

PCCF+

Postal Code Conversion File Plus

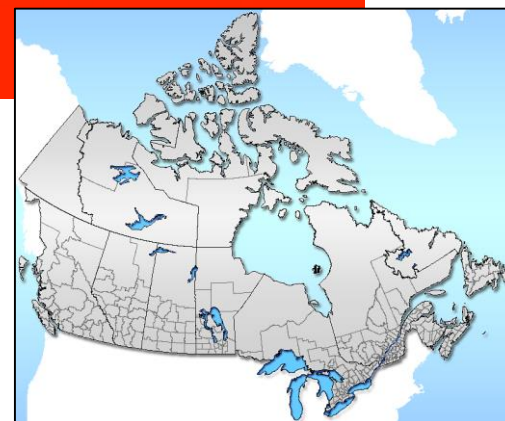
ACCOLEDS, University of Calgary,
December, 2015

Jeff Moon

Data Librarian &

Academic Director, Queen's Research Data Centre

Queen's University Library





What is the PCCF+

- A SAS[®] control program
- Associated datasets derived from the PCCF
- A Postal Code^{OM} population weight file
- Geographic Attribute File
- Health Region boundary files
- Other supplementary data



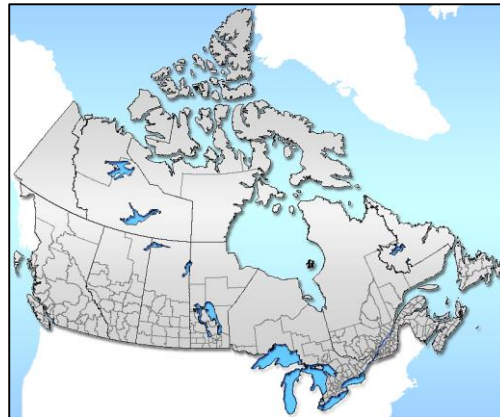
What does it do?

PCCF+ automatically assigns a range of Statistics Canada's **standard geographic areas** based on **Postal Codes**

And why would you want to do this?



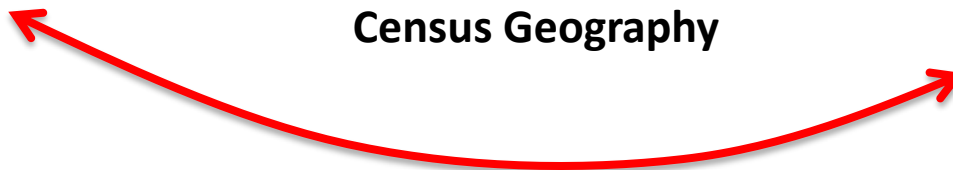
Postal Codes^{OM}



Census Geography



Census/NHS Statistics





PCCF *versus* PCCF+

The PCCF uses an SLI or '*Single Link Indicator*' for matching. The single link indicator **identifies the geographic area with the majority of dwellings assigned to a particular Postal Code.**

The PCCF+ uses **population-weighted random allocation for Postal Codes** that link to more than one geographic area.



Consider using **PCCF+** rather than PCCF-SLI if any of the following apply

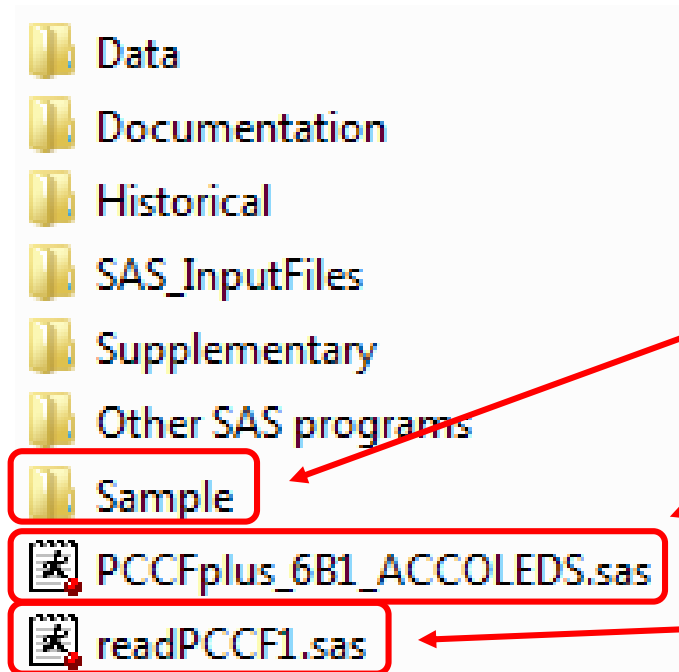
- You want to use variables present on the **PCCF+** which are not present in regular PCCF
- Your file is less than perfect with respect to postal codes
- You want help to evaluate the quality of the postal code on your data file
- The “vintage” of the postal codes on your file spans more than one census
- You want to do better coding in rural areas
- If your file includes postal codes used by residents of “incompletely enumerated Indian Reserves”

We'll be working with PCCF6B1

Download from DLI and unzip



Unzipping PCCF6B1
results in a directory
'PCCF6B1' containing all
of the data and programs
needed to use PCCF+



Sample data files

*this is where we'll put our TEXT file
containing Postal Codes*

Modified SAS program

based on Statistics Canada program

SAS program to convert TEXT file to SAS

not provided by Statistics Canada

Working with PCCF+



Two steps

1. Convert a text file containing Postal Codes into SAS dataset format
2. Run the PCCF+ program against this dataset

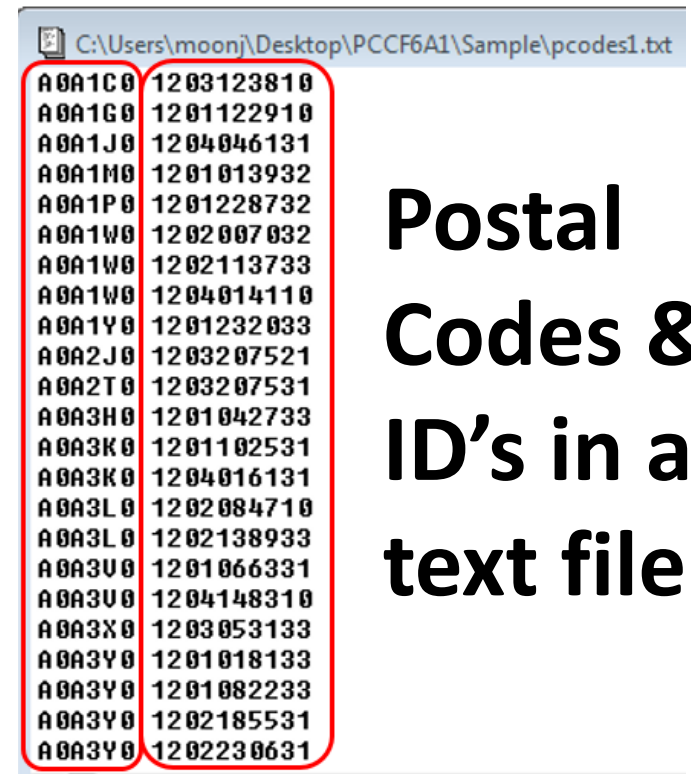
Step 1.1 Start with a text file containing Postal Codes



Input File Specifications:

Postal Codes:

- Can be sorted or unsorted
- Must **each have** a unique ID, up to 15 chars
- Must be 6 characters, no spaces/hyphens
- Must be in UPPER CASE
- May be duplicated, but need different ID's
- *It is important to note that in constructing input data, duplicate PCODEs should be retained and provided separate IDs.*



**Postal
Codes &
ID's in a
text file**

UPPER CASE needed



Results with 2 Postal Codes containing lower case letters

LINK	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0 Error: No match to PCCF	2	5.13	2	5.13
5 Note: Retired Postal Code	10	25.64	12	30.77
6 Note: Multi-match, random allocation	16	41.03	28	71.79
9 No error, note or warning	11	28.21	39	100.00

Same file with NO lower case letters... NO ERRORS

LINK	Frequency	Percent	Cumulative Frequency	Cumulative Percent
5 Note: Retired Postal Code	10	25.64	10	25.64
6 Note: Multi-match, random allocation	16	41.03	26	66.67
9 No error, note or warning	13	33.33	39	100.00

You can use EXCEL (or OPENREFINE) to convert to UPPER CASE

Step 1.2 Convert text file to SAS



C:\Users\moonj\Desktop\PCCF6A1\Sample\pcodes1.txt

A0A1C0	1203123810
A0A1G0	1201122910
A0A1J0	1204046131
A0A1M0	1201013932
A0A1P0	1201228732
A0A1W0	1202007032
A0A1W0	1202113733
A0A1W0	1204014110
A0A1Y0	1201232033
A0A2J0	1203207521
A0A2T0	1203207531
A0A3H0	1201042733
A0A3K0	1201102531
A0A3K0	1204016131
A0A3L0	1202084710
A0A3L0	1202138933
A0A3V0	1201066331
A0A3V0	1204148310
A0A3X0	1203053133
A0A3Y0	1201018133
A0A3Y0	1201082233
A0A3Y0	1202185531
A0A3Y0	1202230631



