### HEALTH AND RETIREMENT STUDY

# 2019 Fall Life History Mail Survey (LHMS) Long Questionnaire Public Version

Release Version : Version 2 Release Date: April 2024

> Data Description Revised April 2024

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#### 1. Introduction

The 2019 Fall Life History Mail Survey (2019 Fall LHMS) contains questions about residential, education, employment and health history, and other important childhood and family events.

The LHMS is part of the Health and Retirement Study (HRS), which is funded under a cooperative agreement between the National Institute on Aging (NIA) and the Survey Research Center at the University of Michigan. The HRS is designed to study labor force, health, and family transitions of the U.S. population aged 51 and older, and the impact of those transitions on economic resources, claims on structured programs such as Social Security, Medicare, and Medicaid, and informal assistance and transfers to and from family members.

The National Institute on Aging (NIA) provided funding (R01 AG051142) for the 2019 Fall LHMS, which was conducted by the Survey Research Center (SRC), at the Institute for Social Research (ISR), at the University of Michigan.

By receiving the dataset, you agree to use it for research and statistical purposes only and make no effort to identify respondents. In addition, you agree to send us a copy of publications you produce based on the data. See Registration and Downloading the Data (at the end of this document) for additional details.

The questions in the HRS are based on several similar studies around the world, including: the English Longitudinal Study of Aging (ELSA, England), the Survey of Health, Ageing and Retirement in Europe (SHARELIFE), and the China Health and Retirement Longitudinal Study (CHARLS).

#### 2. 2019 Fall LHMS Sample Design

In October 2019, questionnaires were mailed to a subsample of HRS respondents (n= 6966). The sample for the 2019 Fall LHMS included three groups of HRS respondents. The first group consisted of 2865 HRS respondents from the late-Baby Boomer cohort (LBB) who had not previously been invited to participate in the LHMS. The second group (n=3143) were HRS respondents who had been invited previously but had never returned a LHMS questionnaire. The third group was made up of 958 HRS respondents who had completed the 2015 LHMS but not the 2017 Supplemental LHMS.

Groups 1 and 2 were mailed a full-length LHMS questionnaire and those in Group 3 were sent a supplemental questionnaire that omitted residential and education histories obtained in 2015. Surveys were conducted in English and Spanish.

The field period for the 2019 Fall LHMS was October 2019 through March 2020.

The data file for the long version of the questionnaire contains 592 variables and data for 1434 respondents. The data file for the supplemental version of the questionnaire contains 233 variables and data for 206 respondents.

#### 3. About the 2019 Fall LHMS Data

#### 3a. Public and Restricted Versions

To protect the confidentiality of the information that respondents provide, a number of variables have been masked or are simply not included in the final release public file. Some of these variables are available to analysts as restricted data. The names of variables that were masked for confidentiality end in the capital letter "M".

The variables in the 2019 Fall LHMS long version Restricted file are identical to those in the 2019 Fall LHMS long version Public file except for the following variables that include detailed respondent-level information for industry and occupation. The same rules apply to the 2019 Fall supplemental version restricted and public files although the variable names in the supplemental versions differ from the long versions (see 3b. Variable names and Labels).

Variable Name	Description
LH41_1E	FIRST OR ONLY TYPE BUSINESS - 1
LH41_1EL	LAST JOB TYPE BUSINESS - 1
LH41_1F	FIRST OR ONLY JOB TITLE – 1
LH41_1FL	LAST JOB TITLE – 1
LH41_2E	FIRST OR ONLY TYPE BUSINESS - 2
LH41_2EL	LAST JOB TYPE BUSINESS - 2
LH41_2F	FIRST OR ONLY JOB TITLE – 2
LH41_2FL	LAST JOB TITLE – 2
LH41_3E	FIRST OR ONLY TYPE BUSINESS - 3
LH41_3EL	LAST JOB TYPE BUSINESS - 3
LH41_3F	FIRST OR ONLY JOB TITLE – 3
LH41_3FL	LAST JOB TITLE – 3
LH41_4E	FIRST OR ONLY TYPE BUSINESS - 4
LH41_4EL	LAST JOB TYPE BUSINESS - 4
LH41_4F	FIRST OR ONLY JOB TITLE – 4
LH41_4FL	LAST JOB TITLE – 4
LH41_5E	FIRST OR ONLY TYPE BUSINESS - 5
LH41_5EL	LAST JOB TYPE BUSINESS - 5
LH41_5F	FIRST OR ONLY JOB TITLE – 5
LH41_5FL	LAST JOB TITLE – 5
LH41_6E	FIRST OR ONLY TYPE BUSINESS - 6
LH41_6EL	LAST JOB TYPE BUSINESS - 6
LH41_6F	FIRST OR ONLY JOB TITLE – 6
LH41_6FL	LAST JOB TITLE – 6
LH41_7E	FIRST OR ONLY TYPE BUSINESS - 7
LH41_7EL	LAST JOB TYPE BUSINESS - 7
LH41_7F	FIRST OR ONLY JOB TITLE – 7

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LH41_7FL	LAST JOB TITLE – 7
LH41_8E	FIRST OR ONLY TYPE BUSINESS - 8
LH41_8EL	LAST JOB TYPE BUSINESS - 8
LH41_8F	FIRST OR ONLY JOB TITLE – 8
LH41_8FL	LAST JOB TITLE – 8
LH41_9E	FIRST OR ONLY TYPE BUSINESS - 9
LH41_9EL	LAST JOB TYPE BUSINESS - 9
LH41_9F	FIRST OR ONLY JOB TITLE – 9
LH41_9FL	LAST JOB TITLE – 9
LH41_10E	FIRST OR ONLY TYPE BUSINESS - 10
LH41_10EL	LAST JOB TYPE BUSINESS – 10
LH41_10F	FIRST OR ONLY JOB TITLE – 10
LH41_10FL	LAST JOB TITLE – 10
LH45	(MOST IMPORTANT) JOB TITLE
LH46	(MOST IMPORTANT) TYPE OF EMPLOYER OR BUSINESS

3b. Variable Names and Labels

Variable names begin with the letters LH to designate the Life History Mail Survey, followed by \_19 for the year in which the data were collected.

