

EXTRACT TUTORIAL: SUMMARY TAPE FILE 3A

Question 1: What is the median household income for all census tracts in Washtenaw County?

1. Look at the Documents Center's guide to STF3A or the Technical Documentation to determine the table number.
2. Choose the appropriate STF3A disk. When a state requires several disks, as is true in Michigan, data for the state, all counties and all cities will be on all disks, but townships, census tracts, and block groups will be only on the disk for that county. In this case, you want disk drive 3 on the CD-ROM cartridge.
3. Put the cartridge into the CD-ROM reader.
4. Starting the EXTRACT program.
 - a. PRESS the F10 function key.
 - b. TYPE 3
 - c. The Extract introduction screen will come up. PRESS RETURN twice.
 - d. A box in the middle on the right side of the screen will say: "c:\extrct14\work etc." not available.
 - e. PRESS ESCAPE.
 - f. You will be prompted to type in the drive letter for the CD-ROM. Remember that you were using disk drive 3 for Washtenaw County. If you look to your left, a chart on the microfiche cabinet says disk drive 3 is letter N. (Drives 1-6 respectively are L-Q).
 - g. TYPE n RETURN
 - h. You will be prompted to the drive and directory of the **workspace**. TYPE c:\extrct14\work RETURN
 - i. You will then be prompted for the drive and directory for the auxiliary files. TYPE c:\extrct14\stfaux RETURN.
 - j. You will be asked if the information is correct. If it is, TYPE y and RETURN. If not, TYPE n and return. If you ever get stuck on this screen, keep pressing ESC or just TYPE q to quit.
 - k. A box on the lower left corner will ask which auxiliary file you are using. Arrow down to HIGHLIGHT MSTRST3A. RETURN.

5. Choose your catalog. STF3A divides over 200 files into 35 groupings, called catalogs.
 - a. Arrow down to STF314 to HIGHLIGHT it. Note that STF314 covers tables P77-83, so it includes table P80a, the table number for median household income you should have found in the technical documentation. PRESS RETURN twice.
 - b. HIGHLIGHT the state. In this case, Michigan is your only option. RETURN.
6. You should have finally reached the main EXTRACT menu. Congratulations!
7. Select items.
 - a. The first step is to select items, i.e. subject variables. TYPE 1 and press RETURN.
 - b. Consider your "items" as columns you would want to have on a spreadsheet. Since you need household income for census tracts:
 - (1). Use the arrow key to highlight TRACTBNA
TYPE x RETURN
 - (2). Arrow down to variable P080A001, median household income in 1989. TYPE x RETURN
 - c. Press ESC to return to main menu.
8. Select records.
 - a. Records are the specific geographic areas for which you need the data.
 - b. TYPE 2 and press RETURN.
 - c. At the next screen TYPE S next to summary level. (This means you don't want the data for every nook and cranny in the state.
 - d. Arrow down to CNTY and type S. This means you want the data for only one county in the state.
 - e. Press ESC.
 - f. You will next be asked what kind of geographic breakdown you want. Arrow down to 140, State-County-Tract/BNA. TYPE x Press ESC.
 - g. You will then be given a list of counties in Michigan.

- (1). TYPE L (which means locate) to page down the list of counties alphabetically.
- (2). A box will appear at the bottom of the screen. TYPE W to page down to counties beginning with W. RETURN
- (3). Once the screen shows counties beginning with W, TYPE x next to Washtenaw. PRESS ESC
You will be returned to the main menu.

9. Now you can view or download the data.

- a. TYPE 6 and press RETURN to view the data on the screen. Is the data what you wanted? Press ESC to return to main menu.
- b. TYPE 7 and press RETURN to print. You did it! ESC.
- c. To download to a disk, you need to bring a formatted high density 3-1/2" disk with you. Insert in drive A.
- d. PRESS 8 and RETURN. You will be given three different formats in which to download data. 1=.DBF, a data base management format. 2=.PRN, a spreadsheet format. 3=.SDF, a textual format identical to what you printed.
- e. You do not need to follow through with these steps in the tutorial. Remember, however, to download to the A drive. It is also a good idea to answer yes when you are asked about printing documentation.
- f. PRESS ESC. Do not quit at this point. Continue with question 2.