Convert
to a SAS
dataset

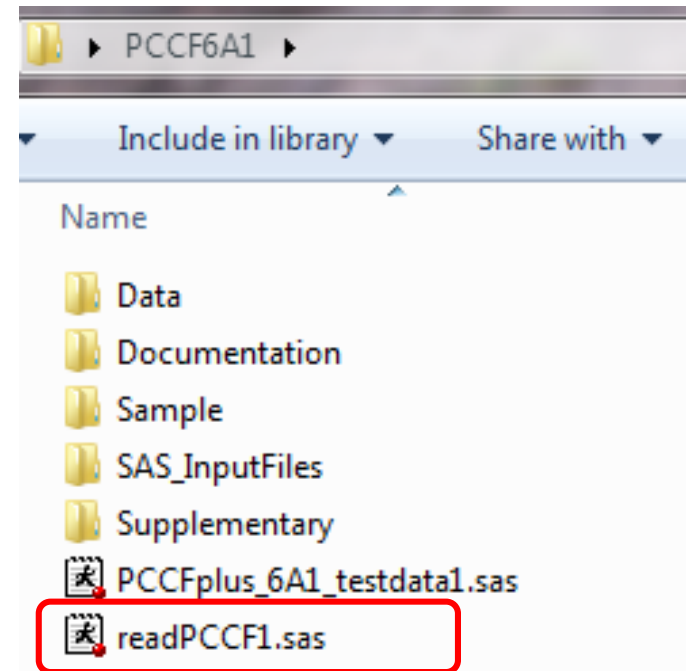
VIEWTABLE: TMP1.testdata1

	PCODE	ID
1	A0A1C0	1203123810
2	A0A1G0	1201122910
3	A0A1J0	1204046131
4	A0A1M0	1201013932
5	A0A1P0	1201228732
6	A0A1W0	1202007032
7	A0A1W0	1202113733
8	A0A1W0	1204014110
9	A0A1Y0	1201232033
10	A0A2J0	1203207521
11	A0A2T0	1203207531
12	A0A3H0	1201042733
13	A0A3K0	1201102531
14	A0A3K0	1204016131
15	A0A3L0	1202084710
16	A0A3L0	1202138933
17	A0A3V0	1201066331
18	A0A3V0	1204148310
19	A0A3X0	1203053133
20	A0A3Y0	1201018133
21	A0A3Y0	1201082233
22	A0A3Y0	1202185531
23	A0A3Y0	1202230631
24	A0A3Z0	1201144731
25	A0A3Z0	1202048921
26	A0A4E0	1203178910
27	A0A4G0	1201140231
28	A0A4K0	1204011721
29	A0B1K0	1204095210
30	A0B1W0	1204010433
31	A0B2B0	1201186931
32	A0B2M0	1203029210
33	A0B2P0	1201089033
34	A0B2P0	1202138031
35	A0B3A0	1203029231
36	A0C1B0	1204202110
37	A0C1V0	1202132033
38	A0C1Z0	1202132031
39	K7K6X7	1202132888



Let's do this together

1. Open the SAS program
'readPCCF1.sas'
2. Modify the SAS
program
3. Run the SAS program



C:\Users\TFDLLC221\Desktop\ACCOLEDS_2015\PCCF6B1

Open, modify, and run 'readPCCF1.sas'



C:\Users\TFDLLC221\Desktop\ACCOLEDS_2015\PCCF6B1

'**libname**' statement to set up a place on the hard drive (**myownlib**) to store SAS datasets

'**filename**' statement to create a '*nickname*' (**pcodes**) for the text file containing Postal Codes

'**data**' statement & SAS commands to read Postal Codes into a SAS dataset

```
readPCCF1.sas

/* SAS Program to read Postal Codes and ID numbers into SAS for use
/*
/* 'libname' sets up a place (myownlib) on my hard drive where my data
/* versus only keeping data for the duration of the SAS session
libname myownlib 'C:\Users\moonj\Desktop\PCCF6A1\Sample';
/* 'filename' assigns a nickname (pcodes) to the text file containing data & tells SAS where to find it */
filename pcodes "C:\Users\moonj\Desktop\PCCF6A1\Sample\pcodes1.txt";
/* In this example, the data file is called 'pcodes1.txt'
/* the file 'pcodes1.txt' must have a 6 digit Postal Code, a space
/* A0A1C0 1203123810
/* 120312 1203123810

/* Because of the two-part name, the dataset 'testdata1.sas7bdat'
/* location defined by the libname statement ('C:\Users\moonj\Desktop\

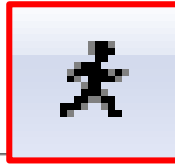
data myownlib.testdata1;
  length PCODE $ 6 ID $10;      * defines variable lengths;
  infile pcodes;                * tells SAS where to look for the data;
  input PCODE $ ID $;           * inputs the data;
  format PCODE $6. ID $10.;     * formats the variables;
  label PCODE=PCODE ID=ID;      * labels the variables;

proc print;
run;
```

Open, modify, and run 'readPCCF1.sas'



readPCCF1.sas



```
1 Postal Codes and ID numbers into SAS for use with PCCF+ Version 6A1 */
/* versus only keeping data for the duration of the SAS session */
libname myownlib 'C:\Users\TFDLLC221\Desktop\ACCOLEDS_2015\PCCF6B1\Sample';
libname myownlib 'C:\Users\moonj\Desktop\ACCOLEDS_2015\PCCF6B1\Sample';
/* 'filename' assigns a nickname (pcodes) to the text file containing data & tells SAS where to find it */
filename pcodes 'C:\Users\moonj\Desktop\ACCOLEDS_2015\PCCF6B1\Sample\pcodes1.txt';
/* In this example, the data file is called 'pcodes1.txt' */
/* the file 'pcodes1.txt' must have a 6 digit Postal Code, a space, and an ID number, in each row */

filename pcodes "C:\Users\TFDLLCxxx\Desktop\ACCOLEDS_2015\PCCF6B1\Sample\pcodes1.txt";
AOA100 1204046131 <== ID IS 10-characters wide, in this case, separated from Postal Code by a space
AOA1M0 1201013932
AOA1P0 1201228732
AOA1W0 1202007032
*/
/* The 'data' statement
/* Because of the two-p
/* location defined by
data myownlib.testdata_accoleds1;
length PCODE $ 6 ID $10;      * defines variable lengths;
infile pcodes;               * tells SAS where to look for the data;
input PCODE $ ID $;          * inputs the data;
format PCODE $6. ID $7.;     * formats the variables;
label PCODE=PCODE ID=ID;     * labels the variables;

proc print;
run;
```

RESULT: a SAS dataset containing Postal Codes



File Edit View Go Tools Solutions Window Help

Results

Print: The SAS System

Results Viewer - SAS Output

The SAS System

Obs	PCODE	ID
1	A0A1C0	1203123810
2	A0A1G0	1201122910
3	A0A1J0	1204046131
4	A0A1M0	1201013932
5	A0A1P0	1201228732
6	A0A1W0	1202007032
7	A0A1W0	1202113733
8	A0A1W0	1204014110
9	A0A1Y0	1201232033
10	A0A2J0	1203207521
11	A0A2T0	1203207531
12	A0A3H0	1201042733
13	A0A3K0	1201102531
14	A0A3K0	1204016131
15	A0A3L0	1202084710
16	A0A3L0	1202138933
17	A0A3V0	1201066331
18	A0A3V0	1204148310
19	A0A3X0	1203053133
20	A0A3Y0	1201018133
21	A0A3Y0	1201082233
22	A0A3Y0	1202185531
23	A0A3Y0	1202230631
24	A0A3Z0	1201144731
25	A0A3Z0	1202048921
26	A0A4E0	1203178910
27	A0A4G0	1201140231
28	A0A4K0	1204011721
29	A0B1K0	1204095210

Results Explorer

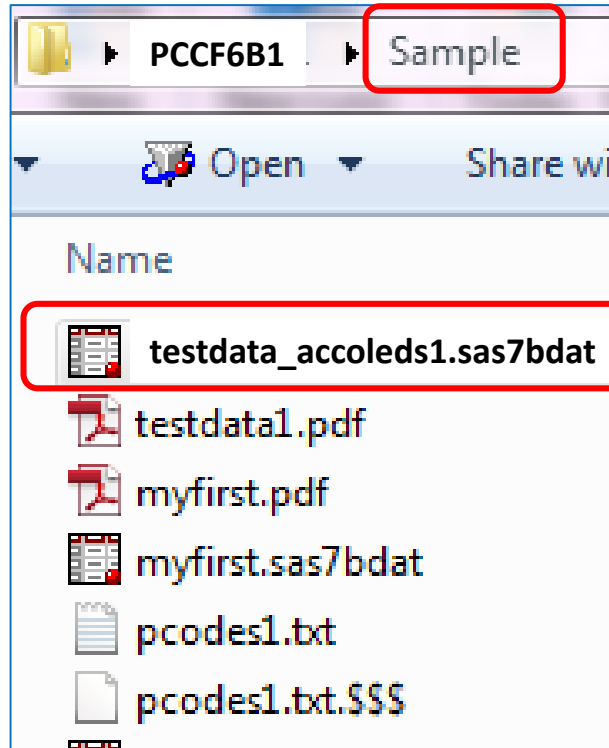
Output - (Untitled) Log - (Untitled) Editor - Untitled1 readPCCF1.sas Results Viewer - SAS ...

