLSVMN |
| NM31A . | NHLSVAF |
| NM31B . | NHLSVBF |
| NM31C | NHLSVCF |
| NM31D | NHLSVDF |
| NM31E . | NHLSVEF |
| NM31F | NHLSVFF |
| NM31G | NHLSVGF |
| NM31H | NHLSVHF |
| NM31I | NHLSVIF |
| NM31J1 | NHLSVJF |
| NM31J2 | NHLSVKF |
| NM31L | NHLSVLF |
| NM31M | NHLSVMF |
| NM32 | NHLCK |
| NM33A . | NHLCKA |
| NM33B . | NHLCKB |
| NM33C | NHLCKC |
| NM33D | NHLCKD |
| NM33E. | NHLCKE |
| NM33F | NHLCKI |
| NM33G | NHLCKF |
| NM33H | NHLCKG |
| NM331 | NHLCKH |
| NM34A . | NHLCKAN |
| NM34B . | NHLCKBN |
| NM34C | NHLCKCN |
| NM34D | NHLCKDN |
| NM34E . | NHLCKEN |
| NM34F | NHLCKIN |
| NM34G | NHLCKFN |


| NM34H | NHLCKGN | NP70NONE | NPRFIRN |
| :---: | :---: | :---: | :---: |
| NM34I | NHLCKHN | NP71 | NPRFITB |
| NM35 | NSMOKER | NPI1A | NIVPA |
| NM36 | NNCIGS | NPI1B | NIVPB |
| NM37 | NHLHTM | NPI1C | NIVPC |
| NM37A1 | . NHLHTF | NPI1D | NIVPD |
| NM37A2 | NHLHTI | NPI1E | NIVPE |
| NM37B | NHLHTC | NS1A | NGHQA |
| NM38 | NHLWTM | NS1B | NGHQB |
| NM38A1 | NHLWTS | NS1C | NGHQC |
| NM38A2 | NHLWTP | NS1D | NGHQD |
| NM38B | NHLWTK | NS1E | NGHQE |
| NM39 | NHLWTE | NS1F | NGHQF |
| NM3O | NHLPRBO | NS1G | NGHQG |
| NM40 | . NHLWTL | NS1H | NGHQH |
| NM41 | NHLWTR | NS1I | NGHQI |
| NM42 | NCBAGEF | NS1J | NGHQJ |
| NM43 | NHLPREG | NS1K | NGHQK |
| NM45 | . NAIDHH | NS1L | NGHQL |
| NM46P1 | NAIDHUA | NS2A | NOPFAMO |
| NM46P2 | NAIDHUB | NS2B | NOPFAML |
| NM46P3 | . NAIDHUC | NS2C | NOPFAMP |
| NM47 | . NAIDXHH | NS2D | NOPFAMQ |
| NM48 | . NNAIDXHH | NS2E | NOPFAMK |
| NM49M1 | NAIDHU1 | NS2F | NOPFAMR |
| NM49M2 | NAIDHU2 | NS3A | NLFSAT1 |
| NM51 | NAIDHRS | NS3B | NLFSAT2 |
| NM52A | . NIVMA | NS3C | NLFSAT3 |
| NM52B | . NIVMB | NS3D | NLFSAT4 |
| NM52C | . NIVMC | NS3E | NLFSAT5 |
| NM52D | . NIVMD | NS3F | NLFSAT6 |
| NM52E | . NIVME | NS3G | NLFSAT7 |
| NNF3 | NNIPENS | NS3H | NLFSAT8 |
| NNF4 | NNISERPS | NS4A | NLFSATO |
| NP2B | NPRRS21 | NS4B | NLFSATL |
| NP2C | NPRIPN | NS5A | . NNETSX1 |
| NP2D | . NPRWHY | NS5A | . NNETSX2 |
| NP3 | NPPLEVR | NS5A | . NNETSX3 |
| NP10M | NPRESBGM | NS5B | NNET1RL |
| NP10Y | NPRESBY4 | NS5B | NNET2RL |
| NP11 | NPRESLY | NS5B | NNET3RL |
| NP23 | NPRFEHQ | NS5BOC | NNET1WR |
| NP25 | . NPRSEHQ | NS5BOC | NNET2WR |
| NP27 | NHLDSBL | NS5BOC | NNET3WR |
| NP58 | NPRJBFT | NS5C | NNET1AG |
| NP59M | NPRJBBGM | NS5C | NNET2AG |
| NP59Y | . NPRJBBY4 | NS5C | NNET3AG |
| NP60 | NPRJBLY | NS5D | NNET1KN |
| NP61 | NPREARN | NS5D | NNET2KN |
| NP70A | . NPRF101 | NS5D | NNET3KN |
| NP70B | NPRF102 | NS5E | NNET1PH |
| NP70C | NPRF116 | NS5E | NNET2PH |
| NP70D | NPRF131 | NS5E | NNET3PH |
| NP70F | NPRF135 | NS5F | NNET1LV |
| NP70G | NPRF137 | NS5F | NNET2LV |
| NP70H | NPRF139 | NS5F | NNET3LV |
| NP70J | NPRF141 | NS5G | NNET1JB |
| NP70K | . NPRF143 | NS5G | NNET2JB |
| NP70L | . NPRF107 | NS5G | . NNET3JB |