LH1\_19 LH1. LIVED OUTSIDE U.S.

As shown in the example, the variable label contains the question number found in the long version of the 2019 Fall LHMS questionnaire.

Variable names in the supplemental questionnaire follow the same pattern as the long, but have the letters "FS" appended at the end.

LH1\_19FS LH1. EVER BEEN MARRIED

Crosswalk Between Long and Supplemental Fall 2019 LHMS Variable Names		
Variable name	Variable Label	Variable name
Long version		Supplemental version
LH36_19	EVER BEEN MARRIED	LH1_19FS
LH36_1A_19	SPOUSE GENDER - 1	LH1_1A_19FS
LH36_1B_19	LIVE TOGETHER - 1	LH1_1B_19FS
LH36_1C_19	YEAR MARRIED - 1	LH1_1C_19FS
LH36_1D_19	STILL TOGETHER - 1	LH1_1D_19FS
LH36_1E_19	YEAR MARRIAGE ENDED - 1	LH1_1E_19FS
LH36_2A_19	SPOUSE GENDER - 2	LH1_2A_19FS
LH36_2B_19	LIVE TOGETHER - 2	LH1_2B_19FS

LH40C 19	S/P WORK LONGER HOURS	LH5C 19FS
LH40D 19	S/P SWITCH JOBS	LH5D 19FS
LH41 1A 19	START YEAR - 1	LH6 1A 19FS
LH41 1B 19	END YEAR - 1	LH6 1B 19FS
LH41 1C 19	FULL OR PART TIME - 1	LH6 1C 19FS
LH41 1D M1 19	DO AFTER LEAVING - 1 - 1	LH6 1D M1 19FS
LH41 1D M2 19	DO AFTER LEAVING - 1 - 2	LH6 1D M2 19FS
LH41 1D M3 19	DO AFTER LEAVING - 1 - 3	LH6 1D M3 19FS
LH41 1EM 19	TYPE BUSINESS - MASKED - 1	LH6 1EM 19FS
LH41 1ELM 19	LAST JOB TYPE BUSINESS - MASKED - 1	LH6 1ELM 19FS
LH41 1FM 19	FIRST OR ONLY JOB TITLE - MASKED - 1	LH6 1FM 19FS
LH41 1FLM 19	LAST JOB TITLE - MASKED - 1	LH6 1FLM 19FS
LH41 2A 19	START YEAR - 2	LH6 2A 19FS
LH41 2B 19	END YEAR - 2	LH6 2B 19FS
LH41_26_19		LH6 2C 19FS
LH41_2C_19 LH41_2D_M1_19	FULL OR PART TIME - 2 DO AFTER LEAVING - 2 - 1	LH6_2C_19F3
LH41_2D_M2_19 LH41_2D_M3_19	DO AFTER LEAVING - 2 - 2 DO AFTER LEAVING - 2 - 3	LH6_2D_M2_19FS LH6_2D_M3_19FS
LH41_2EM_19	TYPE BUSINESS - MASKED - 2	LH6_2EM_19FS
LH41_2ELM_19	LAST JOB TYPE BUSINESS - MASKED - 2	LH6_2ELM_19FS
LH41_2FM_19	FIRST OR ONLY JOB TITLE - MASKED - 2	LH6_2FM_19FS
LH41_2FLM_19	LAST JOB TITLE - MASKED - 2	LH6_2FLM_19FS
LH41_3A_19	START YEAR - 3	LH6_3A_19FS
LH41_3B_19	END YEAR - 3	LH6_3B_19FS
LH41_3C_19	FULL OR PART TIME - 3	LH6_3C_19FS
LH41_3D_M1_19	DO AFTER LEAVING - 3 - 1	LH6_3D_M1_19FS
LH41_3D_M2_19	DO AFTER LEAVING - 3 - 2	LH6_3D_M2_19FS
LH41_3D_M3_19	DO AFTER LEAVING - 3 - 3	LH6_3D_M3_19FS
LH41_3EM_19	TYPE BUSINESS - MASKED - 3	LH6_3EM_19FS
LH41_3ELM_19	LAST JOB TYPE BUSINESS - MASKED - 3	LH6_3ELM_19FS
LH41_3FM_19	FIRST OR ONLY JOB TITLE - MASKED - 3	LH6_3FM_19FS
LH41_3FLM_19	LAST JOB TITLE - MASKED - 3	LH6_3FLM_19FS
LH41_4A_19	START YEAR - 4	LH6_4A_19FS
LH41_4B_19	END YEAR - 4	LH6_4B_19FS
LH41_4C_19	FULL OR PART TIME - 4	LH6_4C_19FS
LH41_4D_M1_19	DO AFTER LEAVING - 4 - 1	LH6_4D_M1_19FS
LH41_4D_M2_19	DO AFTER LEAVING - 4 - 2	LH6_4D_M2_19FS
LH41_4D_M3_19	DO AFTER LEAVING - 4 - 3	LH6_4D_M3_19FS
LH41_4EM_19	TYPE BUSINESS - MASKED - 4	LH6_4EM_19FS
LH41_4ELM_19	LAST JOB TYPE BUSINESS - MASKED - 4	LH6_4ELM_19FS
LH41_4FM_19	FIRST OR ONLY JOB TITLE - MASKED - 4	LH6_4FM_19FS
LH41_4FLM_19	LAST JOB TITLE - MASKED - 4	LH6_4FLM_19FS
LH41_5A_19	START YEAR - 5	LH6_5A_19FS
LH41_5B_19	END YEAR - 5	LH6_5B_19FS
LH41_5C_19	FULL OR PART TIME - 5	LH6_5C_19FS
LH41_5D_M1_19	DO AFTER LEAVING - 5 - 1	LH6_5D_M1_19FS
LH41_5D_M2_19	DO AFTER LEAVING - 5 - 2	LH6_5D_M2_19FS
LH41_5D_M3_19	DO AFTER LEAVING - 5 - 3	LH6_5D_M3_19FS