You should see this in the 'Results Viewer' tab

This is the SAS dataset named: testdata_accoleds1.sas7bdat

Step 1 completed.

C:\Users\TFDLLC221\Desktop\ACCOLEDs_2015\PCCF6B1\Sample



In your “**Sample**”
directory

you should have a SAS
dataset named

testdata_accoleds1.sas7bdat

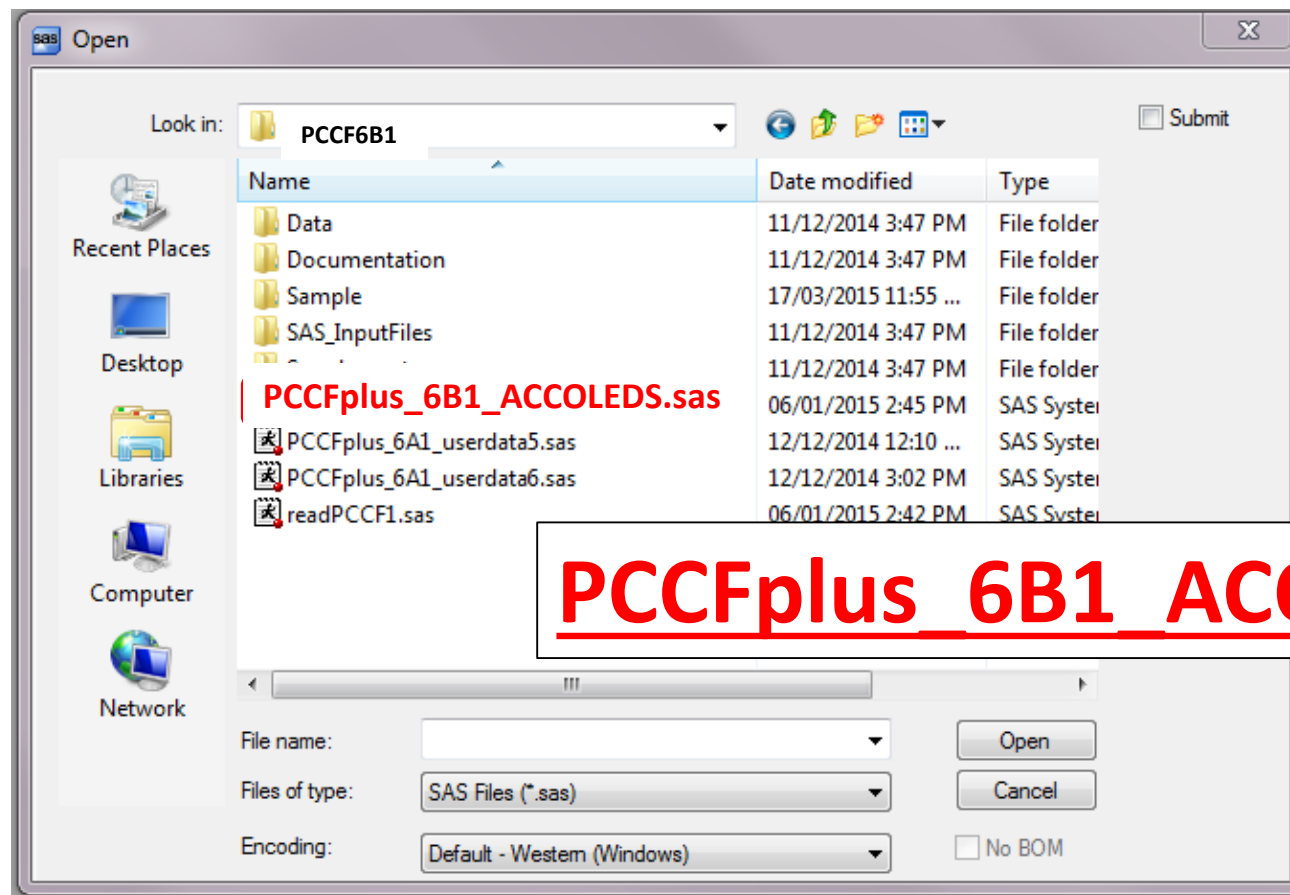
This contains *your* Postal Codes, and
an ID variable. Next, we’ll use the
PCCF+ SAS program to match your
Postal Codes to Census Geography

Step 2. Next, use the PCCF+ SAS program to read this Postal Code dataset



From the main PCCF6B1 directory, open the PCCF+ SAS program:

C:\Users\TFDLLC221\Desktop\ACCOLEDS_2015\PCCF6B1\PCCFplus_6B1_ACCOLEDS.sas



PCCFplus_6B1_ACCOLEDS.sas

a %let installDir = C:\Users\moonj\Desktop\ACCOLEDS_2015\PCCF6B1;

%let installDir = C:\Users\TFDLLC221\Desktop\ACCOLEDS_2015\PCCF6B1;

/* - Default for the input file is a .sas7bdat file (regular SAS file)

libname inData "C:\Users\TFDLLC221\Desktop\ACCOLEDS_2015\PCCF6B1 \Sample\";

b * Data library (folder path where dataset is located);
libname inData "C:\Users\moonj\Desktop\ACCOLEDS_2015\PCCF6B1\Sample\";

c * Data file name (no file extension permitted here);
%let inFile = testdata_accoleds1;
%let inFile = cchs_pcodes;

%let inFile = testdata_accoleds1;

/* Code to read text file into a SAS dataset - remove stars at beginning of each line to active this code */
filename sampdat "&installDir.\Sample\sampdat.txt"; / input data in text format */
*data inData.&infile.;
* infile sampdat lrecl=256 stopover pad;
* input
@ 1 PCODE \$6. /* Postal Code */
@ 8 ID \$15.;

*run;

%let outData = C:\Users\TFDLLC221\Desktop\ACCOLEDS_2015\PCCF6B1\Sample;

d * Output data library (folder path where processed data files will be output);
%let outData = C:\Users\moonj\Desktop\ACCOLEDS_2015\PCCF6B1\Sample\;

e /* This output replaces the former HLTHOUT and GEOPROB files
%let outName = accoleds_out;

%let outName = accoleds_out;

f **%let pdfOutput = "C:\Users\TFDLLC221\Desktop\ACCOLEDS_2015\PCCF6B1\Sample\summaryresults_accoleds.pdf";**

/* This output includes both the former HLTHOUT and GEOPROB files. */
%let pdfOutput = "C:\Users\moonj\Desktop\ACCOLEDS_2015\PCCF6B1\Sample\summaryresults_accoleds.pdf";

One more possible change needed...

Your 'ID' variable may be a different length than the *default* in Statistics Canada's SAS program.

Statistics Canada's SAS program:

```
data input_data;                                /* Read in data
  * Unique identifier variable (ID) can be changed here;
  format ID $15. PCODE $6. FSA $3. LDU $3.;
  set inData.&inFile. (rename=(PCODE=inPCode));
  PCODE = compress(inPCode);
  FSA    = upcase(substr(inPCode,1,3));
  LDU    = upcase(substr(inPCode,4,3));
  if PCODE='' then delete;
```

But our 'ID' variable
is 10 characters long

	PCODE	ID
1	A0A1C0	1203123810
2	A0A1G0	1201122910
3	A0A1J0	1204046131
4	A0A1M0	1201013932
5	A0A1P0	1201228732
6	A0A1W0	1202007032
7	A0A1W0	1202113733
8	A0A1W0	1204014110
9	A0A1Y0	1201232033
10	A0A2J0	1203207521
11	A0A2T0	1203207531
12	A0A3H0	1201042733
13	A0A3K0	1201102531
14	A0A3K0	1204016131
15	A0A3L0	1202084710
16	A0A3L0	1202138933
17	A0A3V0	1201066331
18	A0A3V0	1204148310
19	A0A3X0	1203053133
20	A0A3Y0	1201018133
21	A0A3Y0	1201082233
22	A0A3Y0	1202185531
23	A0A3Y0	1202230631
24	A0A3Z0	1201144731
25	A0A3Z0	1202048921
26	A0A4E0	1203178910
27	A0A4G0	1201140231
28	A0A4K0	1204011721
29	A0B1K0	1204095210
30	A0B1W0	1204014110

33	A0B2P0	1201089033
34	A0B2P0	1202138031
35	A0B3A0	1203029231
37	A0C1V0	1202132033
38	A0C1Z0	1202132031
39	K7K6X7	1202132888



Count the characters in your 'ID' (or just check how you read 'ID' into SAS)

readPCCF1.sas

```
readPCCF1.sas

/* SAS Program to read Postal Codes and ID numbers into SAS for use with PCCF+ Version 6A1 */
/* */
/* 'libname' sets up a place (myownlib) on my hard drive where my datasets will be stored */
/* versus only keeping data for the duration of the SAS session */
libname myownlib 'C:\Users\moonj\Desktop\PCCF6A1\Sample';
/* 'filename' assigns a nickname (pcodes) to the text file containing data & tells SAS where to find it */
filename pcodes "C:\Users\moonj\Desktop\PCCF6A1\Sample\pcodes1.txt";
/* In this example, the data file is called 'pcodes1.txt' */
/* the file 'pcodes1.txt' must have a 6 digit Postal Code, a space, and an ID number, in each row */
/* A0A1C0 1203123810 */
/* A0A1G0 1201122910 */
/* A0A1J0 1204046131 */
/* A0A1M0 1201013932 */
/* A0A1P0 1201228732 */
/* A0A1W0 1202007032 */
/* */
/* The 'data' statement creates a dataset, 'testdata1', in the library 'myownlib' */
/* Because of the two-part name, the dataset 'testdata1.sas7bdat' will be stored on my hard drive in the */
/* location defined by the libname statement ('C:\Users\moonj\Desktop\PCCF6A1\Sample') */
data myownlib.testdata1;
    length PCODE $ 6 ID $10; /* defines variable lengths;
    infile pcodes; /* tells SAS where to look for the data;
    input PCODE $ ID $; /* inputs the data;
    format PCODE $6. ID $10.; /* formats the variables;
    label PCODE=PCODE ID=ID; /* labels the variables;
proc print;
run;
```

