

PCCF Single Link Indicator (SLI) vs PCCF+

You should consider using PCCF+ rather than the regular PCCF (with SLI=1) in any of the following apply.

(1) You want to use variables present on PCCF+ which are not present in regular PCCF:

- Neighbourhood income quintile
- Immigrant tercile
- Health Regions and Alternate Health Regions
- Airstage (isolated fly-in communities) ...

(2) Your file is less than perfect with respect to postal codes.

- Most files will include some postal codes which have never existed, but if the first 5 characters exist, the PCCF+ coding will be done at that level.
- Sensitive files (such as for AIDS) may omit the last digit of the postal code, but can still produce good quality coding in urban area.
- Some files may only contain the first three digits of the postal code (FSA). The coding will be much cruder, but roughly comparable to what can be accomplished with 5-digit US Zip Code

(3) You want help to evaluate the quality of the postal code data on your file. With the regular PCCF, you can tell if a postal ever existed, and some rough measures of quality, but...

Just because a postal code is found on the regular PCCF, that doesn't mean it is not a problem.

The PCCF+ problem file identifies (through the Canada Post building name) postal codes for hospitals, nursing homes, prisons, university residences, and non-residential premises such as coroners' offices, children's aid societies, public trustees, government offices, etc., which just might (depending on your study) indicate a need for additional care for such records, or that you should try to find alternative postal codes for those records.

- On a birth file, the mother's postal code shouldn't be that of the hospital.
- Nobody's usual place of residence should be at a coroner's office, H& R Block, the UPS Store, or Mailboxes, Etc.
- On a file for children, the office of the Children's Aid Society or Public Trustee is not where the child really lives.
- People do live in prisons and mental health facilities, but wouldn't you like to know if you have such cases on your file?
- On PCCF+, the residence flag identifies "business buildings" which are known to be populated (+), as well as those known to be unpopulated (-).

(4) The "vintage" of the postal codes on your file spans more than one census. PCCF+ assigns DA or EA from each census from 1981 through 2011, so you can use time-varying variables from the most relevant period. For example, you may have air pollution, cancer incidence, or hospital morbidity data over many years.

(5) You want to do better coding in rural areas. PCCF+ uses population weights derived from the census to probabilistically assign geographic codes in rural areas, across all DAs served by a given postal code. By contrast, the single link indicator will assign everyone with the same rural postal code to the same DA (and not necessarily the "best" DA, but just the DA containing the DB with the highest population). On analysis of such coding, forcing everyone into a single DA results in "hot" spots surrounded by "cold" spots.

(6) If your file includes postal codes used by residents of "incompletely enumerated Indian Reserves" (even if those postal codes are shared persons living with off-reserve), those postal codes will not be properly coded by the regular PCCF. They will tend to be assigned to the non-reserve areas. PCCF+ includes census population weights adjusted to account for estimates of the population living on the incompletely enumerated reserves.