LH41 5EM 19	TYPE BUSINESS - MASKED - 5	LH6 5EM 19FFS
LH41_5ELM_19	LAST JOB TYPE BUSINESS - MASKED - 5	LH6 5ELM 19FFS
LH41 5FM 19	FIRST OR ONLY JOB TITLE - MASKED - 5	LH6 5FM 19FFS
LH41 5FLM 19	LAST JOB TITLE - MASKED - 5	LH6 5FLM 19FFS
LH41 6A 19	START YEAR - 6	LH6 6A 19FFS
LH41_6B_19	END YEAR - 6	LH6_6B_19FFS
LH41_6C_19	FULL OR PART TIME - 6	LH6_6C_19FS
LH41_6D_M1_19	DO AFTER LEAVING - 6 - 1	LH6_6D_M1_19FS
LH41_6D_M2_19	DO AFTER LEAVING - 6 - 2	LH6_6D_M2_19FS
LH41_6D_M3_19	DO AFTER LEAVING - 6 - 3	LH6_6D_M3_19FS
LH41_6EM_19	TYPE BUSINESS - MASKED - 6	LH6_6EM_19FS
LH41_6ELM_19	LAST JOB TYPE BUSINESS - MASKED - 6	LH6_6ELM_19FS
LH41_6FM_19	FIRST OR ONLY JOB TITLE - MASKED - 6	LH6_6FM_19FS
LH41_6FLM_19	LAST JOB TITLE - MASKED - 6	LH6_6FLM_19FS
LH41_7A_19	START YEAR - 7	LH6_7A_19FS
LH41_7B_19	END YEAR - 7	LH6_7B_19FS
LH41_7C_19	FULL OR PART TIME - 7	LH6_7C_19FS
LH41_7D_M1_19	DO AFTER LEAVING - 7 - 1	LH6_7D_M1_19FS
LH41_7D_M2_19	DO AFTER LEAVING - 7 - 2	LH6_7D_M2_19FS
LH41_7D_M3_19	DO AFTER LEAVING - 7 - 3	LH6_7D_M3_19FS
LH41_7EM_19	TYPE BUSINESS - MASKED - 7	LH6_7EM_19FS
LH41_7ELM_19	LAST JOB TYPE BUSINESS - MASKED - 7	LH6_7ELM_19FS
LH41_7FM_19	FIRST OR ONLY JOB TITLE - MASKED - 7	LH6_7FM_19FS
LH41_7FLM_19	LAST JOB TITLE - MASKED - 7	LH6_7FLM_19FS
LH41_8A_19	START YEAR - 8	LH6_8A_19FS
LH41_8B_19	END YEAR - 8	LH6_8B_19FS
LH41_8C_19	FULL OR PART TIME - 8	LH6_8C_19FS
LH41_8D_M1_19	DO AFTER LEAVING - 8 - 1	LH6_8D_M1_19FS
LH41_8D_M2_19	DO AFTER LEAVING - 8 - 2	LH6_8D_M2_19FS
LH41_8D_M3_19	DO AFTER LEAVING - 8 - 3	LH6_8D_M3_19FS
LH41_8EM_19	TYPE BUSINESS - MASKED - 8	LH6_8EM_19FS
LH41_8ELM_19	LAST JOB TYPE BUSINESS - MASKED - 8	LH6_8ELM_19FS
LH41_8FM_19	FIRST OR ONLY JOB TITLE - MASKED - 8	LH6_8FM_19FS
LH41 8FLM 19	LAST JOB TITLE - MASKED - 8	LH6 8FLM 19FS
LH41 9A 19	START YEAR - 9	LH6 9A 19FS
LH41 9B 19	END YEAR - 9	LH6 9B 19FS
LH41 9C 19F	FULL OR PART TIME - 9	LH6 9C 19FS
LH41 9D M1 19	DO AFTER LEAVING - 9- 1	LH6 9D M1 19FS
LH41_9D_M2_19	DO AFTER LEAVING - 9 - 2	LH6 9D M2 19FS
LH41 9D M3 19	DO AFTER LEAVING - 9 - 3	LH6 9D M3 19FS
LH41 9EM 19	TYPE BUSINESS - MASKED - 9	LH6 9EM 19FS
LH41 9ELM 19	LAST JOB TYPE BUSINESS - MASKED - 9	LH6 9ELM 19FS
LH41 9FM 19	FIRST OR ONLY JOB TITLE - MASKED - 9	LH6 9FM 19FS
LH41 9FLM 19	LAST JOB TITLE - MASKED - 9	LH6 9FLM 19FS
LH41 10A 19	START YEAR - 10	LH6 10A 19FS
LH41 10B 19	END YEAR - 10	LH6_10B_19FS
LH41 10C 19	FULL OR PART TIME - 10	LH6 10C 19FS
LH41 10D M1 19	DO AFTER LEAVING - 7 - 10	LH6 10D M1 19FS