We must be brave here...



```

/*****
/*****
/*
/* EDITS NOT NORMALLY REQUIRED BELOW THIS POINT
/* Some options are specified below that can be edited
/*   - Random seed value
/*   - Length of unique identifier (ID) field
/*
/*****
/*****/

```

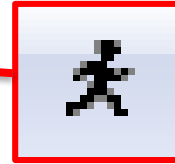
```

/*****/
data input_data;                                /* Read in data file with postal codes to be geocoded */
    * Unique identifier variable (ID) can be changed here;
    format ID $10. PCODE $6. FSA $3. LDU $3.;    /* CHANGED INPUT FORMAT FOR ID TO '$10.' FROM '$15.' */
    set inData.&inFile. (rename=(PCODE=inPCode));
    PCODE = compress(inPCode);
    FSA    = upcase(substr(inPCode,1,3));
    LDU    = upcase(substr(inPCode,4,3));
    if PCODE='' then delete;

```

```
format ID $10. PCODE $6. FSA $3. LDU $3.;
```

We're now ready to run the PCCF+ program!



SAS - [PCCFplus_6A1_testdata1.sas]

File Edit View Tools Run Solutions Window Help

Results

Results
Print: The SAS System

```
/* ***** */
/* PCCF+ Version 6A1 */
/*
/* SAS routine for automated geographic coding from postal codes using the Postal Code Conversion
/* File (PCCF) and Weighted Conversion File (WCF).
/*
/*
/* Reads incoming postal codes from a user specified input file and creates a geocoded output file
/* as well as a "problem" file that includes records that may potentially be a problem. Diagnostics
/* are also included as an output PDF with a summary of geocoding results and several additional
/* diagnostic variables to aid in assessing geocoding accuracy.
/*
/*
/* Version 6 of PCCF+ includes options for geocoding residential or institutional postal codes.
/* Residential postal codes are geocoded using a weighted conversion file, which allocates duplicate
/* postal codes according to the underlying population distribution. Institutional geocoding is for
/* coding office and institutional (hospital, businesses, etc...) and links rural postal codes to the
/* the location of the rural post office rather than using population-weighted allocation. An
/* additional option is available for geocoding historic postal codes from FSA in British Columbia.
/*
/*
/* PCCF+ was developed and written by the Health Analysis Division,
/* Statistics Canada, RHC-24A, 100 Tunney's Pasture Driveway, Ottawa ON K1A 0T6
/* Support can be obtained at had-das@statcan.gc.ca
/*
/*
/* ***** */

/* ***** */
/* 1. Set the installation folder path
/* - Folder path must NOT have any spaces
%let installDir = C:\Users\moonj\Desktop\PCCF6A1;

/* ***** */
/* 2. Specify the input data library and input file
/* - Default for the input file is a .sas7bdat file (regular SAS file)
/* - The file MUST contain the following fields:
/* ID - Unique identifier, character field, 15 characters default
/* PCODE - Postal Code, character field, 6 characters, no spaces
/* ***** */
```

The first thing we'll get is a PDF 'Summary of Automated Coding Results...'

testdata1.pdf - Adobe Acrobat Pro

File Edit View Window Help

Create [Icons]

1 / 3 [Navigation Icons] 96.5% [Zoom]

Tools Comment Share

Bookmarks

- Freq
 - Table LINK
 - Table Link_Source
 - Table Source

11:49 Tuesday, March 17, 2015 1

SUMMARY OF AUTOMATED CODING RESULTS USING PCCF+ VERSION '6A1'

Output File: Frequency of total file (including problem records)

The FREQ Procedure

LINK	Frequency	Percent	Cumulative Frequency	Cumulative Percent
5 Note: Retired Postal Code	10	25.64	10	25.64
6 Note: Multi-match, random allocation	16	41.03	26	66.67
9 No error, note or warning	13	33.33	39	100.00

Link Source	Frequency	Percent	Cumulative Frequency	Cumulative Percent
D Fully coded, duplicate record	38	97.44	38	97.44
F Fully coded, unique record	1	2.56	39	100.00

Source	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1 Automated coding to 2011 Census	7	17.95	7	17.95
2 Geocoded using 2011 Census response	21	53.85	28	71.79
3 Converted from 2006 Census geography	10	25.64	38	97.44
4 Manually geocoded	1	2.56	39	100.00

PREC	Frequency	Percent	Cumulative Frequency	Cumulative Percent
5 1 or more DAs (DMT=H-Z)	38	97.44	38	97.44
7 1 DA (DMT=ABEG)	1	2.56	39	100.00

nCSD	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1 1 CSD	19	48.72	19	48.72
2 2 CSDs	10	25.64	29	74.36
3 3 CSDs	4	10.26	33	84.62
4 4 CSDs	1	2.56	34	87.18
5 5 CSDs	1	2.56	35	89.74
6 6 CSDs	1	2.56	36	92.31
7 7 CSDs	3	7.69	39	100.00

Rep_Pt_Type	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1 Block-face	3	7.69	3	7.69
2 Dissemination block	2	5.13	5	12.82
3 Dissemination area	34	87.18	39	100.00

Links made:

Link source:

More link details:

Other
information...

The FREQ Procedure

LINK	Frequency	Percent	Cumulative Frequency	Cumulative Percent
5 Note: Retired Postal Code	10	25.64	10	25.64
6 Note: Multi-match, random allocation	16	41.03	26	66.67
9 No error, note or warning	13	33.33	39	100.00

Link_Source	Frequency	Percent	Cumulative Frequency	Cumulative Percent
D Fully coded, duplicate record	38	97.44	38	97.44
F Fully coded, unique record	1	2.56	39	100.00

Source	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1 Automated coding to 2011 Census	7	17.95	7	17.95
2 Geocoded using 2011 Census response	21	53.85	28	71.79
3 Converted from 2006 Census geography	10	25.64	38	97.44
4 Manually geocoded	1	2.56	39	100.00

PREC	Frequency	Percent	Cumulative Frequency	Cumulative Percent
5 1 or more DAs (DMT=H-Z)	38	97.44	38	97.44
7 1 DA (DMT=ABEG)	1	2.56	39	100.00

nCSD	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1 1 CSD	19	48.72	19	48.72
2 2 CSDs	10	25.64	29	74.36
3 3 CSDs	4	10.26	33	84.62
4 4 CSDs	1	2.56	34	87.18
5 5 CSDs	1	2.56	35	89.74
6 6 CSDs	1	2.56	36	92.31
7 7 CSDs	3	7.69	39	100.00

Rep_Pt_Type	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1 Block-face	3	7.69	3	7.69
2 Dissemination block	2	5.13	5	12.82
3 Dissemination area	34	87.18	39	100.00

There are two more 'output' files



First, a
**Postal Code/Census Geography
match file**

[OUR ULTIMATE GOAL]

Second, a
problem file

SAS - [VIEWTABLE: TMP2.testdata1]

File Edit View Tools Data Solutions Window Help

Results

- Results
- Print: The SAS System
- Freq: SUMMARY OF AUTOMATEI
- Print: ----- Records for FSA mov

	PCODE	ID
1	A0A1C0	1203123810
2	A0A1G0	1201122910
3	A0A1J0	1204046131
4	A0A1M0	1201013932
5	A0A1P0	1201228732
6	A0A1W0	1202007032
7	A0A1W0	1202113733
8	A0A1W0	1204014110
9	A0A1Y0	1201232033
10	A0A2J0	1203207521
11	A0A2T0	1203207531
12	A0A3H0	1201042733
13	A0A3K0	1201102531
14	A0A3K0	1204016131
15	A0A3L0	1202084710
16	A0A3L0	1202138933
17	A0A3V0	1201066331
18	A0A3V0	1204148310
19	A0A3X0	1203053133
20	A0A3Y0	1201018133
21	A0A3Y0	1201082233
22	A0A3Y0	1202185531
23	A0A3Y0	1202230631
24	A0A3Z0	1201144731
25	A0A3Z0	1202048921
26	A0A4E0	1203178910
27	A0A4G0	1201140231
28	A0A4K0	1204011721
29	A0B1K0	1204095210
30	A0B1W0	1204010433
31	A0B2B0	1201186931
32	A0B2M0	1203029210
33	A0B2P0	1201089033
34	A0B2P0	1202138031
35	A0B3A0	1203029231

Click on the 'Explorer' Tab to find your output files...

Results Explorer

Output - (Unutil...) Log - (Untitled) PCCFplus_6A1_t... readPCCF1.sas VIEWTABLE: T... Results Viewer - ...