CONGRATULATIONS! YOU DID IT. YOUR FIRST EXTRACT SEARCH.

Question 2: You were so pleased with your first search that now you want to add median housing value to your first search.

10. Check the technical documentation to Documents Center STF3A guide determine the table number for median housing value.
for median housing value.
12. You should already be at the main menu. To add a table:
 - a. TYPE 4 (manipulate files option) and press RETURN.
 - b. TYPE 3 and PRESS RETURN to merge files horizontally.
 - c. Page down to highlight catalog STF333 (which includes table H61A, median housing value) and RETURN.

- d. RETURN to select Michigan.
 - e. TYPE 1 and press RETURN to integrate files by record number.
 - f. Page down the list of files to highlight H061A001. TYPE x and press RETURN. ESC.
13. Because you selected a new item (table number) AFTER you had already selected records (geographic areas), you will need to repeat the geographic selection process. FOLLOW STEP 8 above. If you know you want items for more than one catalog when you begin your search, it is easier to follow the manipulate files procedure before you select records.
14. If you repeated STEP 8, you should now be at the main menu. TYPE 6 and press RETURN to view your new file on the screen. Note that the file is in columns. To change the output, press ESC to return to the main menu.
15. To change the output from columns to rows, TYPE 5 and press RETURN.
- a. TYPE 2 and RETURN. ESC.
 - b. You should be back at the main menu.
 - c. TYPE 6 and RETURN to view the new format on the screen.
 - d. ESC to return to the main menu.

NOTE: Now that you know how to switch catalogs, you may be tempted to add tables from several different catalogs. Don't even try. Two is just about the max our equipment can handle. You care better off creating separate files.

Question 3: You want the same data as in questions 1 and 2 but only for 3 tracts in Ann Arbor City and 2 in Ypsilanti.

NOTE: Because the CD-ROM medium and equipment are slow, you would probably crash the computer if you tried to select five tracts. It is better to print all the data for an area and pick out the tracts you want.

16. You are at the main menu after finishing question 2. This time let's change the arrangement so you are printing tract data by city or township in Washtenaw County.
- a. The items you selected should still be x-ed. All you will need to do is change the way to selected the records.
 - b. TYPE 2 and RETURN to select records.
 - c. TYPE S next to Summary level, arrow down to county and TYPE S. Press ESC.

- d. Place an X next to 080, State-County-County Subdivision-Census tract. RETURN. ESC.
 - e. TYPE x next to Washtenaw County. RETURN. ESC.
17. You will need to label your county subdivisions so you know which tracts are in Ann Arbor and which in Ypsilanti.
 - a. TYPE 3 and RETURN to add labels.
 - b. Use the arrow key to HIGHLIGHT County Subdivision. RETURN.
 - c. PRESS RETURN at the area name prompt. ESC.
18. At the main menu, TYPE 6 and press RETURN. It could take awhile for the data to appear on the screen but you will note that it is arranged alphabetically by place or township in Washtenaw County.
19. PRESS ESC to return to the main menu.
20. To do a completely new search, TYPE 9 and press RETURN. If you would like to quit, TYPE q and press RETURN.

COMPLEX CALCULATIONS USING EXTRACT

1. Let's say you want to know the percentage of the population that lives below the poverty level for each census tract in Flint, Michigan. Look at the Summary Tape File 3A Technical Documentation. Total population appears in Table P1. You will need to add 12 age groups in Table P117 to determine the population below the poverty level.
2. At the "Choose Catalog" screen, note that P1 appears in catalog STF301 and P117 in STF322. Highlight STF322, the more complex table, and RETURN.