LH41 10D M2 19	DO AFTER LEAVING - 7 - 10	LH6 10D M2 19FS
LH41 10D M3 19	DO AFTER LEAVING - 7 - 10	LH6 10D M3 19FS
LH41 10EM 19	TYPE BUSINESS - MASKED - 10	LH6 10EM 19FS
LH41 10ELM 19	LAST JOB TYPE BUSINESS - MASKED - 10	LH6 10ELM 19FS
LH41 10FM 19	FIRST OR ONLY JOB TITLE - MASKED - 10	LH6 10FM 19FS
LH41 10FLM 19	LAST JOB TITLE - MASKED - 10	LH6 10FLM 19FS
LH42 19	MOST IMPORTANT JOB	LH7 19FS
LH42B 19	MOST IMPORTANT JOB - NA	LH7B 19FS
LH43 19	SELF EMPLOYED	LH8 19FS
LH44M 19	STATE - MASKED	LH9M 19FS
LH45M 19	JOB TITLE - MASKED	LH10M 19FS
LH46M 19	TYPE BUSINESS - MASKED	LH11M 19FS
LH47A 19	EARNINGS	LH12A 19FS
LH47B 19	EARNINGS PER	LH12B 19FS
LH48 19	UNION CONTRACT	LH13 19FS
LH49 19	STILL WORK FOR	LH14 19FS
LH49A M1 19	WHY LEAVE - 1	LH14A M1 19FS
LH49A M2 19	WHY LEAVE - 2	LH14A M2 19FS
LH49A M3 19	WHY LEAVE - 3	LH14A M3 19FS
 LH49A_M4_19	WHY LEAVE - 4	 LH14A_M4_19FS
 LH49A M5 19	WHY LEAVE - 5	LH14A M5 19FS
 LH50_A_19	PHYSICALLY DEMANDING	LH15 A 19FS
LH50 B 19	FREEDOM TO DECIDE	LH15 B 19FS
 LH50_C_19	CONTROL OVER SITUATIONS	LH15 C 19FS
LH50 D 19	SAY ABOUT WHAT HAPPENED	LH15 D 19FS
LH50 E 19	RELY ON COWORKERS	LH15 E 19FS
LH50_F_19	LEARNED USEFUL SKILLS	LH15_F_19FS
LH50_G_19	SKILLS NOT A GOOD MATCH	LH15_G_19FS
LH51_19	UNPAID CARE 6 MONTHS OR MORE	LH16_19FS
LH51A_1A_19	UNPAID CARE RELATIONSHIP - 1	LH16A_1A_19FS
LH51A_1B_19	UNPAID CARE START YEAR - 1	LH16A_1B_19FS
LH51A_1C_19	UNPAID CARE END YEAR - 1	LH16A_1C_19FS
LH51A_2A_19	UNPAID CARE RELATIONSHIP - 2	LH16A_2A_19FS
LH51A_2B_19	UNPAID CARE START YEAR - 2	LH16A_2B_19FS
LH51A_2C_19	UNPAID CARE END YEAR - 2	LH16A_2C_19FS
LH51A_3A_19	UNPAID CARE RELATIONSHIP – 3	LH16A_3A_19FS
LH51A_3B_19	UNPAID CARE START YEAR – 3	LH16A_3B_19FS
LH51A_3C_19	UNPAID CARE END YEAR - 3	LH16A_3C_19FS
LH51A_4A_19	UNPAID CARE RELATIONSHIP - 4	LH16A_4A_19FS
LH51A_4B_19	UNPAID CARE START YEAR – 4	LH16A_4B_19FS
LH51A_4C_19	UNPAID CARE END YEAR - 4	LH16A_4C_19FS
LH51A_5A_19	UNPAID CARE RELATIONSHIP - 5	LH16A_5A_19FS
LH51A_5B_19	UNPAID CARE START YEAR - 5	LH16A_5B_19FS
LH51A_5C_19	UNPAID CARE END YEAR - 5	LH16A_5C_19FS
LH52A_19	EVER HAD BREATHING PROBLEMS	LH17A_19FS
LH52B_19	EVER HAD CHRONIC HEPATITIS	LH17B_19FS
LH52C_19	EVER HAD HIV AIDS	LH17C_19FS
LH52D_19	EVER HAD IBD CROHNS	LH17D_19FS