C:\Users\moonj\AppData\Local\Temp

SAS - [VIEWTABLE: TMP2.testdata1]

File Edit View Tools Solutions Window Help

Explorer

Contents of 'SAS Environment'

Libraries File Shortcuts

Favorite Folders Computer

Click into **Libraries** and then **Work** to find the files

	PCODE	ID
1	A0A1C0	1203123810
2	A0A1G0	1201122910
3	A0A1J0	1204046131
4	A0A1M0	1201013932
5	A0A1P0	1201228732
6	A0A1W0	1202007032
7	A0A1W0	1202113733
8	A0A1W0	1204014110
9	A0A1Y0	1201232033
10	A0A2J0	1203207521
11	A0A2T0	1203207531
12	A0A3H0	1201042733
13	A0A3K0	1201102531
14	A0A3K0	1204016131
15	A0A3L0	1202084710
16	A0A3L0	1202138923
17	A0A3V0	1201066331
18	A0A3V0	1204148310
19	A0A3X0	1203053133
20	A0A3Y0	1201018133
21	A0A3Y0	1201082233
22	A0A3Y0	1202185531
23	A0A3Y0	1202230631
24	A0A3Z0	1201144731
25	A0A3Z0	1202048921
26	A0A4E0	1203178910
27	A0A4G0	1201140231
28	A0A4K0	1204011721
29	A0B1K0	1204095210
30	A0B1W0	1204010433
31	A0B2B0	1201186931
32	A0B2M0	1203029210
33	A0B2P0	1201089033
34	A0B2P0	1202138031
35	A0B3A0	1203029231

Results Explorer

Output - (Untitled) Log - (Untitled) PCCFplus_6A1_t... readPCCF1.sas VIEWTABLE: TM... Results Viewer - ...

C:\Users\moonj\AppData\Local\Tem

SAS - [VIEWTABLE: TMP2.testdata1]

File Edit View Tools Solutions Window Help

Explorer

Contents of 'Work'

Final_fsm... Final_hlthout

Final_prob... Formats

Input_data Testdata1_...

Testdata1_...

Accoleds_out

Matched Postal Codes and Census Geography

Accoleds_out_problem

Problems that arose, if any...

	PCODE	ID
1	A0A1C0	1203123810
2	A0A1G0	1201122910
3	A0A1J0	1204046131
4	A0A1M0	1201013932
5	A0A1P0	1201228732
6	A0A1W0	1202007032
7	A0A1W0	1202113733
8	A0A1W0	1204014110
9	A0A1Y0	1201232033
10	A0A2J0	1203207521
11	A0A2T0	1203207531
12	A0A3H0	1201042733
13	A0A3K0	1201102531
14	A0A3K0	1204016131
15	A0A3L0	1202084710
16	A0A3L0	1202138933
17	A0A3V0	1201066331
18	A0A3V0	1204148310
19	A0A3Y0	1203053133
20	A0A3Y0	1201018133
21	A0A3Y0	1201082233
22	A0A3Y0	1202185531
23	A0A3Y0	1202230631
24	A0A3Z0	1201144731
25	A0A3Z0	1202048921
26	A0A4E0	1203178810
27	A0A4G0	1201140231
28	A0A4K0	1204011721
29	A0B1K0	1204095210
30	A0B1W0	1204010433
31	A0B2B0	1201186931
32	A0B2M0	1203029210
33	A0B2P0	1201089033
34	A0B2P0	1202138031
35	A0B3A0	1203029231

Results Explorer

Output - (Untitled) Log - (Untitled) PCCFplus_6A1_t... readPCCF1.sas VIEWTABLE: TM... Results Viewer - ...

Library has 7 member(s).

C:\Users\moonj\AppData\Local\Temp\

SAS - [VIEWTABLE: TMP2.testdata1]

File Edit View Tools Solutions Window Help

Explorer

Contents of 'Work'

Final_fsam... Final_hlthout

Final_prob... Formats

Input_data Testdata1...

Testdata1_...

Open
View Columns
Print
Query
Export...
Copy Contents to Clipboard
Save as HTML...
View in Excel
View in JMP
New...
Copy
Duplicate...
Paste
Delete
Rename...
Properties

	PCODE	ID
1	A0A1C0	1203123810
2	A0A1G0	1201122910
3	A0A1J0	1204046131
4	A0A1M0	1201013932
5	A0A1P0	1201228732
6	A0A1W0	1202007032
7	A0A1W0	1202113733
8	A0A1W0	1204014110
9	A0A1Y0	1201232033
10	A0A2J0	1203207521
11	A0A2T0	1203207531
		042733
		102531
		016131
		0084710
		138933
		066331
		148310
		053133
		018133
		082233
		185531
		230631
		144731
		048921
		178910
		140231
		011721
		095210
		010433
		186931
		029210
		089033
34	A0B2F0	1202138031
35	A0B3A0	1203029231

Accoleds_out

Right-click → View in Excel

Results Explorer

Output - (Untitled) Log - (Untitled) PCCFplus_6A1_t... readPCCF1.sas VIEWTABLE: TM... Results Viewer - ...

Library has 7 member(s).

C:\Users\moonj\AppData\Local\Tem

#LN00094.xls - Excel

FILE HOME INSERT PAGE LAYOUT FORMULAS DATA REVIEW VIEW ADD-INS

Paste Clipboards Font Alignment Number Styles Cells Editing

Calibri 11 A A Wrap Text General Conditional Formatting Format as Table Cell Styles Insert Delete Format AutoSum Fill Clear Sort & Filter

A1 : ----- Records for FSA moved by Canada Post -----

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	----- Records													
2	for FSA moved													
3	--- Check the													
4	vintage of													
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														
16														

Postal Codes and Census Geography... success!



And there is a *lot* of Census Geography

ID	DPLuid	SubHRename	Comm_Name
PCODE	DPLtype	SubHRfname	AirLift
DAuid	DPLname	SLI	InstFlag
DB	ERuid	Rep_Pt_type	Resflag
DB_ir2011	ERname	RPF	Hosp
CSDuid	CARuid	PCTYPE	InuitLands
CSDname	CARname	DMT	QAIPPE
CMAuid	PopCtrRAPuid	H_DMT	QNIPPE
CMAtype	PopCtrRAname	DMTDIFF	DAIPPE
CMAname	PopCtrRAtype	PO	DNIPPE
CTname	PopCtrRAclass	QI	IMMTER
Tracted	CSize	Lat	DA06uid
SACcode	CSizeMIZ	Long	DB06uid
SACtype	HRuid	Source	DA01uid
CCSuid	HRename	Link_Source	EA96uid
FEDuid	HRfname	Link	EA91uid
FEDname	SubHRuid	PREC	EA86uid



What was the point of this again?

You can use Census geography to find Census demographics, and relate these to your Postal Codes

ID	DPLuid	SubHRename	Comm_Name
PCODE	DPLtype	SubHRfname	AirLift
DAuid	DPLname	SLI	InstFlag
DB	ERuid	Rep_Pt_type	Resflag
DB_ir2011			Hosp
CSDuid			InuitLands
CSDname			QAIPPE
CMAPid			QNIPPE
CMAtype			DAIPPE
CMAname			DNIPPE
CTname			IMMTER
Tracted			DA06uid
SACcode			DB06uid
SACtype			DA01uid
CCSuid			EA96uid
FEDuid			EA91uid
FEDname			EA86uid

NHS Profile

 **View product**

A detailed overview covering all NHS topics.

Geography levels include:

- Canada, provinces and territories
- Census divisions
- Census subdivisions
- Census metropolitan areas
- Federal electoral districts
- **Census tracts**

CANADA POSTES
POST CANADA



Geographic levels

Canada, provinces, territories, census divisions and census subdivisions

IVT (Beyond 20/20)

☐ (27,926 KB)

XML (SDMX-ML)
(compressed)

☐ (51,413 KB)

Census metropolitan areas and census agglomerations

☐ (1,988 KB)

☐ (2,539 KB)

Census metropolitan areas, tracted census agglomerations and census tracts

☒ (47,794 KB)

☐ (77,351 KB)

Census metropolitan areas, census agglomerations and census subdivisions

☐ (8,581 KB)

☐ (12,351 KB)

Canada, provinces, territories and federal electoral districts
(Representation Order)

Canada, provinces, territories and federal electoral districts
(Representation Order)

Beyond 20/20 Professional Browser - [Profile - Immigration and Ethnocultural Diversity, Aboriginal Peoples, Education and Labour, Mobility and Migration]

File Edit View Dimension Item Window Help

Profile of Cens

Geography: St. John's (001) 00000 (27.5%)