CHOOSE A CATALOG

>, or <>

2. Press <ENTER> to select a catalog (or <ESC> to reselect drives.)

| CATALOG | DESCRIPTION |
|----------|---|
| STF300 | Special Geographic Identification Section |
| STF301 | P1 - P13 Urban/rural, Sex, Race, Hispanic origin, Age (total) |
| STF302 | P14A - P14C Age by sex: White, Black male |
| STF303 | P14D - P14F Age by sex: Black female, Amer. Indian, Eskimo, Aleut |
| STF304 | P14G - P14I Age by sex: Asian or Pacific Islander, Other race male |
| STF305 | P14J - P17 Age by sex: Other race f, Hispanic; Hhld type/relation |
| STF306 | P18 - P26 Relationship and age, Household/family type, Subfamily |
| STF307 | P27 - P32 Marital status, Language spoken at home |
| STF308 | P33 - P36 Ancestry, Year of entry for foreign born |
| STF309 | P37 - P51 Citizens, Child ever born, BQ, Migration, Place of work |
| STF310 | P52 - P60 Carpooling, School enrollment, Educational attainment |
| F311 | P61 - P65 School and employment for 16-19 year olds, Veterans |
| STF312 | P66 - P70 Disability, Employment status |
| STF313 | P71 - P76 Employment status by race/origin, presence of children |
| STF314 | P77 - P83 Industry, Occupation, Household income |
| STF315 | P84 - P86 Household income by age of householder: Total |
| STF316 | P87A Household income by age of householder: White |
| STF317 | P87B Household income by age of householder: Black |
| STF318 | P87C Household income by age of householder: Am.Indian,E,A |
| STF319 | P87D Household income by age of householder: Asian/Pacific |
| STF320 | P87E Household income by age of householder: Other race |
| STF321 | P88 - P107A Hhld income by age: Hispanic; Income type:Family income |
| → STF322 | P108 - P118 Nonfamily/Per capita income; Poverty by age and sex |
| STF323 | P119 - P121 Poverty status by age by race/origin |
| STF324 | P122 - P123 Poverty status by household type & rel./family type |
| STF325 | P124A- P124B Poverty status by race by family type |
| STF326 | P125 - P143 Poverty for Hispanic, by family/hhld type; Imputations |
| STF327 | P144-70,H1-9 Imputations (cont.); Housing units, Condos |

To <R>restrict entire session to files including a particular State, press R.

3. Follow the prompts to the "Main Menu." TYPE 1 for "Select Items" and RETURN.

MAIN MENU

- | | |
|---------------------|----------------------------------|
| → 1. Select ITEMS | 6. Display to Screen |
| 2. Select RECORDS | 7. Print |
| 3. Add LABELS | 8. EXTRACT DATA to a file |
| 4. Manipulate files | 9. Return to FILE SELECTION menu |
| 5. Format options | 10. Advanced options |

(Q to QUIT)

(<F1> for Help)

Enter option number:

STF322MI

4. Place an X next to the lowest level of geography you want to appear in the final output; in this case it is census tract. Note the field name (or table numbers) of the variables you want to add. You do not need to place an X next to them unless you want the individual age groups to appear in the final output.

SELECT ITEMS

(Press H for HELP)

Enter an X next to each item to include in display.

>, or <> to scroll through the list.
TO EXIT: Press the <ESC> key.

| X | FIELD NAME | DESCRIPTION |
|---|------------|---|
| | --title-- | 1990 Census STF 3A, File 22, Tables P108 - P118 |
| | SUMLEV | Summary Level |
| | STATEFP | State (FIPS) |
| | CNTY | County |
| | COUSUBFP | County Subdivision (FIPS) |
| | PLACEFP | Place (FIPS) |
| X | TRACTBNA | Census Tract/Block Numbering Area (4-digits + 2-digit suffix) |
| | BLCKGR | Block Group |
| | LOGRECNU | Logical Record Number |
| | ----- | P107A. MEDIAN FAMILY INCOME IN 1989(1) |
| | --P107A-- | Universe: Families |
| | P107A001 | Median family income in 1989 |
| | ----- | P108. AGGREGATE FAMILY INCOME IN 1989(1) BY FAMILY INCOME |
| | --P108-- | Universe: Families |
| | P1170013 | Persons below poverty level: Under 5 years |
| | P1170014 | Persons below poverty level: 5 years |
| | P1170015 | Persons below poverty level: 6 to 11 years |
| | P1170016 | Persons below poverty level: 12 to 17 years |
| | P1170017 | Persons below poverty level: 18 to 24 years |
| | P1170018 | Persons below poverty level: 25 to 34 years |
| | P1170019 | Persons below poverty level: 35 to 44 years |
| | P1170020 | Persons below poverty level: 45 to 54 years |
| | P1170021 | Persons below poverty level: 55 to 59 years |
| | P1170022 | Persons below poverty level: 60 to 64 years |
| | P1170023 | Persons below poverty level: 65 to 74 years |
| | P1170024 | Persons below poverty level: 75 years and over |
| | ----- | P118. POVERTY STATUS IN 1989(2) BY SEX(2) BY AGE(7) |
| | --P118-- | Universe: Persons for whom poverty status is determined |

