

```
1  /*****
2  Brendan Elliott
3  Thesis Data Management
4  11/29/2024
5  *****/
6
7
8  capture log close
9
10
11  *** Create Log File ***
12  log using
13  "/Users/brendanelliott/Desktop/predoc_data_task/program/Brendan_Elli
14  ott_Task.log", replace
15
16  /*****
17  *****/
18      1. Why did I write this code?
19      To merge and summarize my data for assignment 5 for my
20      thesis.
21
22      2. Table of Contents
23
24      3. Input/Outputs
25
26      4. Technical Information
27
28  *****/
29
30  ***Create Directories***
31  global desktop "/Users/brendanelliott/Desktop"
32
33  global mainpath "$desktop/Thesis"
34
35  global graphs "$mainpath/graphs"
36
37  graph set window fontface "Times New Roman"
38  global titlesize "size(medium)" //graph titles will have size medium
39  global subsize "size(medsmall)" //axis titles and legends will
40  have size medsmall
41  global labsiz "labsiz(small)" //axis labels will have size small
42
```

```
43 *** Installing Packages ***
44
45 /*
46 ssc install elabel, replace
47 ssc install ereplace, replace
48 ssc install tabstatmat, replace
49 ssc install palettes, replace
50 ssc install colrspc, replace
51 ssc install schemepack, replace
52 ssc install blindschemes, replace
53 ssc install brewscheme, replace
54 */
55
56 /*****
57 Question 1
58 *****/
59
60
61
62
63
64
65 ***NEW 2018 place data ***
66 use "$mainpath/data/2018place_nogini.dta", clear
67
68 merge 1:1 gisjoin using "$mainpath/data/2018place_gini.dta"
69 drop _merge
70
71 gen placename_clean = lower(trim(place))
72 replace placename_clean = regexr(placename_clean, "( cdp| city|
town)$", "")
73 gen identifier = string(statea, "%02.0f") + string(placea, "%05.0f")
74
75 rename stusab stateab
76
77 *drop unwanted geographic variables*
78 drop gisjoin regiona divisiona state statea countya cousuba tracta
blkgrp concita aianhha res_onlya trusta aihhtli aitsa anrca cbsaa
csaa metdiva nectaa cnectaa nectadiva uaa cdcurra sldua sldla
zcta5a submcda sdelma sdseca sdunia pci pumaa geo_id bttra btbga
tl_geo_id name_e
79
80 *rename race variables*
81 rename (aqnfe001 aqnge002 aqnge003 aqnge004 aqnge005 aqnge006
aqnge007 aqnge008) (pop2018place whitealone2018place
blkalone2018place nativealone2018place asianalone2018place
pialone2018place otheralone2018place two_or_more2018place)
82
```

```

83 *drop unneeded race variables*
84 drop aqnge009 aqnge010
85
86 *calculate weighted average for commuting time***
87 gen weighted_sum_commute = 2.5*aqn7e002 + 7*aqn7e003 + 12*aqn7e004
+ 17*aqn7e005 + 22*aqn7e006 + 27*aqn7e007 + 32*aqn7e008 + 37*
aqn7e009 + 42*aqn7e010 + 52*aqn7e011 + 74.5*aqn7e012 + 95*aqn7e013
88
89 gen avgcommtime2018place = weighted_sum_commute / aqn7e001
90
91 drop weighted_sum_commute aqn7e001 aqn7e002 aqn7e003 aqn7e004
aqn7e005 aqn7e006 aqn7e007 aqn7e008 aqn7e009 aqn7e010 aqn7e011
aqn7e012 aqn7e013
92
93 *drop MoE variables*
94 drop name_m aqnge001 aqnfm001 aqngm001 aqngm002 aqngm003 aqngm004
aqngm005 aqngm006 aqngm007 aqngm008 aqngm009 aqngm010 aqn7m001
aqn7m002 aqn7m003 aqn7m004 aqn7m005 aqn7m006 aqn7m007 aqn7m008
aqn7m009 aqn7m010 aqn7m011 aqn7m012 aqn7m013 aqpkm001 aqpkm002
aqpkm003 aqpkm004 aqpkm005 aqpkm006 aqpkm007 aqpkm008 aqpkm009
aqpkm010 aqpkm011 aqpkm012 aqpkm013 aqpkm014 aqpkm015 aqpkm016
aqpkm017 aqpkm018 aqpkm019 aqpkm020 aqpkm021 aqpkm022 aqpkm023
aqpkm024 aqpkm025 aqpzm001 aqpzm002 aqpzm003 aqpzm004 aqpzm005
aqpzm006 aqpzm007 aqpzm008 aqp6m001 aqu4m001 aq8tm001
95
96 *rename GINI*
97 rename aq8te001 gini2018place
98
99 gen bach_prop_place2018 = (aqpke022 + aqpke023 + aqpke024 +
aqpke025) / aqpke001
100
101 drop aqpke001 aqpke002 aqpke003 aqpke004 aqpke005 aqpke006 aqpke007
aqpke008 aqpke009 aqpke010 aqpke011 aqpke012 aqpke013 aqpke014
aqpke015 aqpke016 aqpke017 aqpke018 aqpke019 aqpke020 aqpke021