	Sex (3)	Total - Sex	Male	Female				
Profile of Cens								
Total population in private households by citizenship		193,830.0	93,615.0	100,215.0				
Canadian citizens		190,480.0	91,695.0	98,790.0				
Canadian citizens aged under 18		36,735.0	19,155.0	17,585.0				
Canadian citizens aged 18 and over		153,750.0	72,540.0	81,205.0				
Not Canadian citizens		3,345.0	1,920.0	1,425.0				
Total population in private households by immigrant status		193,830.0	93,620.0	100,215.0				
Non-immigrants		186,565.0	89,650.0	96,920.0				
Immigrants		5,880.0	3,085.0	2,790.0				
Before 1971		1,255.0	635.0	620.0				
1971 to 1980		895.0	485.0	415.0				
1981 to 1990		640.0	375.0	265.0				
1991 to 2000		900.0	435.0	475.0				
2001 to 2011		2,185.0	1,160.0	1,025.0				
2001 to 2005		570.0	305.0	265.0				
2006 to 2011		1,615.0	850.0	765.0				
Non-permanent residents		1,385.0	885.0	505.0				
Total immigrant population in private households by age		5,875.0	3,090.0	2,790.0				
Under 5 years		950.0	400.0	550.0				
5 to 14 years		1,115.0	635.0	480.0				
15 to 24 years		875.0	490.0	390.0				
25 to 44 years		2,625.0	1,415.0	1,205.0				
45 years and over		315.0	150.0	160.0				
Total population in private households by immigrant status		193,825.0	93,615.0	100,215.0				
Non-immigrants		186,570.0	89,650.0	96,920.0				
Born in province of residence		170,365.0	81,620.0	88,745.0				
Born outside province of residence		16,205.0	8,035.0	8,170.0				
Immigrants		5,875.0	3,085.0	2,795.0				
Americas		1,140.0	535.0	610.0				

For Help, press F1 960/960 Total population in private household ENG

File Edit View Dimension Item Window Help					
Profile of Cens					
Geography (i): St. John's (001) 00000 (27.5%)					
	Sex (3) (i)	Total - Sex	Male	Female	
Profile of Cens					
Total population in private households by citizenship	(i)	193,830.0	93,615.0	100,210.0	
Canadian citizens		188,185.0	91,205.0	98,790.0	
Canadian citizens aged under 18		155.0	75.0	17,585.0	
Canadian citizens aged 18 and over		188,030.0	91,130.0	81,205.0	
Not Canadian citizens		5,645.0	2,410.0	1,425.0	
Total population in private households by immigrant status		20.0	20.0	100,215.0	
Non-immigrants		150.0	50.0	96,920.0	
Immigrants		185.0	185.0	2,790.0	
Before 1971		185.0	185.0	620.0	
1971 to 1980		185.0	185.0	415.0	
1981 to 1990		175.0	175.0	265.0	
1991 to 2000		300.0	300.0	475.0	
2001 to 2011	(i)	2,185.0	1,160.0	1,025.0	
2001 to 2005		570.0	305.0	265.0	
2006 to 2011	(i)	1,615.0	850.0	765.0	
Non-permanent residents	(i)	1,385.0	885.0	505.0	
Total immigrant population in private households by age group	(i)	5,875.0	3,090.0	2,790.0	
Under 5 years		950.0	400.0	550.0	
5 to 14 years		1,115.0	635.0	480.0	
15 to 24 years		875.0	490.0	390.0	
25 to 44 years		2,625.0	1,415.0	1,205.0	
45 years and over		315.0	150.0	160.0	
Total population in private households by immigrant status	(i)	193,825.0	93,615.0	100,215.0	
Non-immigrants	(i)	186,570.0	89,650.0	96,920.0	
Born in province of residence		170,365.0	81,620.0	88,745.0	
Born outside province of residence		16,205.0	8,035.0	8,170.0	
Immigrants	(i)	5,875.0	3,085.0	2,795.0	
Americas		1,140.0	535.0	610.0	

Drag
'Geography'
dimension to
Rows

Sex (3) i: Female			Profile of Cens	Total population aged 15 y...	No certificate, diploma or d...	High school diploma or...	Postsecondary certificate,...	Apprentice...	College, CEGEP or ot...	University certificate ...	University certificate, di...	Bachelor's degree
Geography												
St. John's (001) 00000 (27.5%)				85,475.0	13,820.0	20,500.0	51,150.0	6,875.0	20,840.0	3,570.0	19,865.0	13,260.0
0002.00 (0010002.00) 00000 (30.3%)				2,235.0	365.0	560.0	1,315.0	80.0	500.0	50.0	685.0	390.0
0003.01 (0010003.01) 00000 (38.4%)				1,955.0	325.0	470.0	1,165.0	150.0	435.0	105.0	470.0	375.0
0003.02 (0010003.02) 00000 (36.9%)				2,415.0	365.0	525.0	1,525.0	250.0	620.0	115.0	535.0	400.0
0004.00 (0010004.00) 00000 (26.2%)				3,115.0	415.0	615.0	1,885.0	255.0	715.0	125.0	640.0	555.0
0005.01 (0010005.01) 00000 (47.2%)				1,115.0	165.0	245.0	605.0	75.0	215.0	35.0	175.0	125.0
0005.02 (0010005.02) 00000 (44.8%)				1,115.0	165.0	245.0	605.0	75.0	215.0	35.0	175.0	170.0
0006.00 (0010006.00) 00000 (42.0%)				1,115.0	165.0	245.0	605.0	75.0	215.0	35.0	175.0	175.0
0008.00 (0010008.00) 00000 (41.5%)				840.0	170.0	100.0	570.0	110.0	130.0	20.0	310.0	180.0
0009.00 (0010009.00) 00000 (34.9%)				260.0	20.0	55.0	175.0	0.0	30.0	0.0	75.0	35.0
0010.00 (0010010.00) 00000 (40.3%)				755.0	60.0	110.0	585.0	0.0	220.0	0.0	325.0	130.0
0011.00 (0010011.00) 00000 (38.0%)				1,240.0	350.0	205.0	685.0	60.0	280.0	70.0	275.0	170.0
0012.00 (0010012.00) 00000 (38.9%)				1,305.0	280.0	390.0	640.0	105.0	190.0	70.0	270.0	150.0
0013.00 (0010013.00) 00000 (31.8%)				835.0	25.0	240.0	570.0	40.0	80.0	95.0	360.0	185.0
0014.00 (0010014.00) 00000 (35.7%)				1,455.0	215.0	315.0	930.0	75.0	195.0	65.0	595.0	335.0
0015.01 (0010015.01) 00000 (34.4%)				2,025.0	375.0	565.0	1,080.0	100.0	430.0	65.0	485.0	310.0
0015.02 (0010015.02) 00000 (31.6%)				1,655.0	275.0	405.0	975.0	165.0	410.0	65.0	495.0	295.0
0015.03 (0010015.03) 00000 (28.1%)				1,305.0	170.0	245.0	790.0	130.0	390.0	165.0	810.0	435.0
0015.04 (0010015.04) 00000 (27.0%)				1,115.0	165.0	245.0	605.0	170.0	570.0	150.0	975.0	610.0
0016.01 (0010016.01) 00000 (34.1%)				1,240.0	350.0	205.0	685.0	210.0	375.0	0.0	680.0	540.0
0016.02 (0010016.02) 00000 (23.6%)				1,440.0	240.0	330.0	870.0	140.0	660.0	115.0	555.0	395.0
0017.00 (0010017.00) 00000 (30.4%)				80.0	375.0	95.0	415.0	80.0	375.0	95.0	415.0	295.0
0100.01 (0010100.01) 00000 (37.6%)				205.0	655.0	55.0	370.0	205.0	655.0	55.0	370.0	270.0
0100.04 (0010100.04) 00000 (38.8%)				125.0	420.0	90.0	345.0	125.0	420.0	90.0	345.0	315.0
0170.01 (0010170.01) 00000 (37.1%)				95.0	390.0	50.0	290.0	95.0	390.0	50.0	290.0	160.0
0170.02 (0010170.02) 00000 (29.4%)				80.0	475.0	90.0	560.0	80.0	475.0	90.0	560.0	405.0
0171.00 (0010171.00) 00000 (37.8%)				120.0	605.0	45.0	275.0	120.0	605.0	45.0	275.0	230.0
0172.02 (0010172.02) 00000 (31.6%)				195.0	880.0	185.0	405.0	195.0	880.0	185.0	405.0	275.0
0172.03 (0010172.03) 00000 (17.1%)				80.0	255.0	40.0	155.0	80.0	255.0	40.0	155.0	155.0
0172.04 (0010172.04) 00000 (37.4%)				195.0	550.0	100.0	280.0	195.0	550.0	100.0	280.0	185.0
0172.05 (0010172.05) 00000 (26.0%)				125.0	870.0	165.0	400.0	125.0	870.0	165.0	400.0	260.0
0172.06 (0010172.06) 00000 (26.5%)				90.0	325.0	20.0	175.0	90.0	325.0	20.0	175.0	120.0
0200.01 (0010200.01) 00000 (33.8%)				180.0	410.0	85.0	585.0	180.0	410.0	85.0	585.0	320.0
0200.02 (0010200.02) 00000 (31.2%)				3,305.0	405.0	505.0	2,395.0	235.0	950.0	110.0	760.0	545.0
0200.03 (0010200.03) 00000 (37.1%)				1,555.0	250.0	425.0	875.0	110.0	450.0	100.0	220.0	110.0
0201.00 (0010201.00) 00000 (39.7%)				1,185.0	295.0	285.0	610.0	75.0	250.0	25.0	260.0	175.0
0202.01 (0010202.01) 00000 (35.6%)				715.0	70.0	130.0	525.0	25.0	285.0	0.0	200.0	170.0
0202.02 (0010202.02) 00000 (34.8%)				1,315.0	110.0	335.0	870.0	80.0	370.0	50.0	370.0	245.0
0202.04 (0010202.04) 00000 (28.1%)				3,230.0	400.0	695.0	2,140.0	430.0	865.0	150.0	690.0	470.0
0202.05 (0010202.05) 00000 (28.5%)				3,825.0	550.0	620.0	2,660.0	355.0	1,045.0	210.0	1,050.0	750.0
0300.00 (0010300.00) 00000 (29.6%)				3,185.0	420.0	840.0	1,925.0	285.0	920.0	95.0	625.0	485.0
0301.01 (0010301.01) 00000 (27.7%)				2,725.0	620.0	565.0	1,535.0	245.0	705.0	55.0	525.0	380.0
0301.02 (0010301.02) 00000 (27.8%)				2,510.0	605.0	590.0	1,315.0	420.0	535.0	35.0	315.0	250.0
0302.00 (0010302.00) 00000 (49.6%)				1,825.0	285.0	455.0	1,085.0	345.0	500.0	35.0	215.0	145.0

