**Dictionary of Mission Categories**

“Regular” or Common-Code(“Specialty”) org (`org.type`)

* R = Regular (>19)
* S = Common-Code (01 -19)

Broad Category (1 – 12) (`broad.category)

* 1 – Arts, Culture, and Humanities
* 2 – Education (Non university)
* 3 – Environment and Animals
* 4 – Health (non-hospital)
* 5 – Human Services
* 6 - International, Foreign Affairs
* 7 – Public, Societal Benefit
* 8 – Religion Related
* 9 – Mutual/Membership Benefit
* 10 – Unknown/ Unclassified
* 11 – University
* 12 – Hospital

Major Group (A – Z) (`letter`)

* Same levels as NTEE Codes

Two Digits (`two.digit`)

* If org.type == “R”, then the 2 digits in the full NTEE Code
* If org.type == “S”, then the FIRST 2 digits in the full NTEE Code
  + Some common code orgs have 4 digits, only take the first 2. The second 2 will be used in `s.further`

Letter + tens place (`letter1`)

* Common codes – only for common code orgs, not for regular orgs
  + Major Group + 0
* Regular orgs only. Mean varies by level 3 value (major group)
  + Major Group + ten’s place in regular orgs NTEE codebook
  + Note, 2-9 each value exists entirely inside level 3. The meaning of this level will vary for each value of major group

Letter + tens place + ones place (`letter2`)

* For common code orgs
  + Letter + (first) 2 digits
* For regular orgs
  + Letter + 00
  + Note, ones place exists entirely inside the `letter1` which is entirely inside the `letter`. Of this variable varies by combinator of `letter` and `letter1`.

Further Categorization (for common code orgs ONLY) (`s.further`)

* If `org.type` == R, then NA
* If `org.type` == S
  + If original NTEE common code digits 3 and 4, then these digits
  + If original NTEE common does does not have digits 3 and 4, then NA

**Mission Closeness Levels:**

If input org and comparison org do not have the same org.type, assign maximum distance

If BOTH input org and comparison org have org.type == “R”

* Level 1: Broad Category (`broad.category)
* Level 2: Major Group (`letter`)
* Level 3: `letter1`
* Level 4: `letter2`

If BOTH input or and comparison org have org.type == “S”

* Level 2: `two.digit`
  + Groups: 01, 02, 03, 05, >10 (support)
* Level 1: Broad Category (`broad.category)
* Level 3: `letter`
* Level 4: `s.further`
  + Using the full 3rd and 4th digits
* Level 5 : if there is not enough(<10) in the s.further category, match on the 3rd digit only.

**Dictionary of Geographic Levels**

US State

* Are they a US state?
  + True if US state
  + False if Puerto Rico (other territories not in the data set yet)

Location Type

* Rural or Metropolitan

Graphical Distance

* Distance on states as a graph (data-wrangle/state-distance-matrix.csv)

**Geography Closeness Levels**

Level 1: US State

Level 2: Location Type

Level 3: Graphical Distance