| NS5H | NNET1ET | NY15 | NYPTLKF | NY65C . . . . . . NYPWKW |
| :---: | :---: | :---: | :---: | :---: |
| NS5H | . NNET2ET | NY16 | NYPNPAL | NY65D . . . . . NYPWKTH |
| NS5H | . NNET3ET | NY17 | NYPFGHT | NY65E . . . . . . NYPWKF |
| NS6A | NNETSOC | NY18 | NYPEATN | NY65F . . . . . NYPWKSA |
| NT2B | NTELWHY | NY19 | NYPSMEV | NY65G . . . . . NYPWKSU |
| NT45 | NTLFIYRL | NY20 | NYPSMOF | NY66 . . . . . . NYPLVHM |
| NT50 | . NTLFIYR | NY21 | . NYPSMLW | NY67 . . . . . . . NYP2UNI |
| NV1A | NOPSOCA | NY22 | . NYPDGFR | NY68M1 . . . . NYPNUNA |
| NV1B | NOPSOCB | NY23 | NYPHSTAT | NY68M2 . . . . NYPNUNB |
| NV1C | NOPSOCC | NY24A | NYPOPHE | NY69M1 . . . . NYPEVNT1 |
| NV1D | NOPSOCD | NY24B | . NYPOPHC | NY69M2 . . . . NYPEVNT2 |
| NV1E | NOPSOCE | NY25 | . NYPHFI |  |
| NV1F | NOPSOCF | NY25 | NYPHTC |  |
| NV2 | NVOTE1 | NY25 | . NYPHTF |  |
| NV3 | NVOTE2 | NY26 | . NYPWTK |  |
| NV4 | . NVOTE3 | NY26 | . NYPWTP |  |
| NV5 | NVOTE4 | NY26 | . NYPWTS |  |
| NV6 | NVOTE5 | NY27 | NYPWGHR |  |
| NV7 | NVOTE7 | NY28 | . NYPDIET |  |
| NV8 | . NVOTE8 | NY29 | NYPSPRT |  |
| NV9 | . NVOTE6 | NY30M1 | NYPSPRT1 |  |
| NV9A | . NNIVT1 | NY30M2 | NYPSPRT2 |  |
| NV9B | . NNIVT2 | NY31M1 | NYPNSPT1 |  |
| NV10A | . NLACTA | NY31M2 | NYPNSPT2 |  |
| NV10B | . NLACTB | NY32 | NYPFRUT |  |
| NV10C | . NLACTC | NY33 | . NYPFFD |  |
| NV10D | . NLACTD | NY34 | . NYPJFD |  |
| NV10E | . NLACTE | NY35 | NYPTTSM |  |
| NV10F | NLACTF | NY36 | NYPESTA |  |
| NV10H | . NLACTH | NY37 | . NYPESTI |  |
| NV10I | . NLACTI | NY38 | NYPESTB |  |
| NV10J | . NLACTJ | NY39 | NYPESTJ |  |
| NV10K | . NLACTK | NY40 | NYPESTC |  |
| NV10L | . NLACTL | NY41 | NYPESTK |  |
| NV11 | NFRNA | NY42 | NYPESTE |  |
| NV12 | . NFRNB | NY43 | NYPESTF |  |
| NV13 | NFRNC | NY44 | NYPTCHA |  |
| NV14 | NOPRLG1 | NY45 | NYPTCHB |  |
| NV15 | NOPRLG2 | NY46 | . NYPHSW |  |
| NV16 | NOPRLG3 | NY47 | . NYPHAP |  |
| NV17A | . . NIVVA | NY48 | . NYPHFM |  |
| NV17B | . NIVVB | NY49 | . NYPHFR |  |
| NV17C | . NIVVC | NY50 | . NYPHSC |  |
| NV17D | NIVVD | NY51 | NYPHLF |  |
| NV17E | . . . NIVVE | NY52 | NYPVTE6 |  |
| NY1 | NYTVHRS | NY53 | NYPVTE3 |  |
| NY2 | . NYTVSTP | NY54 | NYPTRUN |  |
| NY3 | NYPCOMP | NY55 | NYPBULL |  |
| NY4 | NYPPCHW | NY56 | NYPOPSC |  |
| NY5 | . . NYPPCG | NY57 | NYPLVSC |  |
| NY6 | NYPPCNT | NY58 | NYPACVS |  |
| NY7 | NYPMOBU | NY60 | . . NYPSOC |  |
| NY8 | NYPCHOR | NY61 | NYPWKLW |  |
| NY9 | . NYPPALS | NY62M1 | NYPSOC1 |  |
| NY10 | NYPPALO | NY62M2 | NYPSOC2 |  |
| NY11 | . NYPLATE | NY63 | . NYPWHRS |  |
| NY12 | NYPARGM | NY64 | . NYPPAY |  |
| NY13 | NYPARGF | NY65A | NYPWKM |  |
| NY14 | NYPTLKM | NY65B | . . NYPWKT |  |