Options: <J>ump, <L>ocate, <W>ord search, <D>efinition, <P>review, <U>ser-defined item

5. While viewing this screen, PRESS U for user-defined item.

6. A box will appear at the top of the screen. Press RETURN until you reach "Freeform Expression." TYPE the first and last table numbers separated by a colon and RETURN. Enter field length and RETURN; enter decimals and RETURN; enter short name for table name and RETURN; enter table description and RETURN. Continue pressing ESCAPE until you reach the main menu.

| User Defined Item | | | |
|--|--------------------------------------|-------------|-------------------|
| Numerator | / | Denominator | * Scaling Factor |
| Ratio: | | | |
| --OR-- | | | |
| Freeform expression: P1170013:P1170024 | | | |
| Field Name | Description | Length: 7 | Decimal places: 0 |
| poor | total population below poverty level | | |

| | | |
|----------|---|-------------------|
| P1170013 | Persons below poverty level: | Under 5 years |
| P1170014 | Persons below poverty level: | 5 years |
| P1170015 | Persons below poverty level: | 6 to 11 years |
| P1170016 | Persons below poverty level: | 12 to 17 years |
| P1170017 | Persons below poverty level: | 18 to 24 years |
| P1170018 | Persons below poverty level: | 25 to 34 years |
| P1170019 | Persons below poverty level: | 35 to 44 years |
| P1170020 | Persons below poverty level: | 45 to 54 years |
| P1170021 | Persons below poverty level: | 55 to 59 years |
| P1170022 | Persons below poverty level: | 60 to 64 years |
| P1170023 | Persons below poverty level: | 65 to 74 years |
| P1170024 | Persons below poverty level: | 75 years and over |
| ----- | P118. POVERTY STATUS IN 1989(2) BY SEX(2) BY AGE(7) | |
| --P118-- | Universe: Persons for whom poverty status is determined | |

7. At the "Main Menu," TYPE 3 for "Add Labels" and RETURN. Highlight the second "Catalog" you wish to choose (in this case, STF301) and RETURN.

| ADD LABELS | |
|--|--|
| or <> to position cursor on a code for which you want labels | |
| Press <ENTER> key to select | |
| Press <ESC> key for no labels | |
| CODE | Code field for which labels are available |
| SUMLEV | Summary Level |
| STATEFP | State (FIPS) |
| CNTY | County |
| COUSUBFP | County Subdivision (FIPS) |
| PLACEFP | Place (FIPS) |
| TRACTBNA | Census Tract/Block Numbering Area (4-digits + 2-digit suffix |
| --STF300 | AREA NAME and geographic codes from STF300 |
| → --STF301 | Data from STF301, P1 - P13 Race, Hispanic, Age (totals) |
| --STF302 | Data from STF302, P14A - P14C Age: White, Black male |
| --STF303 | Data from STF303, P14D - P14F Age: Black female, AIEA |
| --STF304 | Data from STF304, P14G - P14I Age: Asian/PI, Other male |
| --STF305 | Data from STF305, P14J - P17 Age: Other female, Hispanic |

8. Highlight the variable you would like in STF301 (in this case P0010001) and RETURN.

ADD LABELS

ADD LABELS (Screen 2)

Select one of these variations of the label.
 or to position cursor on desired label.
 Hit <ENTER> key to select.

| CODE | Description of available labels |
|------------|---|
| --title--- | 1990 Census STF 3A, File 01, Tables P1 - P13 |
| SUMLEV | Summary Level |
| STATEFF | State (FIPS) |
| CNTY | County |
| COUSUBFF | County Subdivision (FIPS) |
| PLACEFF | Place (FIPS) |
| TRACTBNA | Census Tract/Block Numbering Area (4-digits + 2-digit suffix) |
| BLCKGR | Block Group |
| LOGRECNU | Logical Record Number |
| ----- | P1. PERSONS(1) |
| --P001-- | Universe: Persons |
| → P0010001 | Persons: Total (based on sample) |

Press A to show all fields (not just labels). Press M for multiple labels

9. At the "Main Menu," TYPE 1 to "Select Items" and RETURN. TYPE U to retrieve "User-Defined Item." TYPE 2 to add to existing items.