And all the NHS Profile variables

So, in the NHS
Profile, we have
Census Geography
In this case,
Census Tracts

Profile of Cens		Total population aged 15 y...	No certificate, diploma or d...	High school diploma or...	Postsecondary certificate,...	Apprentice...	College, CEGEP or ot...	University certificate ...	University certificate, di...	Bachelor's degree
Geography										
St. John's (001) 00000 (27.5%)		85,475.0	13,820.0	20,500.0	51,150.0	6,875.0	20,840.0	3,570.0	19,865.0	13,260.0
0002.00 (0010002.00) 00000 (30.3%)		2,235.0	365.0	560.0	1,315.0	80.0	500.0	50.0	685.0	390.0
0003.01 (0010003.01) 00000 (38.4%)		1,955.0	325.0	470.0	1,165.0	150.0	435.0	105.0	470.0	375.0
0003.02 (0010003.02) 00000 (36.9%)		2,415.0	365.0	525.0	1,525.0	250.0	620.0	115.0	535.0	400.0
0004.00 (0010004.00) 00000 (26.2%)		3,550.0	800.0	895.0	1,855.0	230.0	690.0	170.0	755.0	555.0
0005.01 (0010005.01) 00000 (47.2%)		1,250.0	320.0	385.0	545.0	75.0	260.0	25.0	185.0	125.0
0005.02 (0010005.02) 00000 (44.8%)		1,470.0	455.0	400.0	615.0	85.0	250.0	0.0	230.0	170.0
0006.00 (0010006.00) 00000 (42.0%)		1,420.0	350.0	340.0	725.0	125.0	175.0	45.0	390.0	175.0
0008.00 (0010008.00) 00000 (41.5%)		840.0	170.0	100.0	570.0	110.0	130.0	20.0	310.0	180.0
0009.00 (0010009.00) 00000 (34.9%)		260.0	20.0	50.0	190.0	10.0	100.0	0.0	75.0	35.0
0010.00 (0010010.00) 00000 (40.3%)		755.0	60.0	110.0	585.0	10.0	200.0	0.0	325.0	130.0
0011.00 (0010011.00) 00000 (38.0%)		1,240.0	350.0	205.0	785.0	10.0	200.0	0.0	275.0	170.0
0012.00 (0010012.00) 00000 (38.9%)		1,305.0	280.0	390.0	635.0	10.0	200.0	0.0	270.0	150.0
0013.00 (0010013.00) 00000 (31.8%)		835.0	25.0	240.0	575.0	10.0	200.0	0.0	360.0	185.0
0014.00 (0010014.00) 00000 (35.7%)		1,455.0	215.0	315.0	925.0	10.0	200.0	0.0	595.0	335.0
0015.01 (0010015.01) 00000 (37.6%)		375.0	565.0	565.0	375.0	10.0	200.0	0.0	485.0	310.0
0015.02 (0010015.02) 00000 (37.6%)		210.0	390.0	390.0	210.0	10.0	200.0	0.0	495.0	295.0
0015.03 (0010015.03) 00000 (37.6%)		255.0	510.0	510.0	255.0	10.0	200.0	0.0	810.0	435.0
0015.04 (0010015.04) 00000 (37.6%)		230.0	515.0	515.0	230.0	10.0	200.0	0.0	975.0	610.0
0016.01 (0010016.01) 00000 (37.6%)		220.0	260.0	260.0	220.0	10.0	200.0	0.0	680.0	540.0
0016.02 (0010016.02) 00000 (37.6%)		235.0	660.0	660.0	235.0	10.0	200.0	0.0	555.0	395.0
0017.00 (0010017.00) 00000 (37.6%)		130.0	215.0	215.0	130.0	10.0	200.0	0.0	415.0	295.0
0100.01 (0010100.01) 00000 (37.6%)		2,360.0	465.0	600.0	1,295.0	10.0	200.0	0.0	370.0	270.0
0100.04 (0010100.04) 00000 (38.8%)		1,730.0	320.0	425.0	1,085.0	10.0	200.0	0.0	345.0	315.0
0170.01 (0010170.01) 00000 (37.1%)		1,450.0	220.0	395.0	1,035.0	10.0	200.0	0.0	290.0	160.0
0170.02 (0010170.02) 00000 (29.4%)		1,880.0	210.0	460.0	1,210.0	10.0	200.0	0.0	560.0	405.0
0171.00 (0010171.00) 00000 (37.8%)		2,055.0	440.0	580.0	1,035.0	10.0	200.0	0.0	275.0	230.0
0172.02 (0010172.02) 00000 (31.6%)		2,855.0	380.0	810.0	1,665.0	195.0	880.0	185.0	405.0	275.0
0172.03 (0010172.03) 00000 (17.1%)		935.0	145.0	250.0	535.0	80.0	255.0	40.0	155.0	155.0
0172.04 (0010172.04) 00000 (37.4%)		2,060.0	415.0	510.0	1,135.0	195.0	550.0	100.0	280.0	185.0
0172.05 (0010172.05) 00000 (26.0%)		2,410.0	300.0	550.0	1,560.0	125.0	870.0	165.0	400.0	260.0
0172.06 (0010172.06) 00000 (26.5%)		920.0	115.0	200.0	610.0	90.0	325.0	20.0	175.0	120.0
0200.01 (0010200.01) 00000 (33.8%)		1,855.0	235.0	355.0	1,270.0	180.0	410.0	85.0	585.0	320.0
0200.02 (0010200.02) 00000 (31.2%)		3,500.0	480.0	965.0	2,055.0	235.0	950.0	110.0	760.0	545.0
0200.03 (0010200.03) 00000 (37.1%)		1,555.0	250.0	425.0	875.0	110.0	450.0	100.0	220.0	110.0
0201.00 (0010201.00) 00000 (39.7%)		1,185.0	295.0	285.0	610.0	75.0	250.0	25.0	260.0	175.0
0202.01 (0010202.01) 00000 (35.6%)		715.0	70.0	130.0	525.0	25.0	285.0	0.0	200.0	170.0
0202.02 (0010202.02) 00000 (34.8%)		1,315.0	110.0	335.0	870.0	80.0	370.0	50.0	370.0	245.0
0202.04 (0010202.04) 00000 (28.1%)		3,230.0	400.0	695.0	2,140.0	430.0	865.0	150.0	690.0	470.0
0202.05 (0010202.05) 00000 (28.5%)		3,825.0	550.0	620.0	2,660.0	355.0	1,045.0	210.0	1,050.0	750.0
0301.01 (0010301.01) 00000 (27.7%)		2,725.0	620.0	565.0	1,535.0	0.0	0.0	0.0	0.0	0.0
0301.02 (0010301.02) 00000 (27.8%)		2,510.0	605.0	590.0	1,315.0	420.0	535.0	35.0	315.0	250.0
0302.00 (0010302.00) 00000 (49.6%)		1,825.0	285.0	455.0	1,085.0	345.0	500.0	35.0	215.0	145.0