LH52E_19	EVER HAD KIDNEY DISEASE	LH17E_19FS
LH52F_19	EVER HAD MENINGITIS OR ENCEPHALITIS	LH17F_19FS
LH52G_19	EVER HAD MONONUCLEOSIS	LH17G_19FS
LH52H_19	EVER HAD MULTIPLE SCLEROSIS	LH17H_19FS
LH52I_19	EVER HAD NEUROLOGICAL DISORDER	LH17I_19FS
LH52J_19	EVER HAD THYROID DISEASE	LH17J_19FS
LH52K_19	EVER HAD RHEUMATOID ARTHRITIS	LH17K_19FS
LH52L_19	EVER HAD GYNECOLOGICAL ISSUES	LH17L_19FS
LH53_19	MISCARRIAGE ABORTION STILLBIRTH	LH18_19FS
LH54_19	MAJOR SURGERY	LH19_19FS
LH54A_M1_19	MAJOR SURGERY - 1	LH19A_M1_19FS
LH54A_M2_19	MAJOR SURGERY - 2	LH19A_M2_19FS
LH54A_M3_19	MAJOR SURGERY - 3	LH19A_M3_19FS
LH54A_M4_19	MAJOR SURGERY - 4	LH19A_M4_19FS
LH55_19	COUNSELING DRUGS ALCOHOL	LH20_19FS
LH56_19	MAJOR CAR OR VEHICLE CRASH	LH21_19FS
LH56A_19	YEAR OF ACCIDENT	LH21A_19FS
LH57_19	PERIODS OF ILL HEALTH AFTER AGE 16	LH22_19FS
LH57A_1A_19	ILL HEALTH START YEAR - 1	LH22A_1A_19FS
LH57A_1B_19	ILL HEALTH END YEAR - 1	LH22A_1B_19FS
LH57A_2A_19	ILL HEALTH START YEAR - 2	LH22A_2A_19FS
LH57A_2B_19	ILL HEALTH END YEAR - 2	LH22A_2B_19FS
LH57A_3A_19	ILL HEALTH START YEAR - 3	LH22A_3A_19FS
LH57A_3B_19	ILL HEALTH END YEAR - 3	LH22A_3B_19FS
LH60_M1_19	MOST IMPORTANT ACCOMPLISHMENT - 1	LH23_M1_19FS
LH60_M2_19	MOST IMPORTANT ACCOMPLISHMENT - 2	LH23_M2_19FS
LH60_M3_19	MOST IMPORTANT ACCOMPLISHMENT - 3	LH23_M3_19FS
LH61_19	WHO ANSWERED SURVEY QUESTIONS	LH24_19FS
VERSION	VERSION	VERSION

#### 3c. Data Quality

Due to the skip patterns in this questionnaire, all missing answers are treated the same in the dataset and coded as simply "Answer not given/Missing." This is true whether the respondent was "expected" to answer the question or not, based on earlier responses.

While cleaning the data, when extreme, unlikely or conflicting values were encountered, electronic images of the questionnaires were checked directly to determine if errors were introduced during the data entry/scanning process. This includes instances where a start year is greater than an end year, or a start age is greater than an end age. If the respondent reported the extreme or conflicting value, the value appears unchanged in the data.

3c-1. LH22 Series, Primary through High School Education – Start Grade, Start Age, End Age

For this series, respondents were instructed to write the start grade, end grade, start age, end age, whether the school was public or private, and the racial composition for each school they attended from Kindergarten through high school. The state where the institution was located is included as well, but for both the public and restricted versions is coded according to the scheme presented in 3c-2 below. School names and cities where located are not included in the public or restricted data.

In the LH22 series, a number of respondents provided information for post high school education or training (rather than writing those in the LH35 series). In these cases, if the "School Name" field in LH22 clearly indicated a post-high school institution, the response was moved to LH35; otherwise it was left in LH22.

As described earlier in this section, electronic images were checked in all instances of extreme or conflicting values to confirm that the data accurately reflects the respondent's answers.

3c-2. State Coding Scheme

LH5 Residential History LH22 Primary through High School Education LH35 Post High School Education LH44 Employment History

These series asked respondents answering the long version of the questionnaire to provide the state for their residence, education and their employment history. The state variable in these series is coded as follows: for the long version beginning with LH5, the first state mentioned is coded as 1, the second state is coded as 2, and so on for each unique state mentioned. If the first state mentioned is repeated on a later line in LH5, it is coded as 1, if the second state mentioned is repeated on a later line in LH5, it is coded as 1, if the second state mentioned is repeated on a later line in LH5, it is coded as 1, if the second state mentioned is repeated on a later line in LH5, it is coded as 1, if the second state mentioned is repeated on a later line in LH5, it is coded as 1, if the second state mentioned is repeated on a later line in LH5, it is coded as 1, if the second state mentioned is repeated on a later line in LH5, it is coded as 1, if the second state mentioned is repeated on a later line in LH5, it is coded as 1, if the second state mentioned is repeated on a later line in LH5, it is coded as 1, if the second state mentioned is repeated on a later line is coded as 2, etc. Mentions of foreign countries are coded as 96.

For LH22, LH35 and LH44 the same scheme is maintained. For example, a 1 in the state variables in the education and employment series represents the same state as the 1 in the LH5 residential series.