User Defined Item

Edit existing items:

- 1. poor
- 2. Add new item

Enter item number: 2

| | |
|------------|---|
| --title--- | 1990 Census STF 3A, File 22, Tables P108 - P118 |
| SUMLEV | Summary Level |
| STATEFF | State (FIPS) |
| CNTY | County |
| COUSUBFF | County Subdivision (FIPS) |
| PLACEFF | Place (FIPS) |
| TRACTBNA | Census Tract/Block Numbering Area (4-digits + 2-digit suffix) |
| BLCKGR | Block Group |
| LOGRECNU | Logical Record Number |
| ----- | P107A. MEDIAN FAMILY INCOME IN 1989(1) |
| --P107A-- | Universe: Families |
| P107A001 | Median family income in 1989 |
| ----- | P108. AGGREGATE FAMILY INCOME IN 1989(1) BY FAMILY INCOME |
| --P108-- | Universe: Families |

10. When the box appears at the top of the screen, TYPE the name of the variable you first calculated (in this case, the name is "ppor"). Use the table number for the total population as your denominator. You MUST preface the table number from any table you selected in the "Add Labels" process with the catalog number and an arrow. Skip "Freeform Expression." Fill in field length, decimals, name and description. ESCAPE to return to the "Main Menu."

ORIGINAL
USER-DEFINED
ITEM

NEW VARIABLE
FROM "ADD LABEL"
INCLUDE CATALOG
NUMBER

| | | | |
|----------------------|-------------------------------------|------------------|------------------|
| User Defined Item | Numerator | Denominator | * Scaling Factor |
| Ratio: --OR-- | POOR | STF301->P0010001 | 100 |
| Freeform expression: | | | |
| Field Name | Description | Length: | Decimal places: |
| perpoor | poor as percent of total population | 7 | 2 |

NEW USER-DEFINED ITEM

| | |
|--------------|---|
| ---title--- | 1990 Census STF 3A, File 22, Tables P108 - P118 |
| SUMLEV * | Summary Level |
| STATEFP - | State (FIPS) |
| CNTY * | County |
| COUSUBFP * | County Subdivision (FIPS) |
| PLACEFP * | Place (FIPS) |
| x TRACTBNA * | Census Tract/Block Numbering Area (4-digits + 2-digit suffix) |
| BLCKGR * | Block Group |
| LOGRECNU * | Logical Record Number |
| ----- | P107A. MEDIAN FAMILY INCOME IN 1989(1) |
| --P107A-- * | Universe: Families |
| P107A001 * | Median family income in 1989 |
| ----- | P108. AGGREGATE FAMILY INCOME IN 1989(1) BY FAMILY INCOME |
| --P108-- * | Universe: Families |

11. At the "Main Menu," TYPE 2 for "Select Records" (i.e. geographic areas) and RETURN. Place an "S" next to Summary Level and the type of geographic area for which you want to LIMIT data (Flint is a place).

SELECT RECORDS.

Mark with S the variable(s) to restrict.
(you will be prompted for values to select)

TO EXIT: Press the <ESC> key.
> or <> to scroll through the list.

S FIELD NAME DESCRIPTION

| | | |
|-----|-------------|---|
| --- | ---title--- | 1990 Census STF 3A, File 22, Tables P108 - P118 |
| (S) | SUMLEV * | Summary Level |
| | STATEFP - | State (FIPS) |
| | CNTY * | County |
| (S) | COUSUBFP * | County Subdivision (FIPS) |
| | PLACEFP * | Place (FIPS) |
| | TRACTBNA * | Census Tract/Block Numbering Area (4-digits + 2-digit suffix) |
| | BLCKGR * | Block Group |
| | LOGRECNU * | Logical Record Number |
| | ----- | P107A. MEDIAN FAMILY INCOME IN 1989(1) |
| | --P107A-- * | Universe: Families |
| | P107A001 * | Median family income in 1989 |
| | ----- | P108. AGGREGATE FAMILY INCOME IN 1989(1) BY FAMILY INCOME |
| | --P108-- * | Universe: Families |

12. Place an X next to the geographic hierarchy. The hierarchy for Flint--Tract is field 080. After pressing ESC, you will be given a list of all places in the state beginning with the letter A.