Take note of the
Census Geography

St. John's Census
Tract 301.01 in
CMA 001
So CT code:
0010301.01

Sex (3) Female

Profile of Cens	Total population aged 15 y...	No certificate, diploma or d...	High school diploma or...	Postsecondary certificate,...	Apprentice...	College, CEGEP or ot...	University certificate ...	University certificate, di...	Bachelor's degree
Geography									
St. John's	85,475.0	13,820.0	20,500.0	51,150.0	6,875.0	20,840.0	3,570.0	19,865.0	13,260.0
0010002.00	2,235.0	365.0	560.0	1,315.0	80.0	500.0	50.0	685.0	390.0
0010003.01	1,955.0	325.0	470.0	1,165.0	150.0	435.0	105.0	470.0	375.0
0010003.02	2,415.0	365.0	525.0	1,525.0	250.0	620.0	115.0	535.0	400.0
0010004.00	3,550.0	800.0	895.0	1,855.0	230.0	690.0	170.0	755.0	555.0
0010005.01	1,250.0	320.0	385.0	545.0	75.0	260.0	25.0	185.0	125.0
0010005.02	1,470.0	455.0	400.0	615.0	85.0	250.0	0.0	230.0	170.0
0010006.00	1,420.0	350.0	340.0	725.0	125.0	175.0	45.0	390.0	175.0
0010008.00	840.0	170.0	100.0	570.0	50.0	270.0	0.0	310.0	180.0
0010009.00	260.0	20.0	50.0	190.0	0.0	120.0	0.0	75.0	35.0
0010010.00	755.0	60.0	110.0	585.0	0.0	325.0	0.0	325.0	130.0
0010011.00	1,240.0	350.0	200.0	790.0	0.0	275.0	0.0	275.0	170.0
0010012.00	1,305.0	280.0	390.0	635.0	0.0	270.0	0.0	270.0	150.0
0010013.00	835.0	25.0	240.0	575.0	0.0	360.0	0.0	360.0	185.0
0010014.00	215.0	31.0	100.0	184.0	0.0	595.0	0.0	595.0	335.0
0010015.01	375.0	56.0	150.0	275.0	0.0	485.0	0.0	485.0	310.0
0010015.02	210.0	39.0	100.0	210.0	0.0	495.0	0.0	495.0	295.0
0010015.03	255.0	51.0	150.0	255.0	0.0	810.0	0.0	810.0	435.0
0010015.04	220.0	26.0	100.0	220.0	0.0	975.0	0.0	975.0	610.0
0010016.01	235.0	66.0	150.0	235.0	0.0	680.0	0.0	680.0	540.0
0010016.02	130.0	21.0	70.0	130.0	0.0	555.0	0.0	555.0	395.0
0010017.00	465.0	60.0	210.0	465.0	0.0	415.0	0.0	415.0	295.0
0010100.01	320.0	42.0	100.0	320.0	0.0	370.0	0.0	370.0	270.0
0010100.04	220.0	39.0	100.0	220.0	0.0	345.0	0.0	345.0	315.0
0010170.01	210.0	46.0	100.0	210.0	0.0	290.0	0.0	290.0	160.0
0010170.02	440.0	59.0	200.0	440.0	0.0	560.0	0.0	560.0	405.0
0010171.00	380.0	81.0	100.0	380.0	0.0	275.0	0.0	275.0	230.0
0010172.02	935.0	145.0	250.0	935.0	0.0	185.0	0.0	185.0	275.0
0010172.03	2,060.0	415.0	510.0	1,135.0	195.0	550.0	100.0	280.0	185.0
0010172.04	2,410.0	300.0	550.0	1,560.0	125.0	870.0	165.0	400.0	260.0
0010172.05	920.0	115.0	200.0	610.0	90.0	325.0	20.0	175.0	120.0
0010172.06	1,855.0	235.0	355.0	1,270.0	180.0	410.0	85.0	585.0	320.0
0010200.01	3,500.0	480.0	965.0	2,055.0	235.0	950.0	110.0	760.0	545.0
0010200.02	1,555.0	250.0	425.0	875.0	110.0	450.0	100.0	220.0	110.0
0010200.03	1,185.0	295.0	285.0	610.0	75.0	250.0	25.0	260.0	175.0
0010201.00	715.0	70.0	130.0	525.0	25.0	285.0	0.0	200.0	170.0
0010202.01	1,315.0	110.0	335.0	870.0	80.0	370.0	50.0	370.0	245.0
0010202.02									
0010301.01	2,725.0	620.0	565.0	1,535.0	245.0	705.0	55.0	525.0	380.0
0010301.02	2,510.0	605.0	590.0	1,315.0	420.0	535.0	35.0	315.0	250.0

Or, using the
'label' command,
show just the
code

St. John's Census
Tract 301.01 in
CMA 001
So CT code:
0010301.01

Now, we take that Census Geography, and link it to our Postal Codes...



ID	PCODE	DAuid	DB	DB_ir2011	CSDuid	CSDname	CMApuid	CMAtype	CMAname	CTname	Tracted
1204046131	A0A1J0	10010193	3	F	1001519	St. John's	10001	B	St. John's	1	1
1201013932	A0A1M0	10010500	9	F					Moderate metropolitan influenced zone (N.L.) / Zone d'influence métropolitaine	9910	0
1201140231	A0A4G0	10010504	26	F					Moderate metropolitan influenced zone (N.L.) / Zone d'influence métropolitaine	9910	0
1201122910	A0A1G0	10010535	8	F					Bay Roberts	9910	0
1204148310	A0A3V0	10010536	10	F					Bay Roberts	9910	0
1201066331	A0A3V0	10010542	5	F					Bay Roberts	9910	0
1204014110	A0A1W0	10010550	2	F					Strong metropolitan influenced zone (N.L.) / Zone d'influence métropolitaine forte (T.-N.-L.)	9910	0
1201232033	A0A1Y0	10010560	6	F	1001456	Colliers	10996	G	Strong metropolitan influenced zone (N.L.) / Zone d'influence métropolitaine forte (T.-N.-L.)	9910	0
1203207521	A0A2J0	10010586	2	F	1001485	Conception Bay South	10001	B	St. John's	301.01	1

St. John's Census Tract 301.01 in CMA 001 So CT code: 0010301.01

C:\Users\moonj\Desktop\PCCF6A1\Sample\pc

A0A1C0 1203123810
A0A1G0 1201122910
A0A1J0 1204046131
A0A1M0 1201013932
A0A1P0 1201228732
A0A1W0 1202007032
A0A1W0 1202113733
A0A1W0 1204014110
A0A1Y0 1201232033
A0A2J0 1203207521
A0A2T0 1203207531
A0A3H0 1201042733
A0A3K0 1201102531
A0A3K0 1204016131
A0A3L0 1202084710
A0A3L0 1202138933
A0A3U0 1201066331
A0A3U0 1204148310
A0A3X0 1203053133
A0A3Y0 1201018133
A0A3Y0 1201082233
A0A3Y0 1202185531
A0A3Y0 1202230631

So, we've gone
from Postal Codes

To Census
Geography

ID	PCODE	DAuid	DB	DB_ir2011	CSDuid	CSDname	CMApuid	CMAtype	CMAname	CTname	Tracted
1204046131	A0A1J0	10010193	3	F	1001519	St. John's	10001	B	St. John's	1	1
					1001339	Division No. 1, Subd. G	10997	H	Moderate metropolitan influenced zone (N.L.) / Zone d'influence métropolitaine	9910	0
					1001357	Division No. 1, Subd. H	10997	H	Moderate metropolitan influenced zone (N.L.) / Zone d'influence métropolitaine	9910	0
					1001409	Bay Roberts	10005	D	Bay Roberts	9910	0
1204148310	A0A3V0	10010536	10	F	1001409	Bay Roberts	10005	D	Bay Roberts	9910	0
1201066331	A0A3V0	10010542	5	F	1001409	Bay Roberts				9910	0
1204014110	A0A1W0	10010550	2	F	1001437	Cupids			h influenced 'influence e (T.-N.-L.)	9910	0
1201232033	A0A1Y0	10010560	6	F	1001456	Colliers			h influenced	9910	0
									zone (N.L.) / Zone d'influence métropolitaine forte (T.-N.-L.)		
1203207521	A0A2J0	10010586	2	F	1001485	Conception Bay South	10001	B	St. John's	301.01	1

And then to Census/NHS
demographic statistics

Beyond 20/20 Professional Browser - [Profile - Immigration and Ethnocultural Diversity, Aboriginal Peo

File Edit View Dimension Item Window Help

Sex (3) Female



Geography	Profile of Cens	Total population aged 15 y...	No certificate, diploma or d...	High school diploma or...	Postsecondary certificate,...	Apprentice...	College, CEGEP or ot...	University certificate ...	University certificate, di...	Bachelor's degree
0010300.00		3,185.0	420.0	840.0	1,925.0	285.0	920.0	95.0	625.0	485.0
0010301.01		3,795.0	630.0	565.0	1,635.0	345.0	795.0	55.0	595.0	300.0
0010301.02		2,510.0	605.0	590.0	1,315.0	420.0	535.0	35.0	315.0	250.0
0010302.00		1,825.0	285.0	455.0	1,085.0	345.0	500.0	35.0	215.0	145.0

For further study...



http://library.queensu.ca/data/how_to_guides

Postal Code Conversion File Plus (PCCF+)

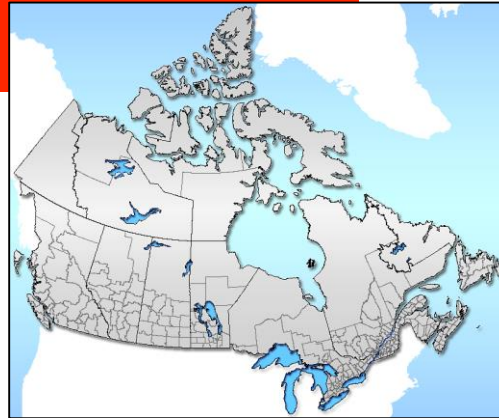
- [PCCF+ Guide](#) : How to take Postal Codes in a text file, convert to a SAS dataset, and then run PCCF+ to match Postal Codes with Census geography
- [PCCF+ YouTube Video](#) : Video to accompany the PCCF+ Guide
- [readPCCF1.sas](#): Program to convert Postal Codes in a text file into a SAS dataset

You  ^{CA} <https://www.youtube.com/watch?v=ECoGzP26NbE>

Note: filenames & paths used in this guide may not match those used in YouTube.

PCCF+ Reference Guide from Statistics Canada:

<http://www.statcan.gc.ca/pub/92-154-g/92-154-g2013001-eng.htm>



Questions?