#### 3c-3. Occupation and Industry

For question LH41, respondents were asked to describe places worked for one year or more after finishing full-time education. If a respondent changed jobs (or job titles) but stayed with the same employer, they were asked to list the first and last title held with that employer on the same line. The first (or only) job is provided in the variable LH41\_xFM\_19F (FIRST OR ONLY JOB TITLE); the corresponding employer/business is in variable LH41\_xEM\_19F (TYPE OF EMPLOYER OR BUSINESS, FIRST JOB). The last (where applicable) job is provided in the variable LH41\_xELM\_19 (LAST JOB TITLE); the corresponding last employer/business is in variable LH41\_xELM\_19F (TYPE OF EMPLOYER OF EMPLOYER OR BUSINESS, OR BUSINESS, LAST JOB).

For Occupation and Industry questions appearing in the supplemental version of the questionnaire (LH6), refer to crosswalk table of corresponding long and supplemental variable numbers appearing in 3b Variable Names and Labels.

#### 3d. Open End Questions

Responses were reviewed for six open end questions:

- LH35f\_19, major field of study in post high school education
- LH35g\_19, degree earned in post high school education
- LH35h\_19, certificate earned in post high school education
- LH54\_19/LH19\_19FS, major surgeries
- LH57a\_19/LH22\_19FS, periods of ill health or disability
- LH60\_19/LH23\_19FS, most important accomplishments

Responses to the LH35 series, post high school training or education, were coded based on the Classification of Instructional Programs (CIP) categories, provided by the National Center for Educational Statistics (https://nces.ed.gov). The codes for LH35FM\_19F, major field of study, were then grouped into larger categories to protect respondent confidentiality, as shown below:

LHMS	NCES CIP	
code	Code	NCES Description
1	52	BUSINESS, MANAGEMENT, MARKETING, AND RELATED SUPPORT SERVICES
2	9	COMMUNICATION, JOURNALISM
3	13	EDUCATION
4	51	HEALTH PROFESSIONS, RESIDENCY PROGRAMS, AND RELATED PROGRAMS
4	60	RESIDENCY PROGRAMS
5	16	FOREIGN LANGUAGES, LITERATURES, AND LINGUISTICS
5	23	ENGLISH LANGUAGE AND LITERATURE/LETTERS
5	24	LIBERAL ARTS AND SCIENCES, GENERAL STUDIES AND HUMANITIES
5	38	PHILOSOPHY AND RELIGIOUS STUDIES
5	39	THEOLOGY AND RELIGIOUS VOCATIONS
5	50	VISUAL AND PERFORMING ARTS
5	54	HISTORY
6	22	LEGAL PROFESSIONS AND STUDIES
6	28	MILITARY SCIENCE, LEADERSHIP, OPERATIONAL ART
6	29	MILITARY TECHNOLOGIES AND APPLIED SCIENCES
6	43	HOMELAND SECURITY, LAW ENFORCEMENT, FIREFIGHTING AND RELATED PROTECTIVE SERVICES
7	1	AGRICULTURE, AGRICULTURE OPERATIONS, AND RELATED SCIENCES
7	3	NATURAL RESOURCES AND CONSERVATION
8	4	ARCHITECTURE AND RELATED SERVICES

814ENGINEERING815ENGINEERING TECHNOLOGIES AND ENGINEERING-RELATED FIELDS826BIOLOGICAL AND BIOMEDICAL SCIENCES827MATHEMATICS AND STATISTICS840PHYSICAL SCIENCES95AREA, ETHNIC, CULTURAL, GENDER, AND GROUP STUDIES919FAMILY AND CONSUMER SCIENCES/HUMAN SCIENCES942PSYCHOLOGY	
8       26       BIOLOGICAL AND BIOMEDICAL SCIENCES         8       27       MATHEMATICS AND STATISTICS         8       40       PHYSICAL SCIENCES         9       5       AREA, ETHNIC, CULTURAL, GENDER, AND GROUP STUDIES         9       19         9       19         9       19         9       19         9       19         9       19         9       19         9       19         9       19         9       19         9       19         9       19         19       FAMILY AND CONSUMER SCIENCES/HUMAN SCIENCES	
8       27       MATHEMATICS AND STATISTICS         8       40       PHYSICAL SCIENCES         9       5       AREA, ETHNIC, CULTURAL, GENDER, AND GROUP STUDIES         9       19       FAMILY AND CONSUMER SCIENCES/HUMAN SCIENCES	
8       40       PHYSICAL SCIENCES         9       5       AREA, ETHNIC, CULTURAL, GENDER, AND GROUP STUDIES         9       19       FAMILY AND CONSUMER SCIENCES/HUMAN SCIENCES	
9     5     AREA, ETHNIC, CULTURAL, GENDER, AND GROUP STUDIES       9     19     FAMILY AND CONSUMER SCIENCES/HUMAN SCIENCES	
9 19 FAMILY AND CONSUMER SCIENCES/HUMAN SCIENCES	
9 42 PSYCHOLOGY	
9 44 PUBLIC ADMINISTRATION AND SOCIAL SERVICE PROFESSIONS	
9 45 SOCIAL SCIENCES	
10 10 COMMUNICATIONS TECHNOLOGIES/TECHNICIANS AND SUPPORT SERVICES	
10 11 COMPUTER AND INFORMATION SCIENCES AND SUPPORT SERVICES	
10 25 LIBRARY SCIENCE	
11 12 PERSONAL AND CULINARY SERVICES	
11 31 PARKS, RECREATION, LEISURE, AND FITNESS STUDIES	
11 36 LEISURE AND RECREATIONAL ACTIVITIES	
12 46 CONSTRUCTION TRADES	
12 47 MECHANIC AND REPAIR TECHNOLOGIES/TECHNICIANS	
12 48 PRECISION PRODUCTION	
12 49 TRANSPORTATION AND MATERIALS MOVING	
12 53 HIGH SCHOOL/SECONDARY DIPLOMAS AND CERTIFICATES	
13 96 OTHER	

Responses to the employment series beginning at LH41/LH6 were coded based on the same US Census codes used to code J166M and J168M (Section J) in the core interview. These codes were then grouped into larger categories to protect respondent confidentiality, also using the same masking code used in the HRS core study.