>SELECT RECORDS (Screen 2)

Enter an X next to each value you want to include.

>, or <> to scroll through the list.

TO EXIT: Press the <ESC> key.

| X | SUMLEV | DESCRIPTION |
|---|--------|--|
| | 040 | State |
| | 050 | State-County |
| | 060 | State-County-County Subdivision |
| | 070 | State-County-County Subdivision-Place/Remainder |
| X | 080 | State-County-County Subdivision-Place/Rmdr-Census Tract/BNA |
| | 090 | State-Co-Co Sub-Place/Rmdr-Census Tract/BNA-...-Block Group |
| | 140 | State-County-Census Tract/Block Numbering Area |
| | 150 | State-County-Census Tract/Block Numbering Area-Block Group |
| | 155 | State-Place-County |
| | 160 | State-Place |
| | 170 | State-Consolidated City |
| | 210 | State-American Indian Reservation with Trust Lands |
| | 211 | State-American Indian Reservation [w trust lands;reserv only |
| | 212 | State-American Indian Reservation [w trust lands;trust only] |

select based on range of codes, type R Other options: D,J,L,W, or Hkelp

13. Rather than page down the list, you may TYPE L to receive a locator prompt. TYPE the first letter of the city, then let the computer page down the list. X the name of the city. Press ESCAPE.

>SELECT RECORDS (Screen 2)

Enter an x next to each value you want to include.

>, or <> to scroll through the list.

TO EXIT: Press the <ESC> key.

| X | PLACEFP | DESCRIPTION |
|---|---------|---------------------|
| X | 28360 | Flat Rock city |
| | 29000 | Flint city |
| | 29200 | Flushing city |
| | 29580 | Forest Hills CDP |
| | 29660 | Forestville village |
| | 29940 | Fountain village |
| | 30040 | Fowler village |
| | 30060 | Fowlerville village |
| | 30200 | Frankenmuth city |
| | 30260 | Frankfort city |
| | 30340 | Franklin village |
| | 30420 | Fraser city |
| | 30540 | Freeland CDP |
| | 30580 | Freeport village |

To select based on range of codes, type R Other options: D,J,L,W, or Hkelp

14. At the "Main Menu," TYPE 6 to view your results. The variables you calculated and named while in your first catalog appear to the right of the tract numbers. The variable which you chose in the "Add Labels" mode appears to the left of the tract numbers.

Use ARROW keys to scroll up, down, and sideways. Press ESC when finished.
 --Display sorted by SUMLEV+PLACEFP--Press N for Natural order--
 1990 Census STF 3A, File 22, Tables P108 - P118

STF301->P0010001 Flint city **USER-DEFINED ITEMS**
 TRACTBNA poor perpoor

VARIABLE
 CHOSEN IN
 "ADD LABELS"
 PROCESS

| | | | |
|------|------|-------|-------|
| 3585 | 0001 | 841. | 23.46 |
| 4062 | 0002 | 2061. | 50.74 |
| 3817 | 0003 | 1087. | 28.48 |
| 3818 | 0004 | 1937. | 50.73 |
| 3232 | 0005 | 896. | 27.72 |
| 4169 | 0006 | 1692. | 40.59 |
| 4642 | 0007 | 1552. | 33.43 |
| 2693 | 0008 | 1291. | 47.94 |
| 6099 | 0009 | 2172. | 35.61 |
| 4570 | 0010 | 1720. | 37.64 |
| 4300 | 0011 | 1979. | 46.02 |
| 3945 | 0012 | 449. | 11.38 |
| 3495 | 0013 | 452. | 12.93 |
| 2871 | 0014 | 1561. | 54.37 |
| 3431 | 0015 | 1659. | 48.35 |
| 4795 | 0016 | 240. | 5.01 |
| 2715 | 0017 | 1107. | 40.77 |

total population below poverty

CAVEAT: This example is for illustrative purposes only. The universe for those below the poverty level are "Persons for Whom Poverty Status Has Been Determined," a figure slightly lower than the total population in Table P0010001. You could have remained in Catalog STF322 and performed the same task with three user-defined items: poor (adding the 12 age groups below poverty as we did), total (adding the 24 age groups above and below poverty), and dividing poor by total.