[^0]:    (C) August 2018

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[^1]:    1. Throughout this document, the lower case " $w$ " corresponds to some wave specific single letter prefix, e.g. "A" for Wave 1.
[^2]:    1. For more information on the Survey Database and its "caseless" structure, please refer to Appendix 1.
    2. For a full discussion of CASOC, see: Elias, Peter, Keith Halstead and Keith Prandy: Computer Assisted Standard Occupational Coding (CASOC) 1993. London: HMSO
[^3]:    * This conforms to the database. In 38 cases, documents were either missing or otherwise unusable.

[^4]:    1. In addition to those interviewed at all waves, OSM children enumerated in a respondent household at all waves before they reached 16, and respondents thereafter, will have positive longitudinal respondent weights.
[^5]:    wHHMOVE Household Mover Indicator. This indicates whether expected Original Sample Members have moved household since earlier wave. Coding as a non-mover household implies that all OSM's who are resident there at Wave w were also resident at the same address at Wave w-1. New entrants may however have moved in. Conversely, coding as a mover household implies that all the OSMs are at a new address. New entrants to the sample may have been resident at the address at the time of the previous wave. Uses wIVNADD wIVIA wIVFHO on Record wHHSAMP.
    wHHWGHT See section on Weighting earlier in this manual for a description of the derivation of weights. This weight should be used for any analysis at the household level. (cf wXRWGHT on Record wINDRESP and wXEWGHT on Record wINDALL)

[^6]:    wFIEQFCA wFIEQFCA contains a conversion factor to allow for the effects of household size and composition on needs in making income comparisons. The equivalence scale used in this variable is the McClements scale, as used in publications such as `Households Below Average Income' (Department of Social Security, 1992). wFIEQFCA is based on the scale to be used with income after housing costs are deducted. (See McClements Equivalence Scales Table 29). wFIEQFCB wFIEQFCB contains a conversion factor to allow for the effects of household size and composition on needs in making income comparisons. The equivalence scale used in this variable is the McClements scale, as used in publications such as `Households Below Average Income' (Department of Social Security, 1992). wFIEQFCB is based on the scale to be used with income before housing costs are deducted. (see Table 29) Uses wHGR2R wAGE wDEPCHL on Record wINDALL.

[^7]:    wFIHHMB This sums the values of benefit income in the month before interview for individuals in the household. Includes imputed data. The imputation flag variable wFIHHMBI takes a value 0 if there was no imputation, 1 if some component of an individual $\mathrm{h} / \mathrm{hold}$ members income was imputed, and 2 if the whole income of one or more $\mathrm{h} / \mathrm{hold}$ members was imputed. See section on Imputation earlier in this manual.
    Uses wIVFHO from Record wHHSAMP. Uses wFIMNB wIVFIO from Record wINDRESP.
    wFIHHMBI Imputation flag. See notes above for variable wFIHHMB.

[^8]:    wNWSTAT Alter's residence at Wave w+1. This variable indicates whether Alter was resident in the same household at Wave $w+1$. It is intended to enable measures of household composition change to be computed. It is only available in the database after the following years data becomes available. That is, ANWSTAT appeared on the database with the release of the Wave Two dataset.
    wREL Relationship of Ego to Alter, Person to Other
    Uses wPNO wHGR2R wHGSEX wMASTAT wHGSPN wHGFNO wHGMNO from Record wINDALL

[^9]:    * Marital Status


    ## Marriages

    See Marital and Cohabitation History Marital Status

    ## Maternity History

    See Children
    Fertility

    ## Membership of Organisations

    See Social and Interest Group Membership

    ## Metropolitan Area

    See Geographic Location

    ## Mobility

    See Geographic Mobility
    Household Changes
    Housing: Ownership Status and Tenure

    ## Mortgages

    See Housing: Rent, Mortgage and Loan Details Financial Management: Loan Repayments

    ## Mother's Employment

    See
    Socio-Demographic Characteristics

    ## Mother's Job Title

    See Socio-Demographic Characteristics
    Moving House
    See Geographic Mobility
    Housing: Ownership Status and Tenure Neighbourhood and Residence

    ## National Health Service (NHS)

    See Health: Hospital and Clinic Use
    Health: Medical Consultations
    Health: NHS vs Private
    Health: Use of Health and Welfare Services

    ## * Neighbourhood and Residence

    See also
    Crime
    Socio-Demographic Characteristics

    ## * Newspaper Readership

    ## Old Age Benefits

    Employment: Superannuation and Pension Schemes Financial Management: Pensions Incomes: Benefits and Allowances and Pensions

    ## One-Parent Families

    See Relationship between Household Members
    Values, Opinions and Attitudes

[^10]:    * Relationship between Household Members

    See also Family Life