Responses to the health questions (LH54/LH19 and LH57/LH22), and to LH60/LH23, (major accomplishments), were coded based on an analysis of frequencies found in the responses.

3e. "Other: Specify" Questions

Responses were reviewed for all questions with an "Other: Specify" option, and were either coded into existing code frames or new code frames were created. For the six questions below, the following new code frames were created:

LH14\_19, Who lived with you when you started your first full-time job?

11 Children, unspecified

12 In the military

LH16\_19, What type of residence did you live in when you started first full-time job?

- 4 Military housing/barracks
- 5 Rooming house, boarding house/YMCA/dormitory
- LH18\_19, Who lived with you when you were 40?
  - 11 Children, unspecified
- LH33b\_19, In what sports did you participate (in junior/middle and high school)?
  - 12 Softball
  - 13 Wrestling
  - 14 Cheerleading, drill team

#### LH41d\_19/LH6d, What did you do after leaving this job?

- 6 Retired, took buy out package
- 7 Pursued further education
- 8 Started own business/became self-employed
- 9 Moved/relocated
- 10 Joined military
- 11 Still work at this job

#### LH49a\_19/LH14a, Why did you leave or stop working for this employer?

- 11 The company closed, went out of business, or relocated
- 12 Started own business/became self-employed
- 13 Did not like it; problems with the owners; problems with coworkers; hours were cut
- 14 Moved to a different job, reason unspecified
- 15 Divested ownership in the business/sold the business
- 3f. Changes to Version 2

#### Long Questionnaire (Public and Restricted)

Data coded 9995 in the Residential History data (LH5 series) have been resolved and replaced in the data and the codebooks have updated.

Code frames for LH35\_6F\_19 and LH35\_7F\_19 in the codebooks have been corrected.

Post-High school data (LH35 series) incorrectly reported by the respondent in the K-12 school data (LH22 series) was removed from the LH22 series and transferred to the LH35 series and both codebooks have been updated.

Occupation and Industry data (LH41 series) were added to four respondent records and the codebooks were updated to reflect this change.

#### Supplemental Questionnaire (Public and Restricted)

Two variables (LH10M\_19FS and LH11M\_19FS) that were undocumented in the Public Version 1 codebook have been corrected.

Three variables (LH22A\_1C\_19FS, LH22B\_2C\_19FS, and LH22C\_3C\_19FS) that were omitted from Version 1 (Public and Restricted) data files and codebooks have been added.

#### 4. File Structure

The HRS 2019 Fall LHMS Version 2 long and supplemental data are at the respondent level. The data files contain one record for each respondent or proxy (long n=1434, supplemental n=206) who filled out and returned a 2019 LHMS questionnaire in English or Spanish. The variable LH61\_19/ LH24\_19FS WHO ANSWERED SURVEY QUESTIONS provides information about who answered the questions in the 2019 LHMS.

The long questionnaire data file is called LHMS19F\_R, translated as: Life History Mail Survey 2019 Fall, with the "\_R" designating the file is at the respondent level.

The supplemental questionnaire data file is called LHMS19FS\_R, translated as: Life History Mail Survey 2019 Fall, with the "S\_R" designating the file is the supplemental version of the questionnaire at the respondent level.

The primary Identification variables (IDs) are:

HHIDHOUSEHOLD IDENTIFIERPNPERSON NUMBER

Records in the data files are sorted in order by the identifying variables from the HRS core study, HHID (household ID) and PN (person number). The variable PN refers to the respondent to whom the questionnaire was mailed. Identification variables in the HRS 2019 Fall LHMS Release (Version 2) are stored in character format. For further information about HRS identification variables and merging data, see the <u>Data Description for the HRS 2002 Core</u>.

#### 5. Distribution Files

The following extensions are used for the six different types of distribution files:

.DA for data files, .SAS for SAS program statements and .sas7bdat for SAS "ready-to-use" files, .SPS for SPSS program statements and .sav for SPSS "ready-to-use" files, .DO for Stata DO statements and .dta for Stata "ready-to-use" files, .DCT for Stata dictionary statements, and .TXT for codebook files.

For example, the long questionnaire data are as follows:

LHMS19F\_R.DA contains ASCII data LHMS19F\_R.SAS contains corresponding SAS program statements, LHMS19F\_R.SAS7BDAT contains SAS data in "ready-to-use" format, LHMS19F\_R.SPS contains corresponding SPSS program statements, LHMS19F\_R.SAV contains SPSS data in "ready-to-use" format, LHMS19F\_R.DO contains corresponding Stata DO statements, LHMS19F\_R.DTA contains Stata data in "ready-to-use" format, LHMS19F\_R.DCT contains corresponding Stata dictionary statements, and LHMS19F\_R.TXT contains the ASCII codebook

And the supplemental questionnaire data are:

LHMS19FS\_R.DA contains ASCII data LHMS19FS\_R.SAS contains corresponding SAS program statements, LHMS19FS\_R.SAS7BDAT contains SAS data in "ready-to-use" format, LHMS19FS\_R.SPS contains corresponding SPSS program statements, LHMS19FS\_R.SAV contains SPSS data in "ready-to-use" format, LHMS19FS\_R.DO contains corresponding Stata DO statements, LHMS19FS\_R.DTA contains Stata data in "ready-to-use" format, LHMS19FS\_R.DCT contains corresponding Stata dictionary statements, and LHMS19FS\_R.TXT contains the ASCII codebook

The HRS 2019 Fall LHMS Version 2 data (long and supplemental) are provided in ASCII format, with fixed-length records. Use the associated SAS, SPSS or Stata program statements to read the data into the analysis package of your choice. In addition, you may also download the codebook file (LHMS19F\_R.TXT/ LHMS19FS\_R.TXT) and the data description (this document).

#### 6. Program Statements

6a. Using the Files with SAS

To create a SAS system file for a particular dataset, two file types must be present for that dataset -- .SAS program statement files and .DA data files.

To create a SAS system file, load the \*.SAS file into the SAS Program Editor.

If the \*.SAS file is located in "c:\lhms2019fall\sas" and the data file is located in "c:\LHMS19fall\data", you can run the file as is. A SAS system file (\*.SD2 or \*.SAS7BDAT) will be saved to directory "c:\lhms2019fall\sas".

If the files are not located in the specified directories, you will need to edit the \*.SAS file to reflect the proper path names prior to running the file.

6b. Using the Files with SPSS

To create an SPSS system file for a particular dataset, two file types must be present for that dataset -- .SPS program statement files and .DA data files.

To create an SPSS system file, open the \*.SPS file in SPSS as an SPSS Syntax File.

If the \*.SPS file is located in "c:\lhms2019fall\spss" and the data file is located in "c:\lhms2019fall\data", you can run the file as is. An SPSS system file (\*.SAV) will be saved to directory "c:\lhms2019fall\spss".

If the files are not located in the specified directories, you will need to edit the \*.SPS file to reflect the proper path names prior to running the file.

6c. Using the Files with Stata

To use Stata with a particular dataset, the following three file types must be present for that dataset -- .DCT files, .DO files, and .DA data files.

Files with the suffix .DA contain the raw data for Stata to read. Files with the suffix .DCT are Stata dictionaries used by Stata to describe the data. Files with the suffix .DO are supplemental Stata programs ("do files") which you may use to read in the data. Load the .DO file into Stata and then submit it.

If the \*.DO and \*.DCT files are located in "c:\lhms2019fall\stata" and the data file is located in "c:\lhms2019fall\data", you can run the .DO file as is.

If the files are not located in these directories, you must edit the \*.DO and \*.DCT files to reflect the proper path names before you run the files.

Note that the variable names provided in the .DCT files are uppercase. If you prefer lower case variable names, you may wish to convert the .DCT files to lower case prior to use. You may do this by reading the .DCT file into a text or word processing program and changing the case. For instance in Microsoft Word, Edit, Select All, Format, Change Case, lowercase.

#### 7. Linking Respondents across Time

Respondent records in the HRS 2019 Fall LHMS Version 2 can be linked to respondent records from 2018 and prior waves by HHID and PN. The core sub-household identifiers can be used to link household data with the cross-sectional respondent level data.

#### 8. Registration and Downloading the Data

#### 8a. Registration

HRS data are available for free to researchers and analysts at the HRS Web site. In order to obtain public release data, you must first register at our Web site. Once you have completed the registration process, your username and password will be sent to you via e-mail. Your username and password are required to download data files.

Registered users receive user support, information related to errors in the data, future releases, workshops, and publication lists. The information you provide will not be used for any commercial use, and will not be redistributed to third parties.

#### 8b. Conditions of Use

By registering, you agree to the <u>Conditions of Use</u> governing access to Health and Retirement public release data.

#### 8c. Publications Based on Data

As part of the data registration process, you agree to include specified citations and to inform HRS of any papers, publications, or presentations based on HRS data. Please send a copy of any publications you produce based on HRS data, with a bibliographical reference, if appropriate, to the address below.

Health and Retirement Study Attn: Papers and Publications The Institute for Social Research P.O. Box 1248 Ann Arbor, MI (USA) 48106-1248

Alternately, you may contact us by e-mail at hrsquestions@umich.edu with "Attn: Papers and Publications" in the subject line.

#### 9. If You Need to Know More

This document is intended to serve as a brief overview and to provide guidelines to using the 2019 Fall LHMS Version 2 data. Additional information about the HRS can be obtained from the HRS Web site. If you have questions or concerns that are not adequately covered here or on our Web site, please contact us. We will do our best to provide answers.

9a. HRS Internet Site

Health and Retirement Study public release data and additional information about the study are available on the Internet. To access the data and other relevant information, point your Web browser to the HRS Web site.

http://hrsonline.isr.umich.edu

9b. Contact Information

If you need to contact us, you may do so by one of the methods listed below.

Internet: <a href="https://hrs.isr.umich.edu/help">https://hrs.isr.umich.edu/help</a>

E-mail: <u>hrsquestions@umich.edu</u>

By Mail: Health and Retirement Study The Institute for Social Research The University of Michigan P.O. Box 1248 Ann Arbor, MI 48106-1248

FAX: (734) 647-1186