aqpke022 aqpke023 aqpke024 aqpke025
102
103 *Drop poverty data; can reinclude if I need*
104 drop aqpze001 aqpze002 aqpze003 aqpze004 aqpze005 aqpze006 aqpze007
aqpze008
105
106 rename aqp6e001 med_hh_inc2018place
107
108 rename aqu4e001 med_home_price2018place
109
110 duplicates tag identifier, gen(dup_id)
111 drop if dup_id != 0
112 drop dup_id
113

```

```
114 save "$mainpath/data/2018place_clean.dta", replace
115
116
117 ***NEW 2018 cousub data***
118 use "$mainpath/data/2018cousub_nogini.dta", clear
119
120 merge 1:1 gisjoin using "$mainpath/data/2018cousub_gini.dta"
121 drop _merge
122
123 gen identifier = string(statea, "%02.0f") + string(cousuba,
"%05.0f")
124 rename stusab stateab
125
126 drop gisjoin regiona divisiona state statea county countya placea
tracta blkgrpa concita aianhha res_onlya trusta aihhtli aitsa anrca
cbsaa csaa metdiva nectaa cnectaa nectadiva uaa cdcurra sldua
sldla zcta5a submcda sdelma sdseca sdunia pci pumaa geo_id bttra
btbga tl_geo_id name_e
127
128 *rename race variables*
129 rename (aqnfe001 aqnge002 aqnge003 aqnge004 aqnge005 aqnge006
aqnge007 aqnge008) (pop2018cousub whitealone2018cousub
blkalone2018cousub nativealone2018cousub asialalone2018cousub
pialone2018cousub otheralone2018cousub two_or_more2018cousub)
130
131 *drop unneeded race variables*
132 drop aqnge001 aqnge009 aqnge010
133
134 *calculate weighted average for commuting time***
135 gen weighted_sum_commute = 2.5*aqn7e002 + 7*aqn7e003 + 12*aqn7e004
+ 17*aqn7e005 + 22*aqn7e006 + 27*aqn7e007 + 32*aqn7e008 + 37*
aqn7e009 + 42*aqn7e010 + 52*aqn7e011 + 74.5*aqn7e012 + 95*aqn7e013
136
137 gen avgcommtime2018cousub = weighted_sum_commute / aqn7e001
138
139 drop weighted_sum_commute aqn7e001 aqn7e002 aqn7e003 aqn7e004
aqn7e005 aqn7e006 aqn7e007 aqn7e008 aqn7e009 aqn7e010 aqn7e011
aqn7e012 aqn7e013
140
141 *drop MoE variables*
142 drop name_m aqnfm001 aqngm001 aqngm002 aqngm003 aqngm004 aqngm005
aqngm006 aqngm007 aqngm008 aqngm009 aqngm010 aqn7m001 aqn7m002
aqn7m003 aqn7m004 aqn7m005 aqn7m006 aqn7m007 aqn7m008 aqn7m009
aqn7m010 aqn7m011 aqn7m012 aqn7m013 aqpkm001 aqpkm002 aqpkm003
aqpkm004 aqpkm005 aqpkm006 aqpkm007 aqpkm008 aqpkm009 aqpkm010
aqpkm011 aqpkm012 aqpkm013 aqpkm014 aqpkm015 aqpkm016 aqpkm017
aqpkm018 aqpkm019 aqpkm020 aqpkm021 aqpkm022 aqpkm023 aqpkm024
aqpkm025 aqpzm001 aqpzm002 aqpzm003 aqpzm004 aqpzm005 aqpzm006
```

```
143
144 *rename GINI*
145 rename aq8te001 gini2018cousub
146
147 gen bach_prop2018cousub = (aqpke022 + aqpke023 + aqpke024 +
    aqpke025) / aqpke001
148 drop aqpke001 aqpke002 aqpke003 aqpke004 aqpke005 aqpke006 aqpke007
    aqpke008 aqpke009 aqpke010 aqpke011 aqpke012 aqpke013 aqpke014
    aqpke015 aqpke016 aqpke017 aqpke018 aqpke019 aqpke020 aqpke021
    aqpke022 aqpke023 aqpke024 aqpke025
149
150 *Drop poverty data; can reinclude if I need*
151 drop aqpze001 aqpze002 aqpze003 aqpze004 aqpze005 aqpze006 aqpze007
    aqpze008
152
153 rename aqp6e001 med_hh_inc2018cousub
154
155 rename aqu4e001 med_home_price2018cousub
156
157 duplicates tag identifier, gen(dup_id)
158 drop if dup_id != 0
159 drop dup_id
160
161 save "$mainpath/data/2018cousub_clean.dta", replace
162
163
164
165
166
167
168 ***2006 place data ***
169 use "$mainpath/data/2006place_nogini.dta", clear
170
171 merge 1:1 gisjoin using "$mainpath/data/2006place_gini.dta"
172 drop _merge
173
174 gen placename_clean = lower(trim(place))
175 replace placename_clean = regexr(placename_clean, "( cdp| city|
    town)$", "")
176 gen identifier = string(statea, "%02.0f") + string(placea, "%05.0f")
177
178 rename stusab stateab
179
180 *drop MoE variables*
181 drop name_m jmam001 jmbm001 jmbm002 jmbm003 jmbm004 jmbm005 jmbm006
    jmbm007 jmbm008 jmbm009 jmbm010 jm2m001 jm2m002 jm2m003 jm2m004
    jm2m005 jm2m006 jm2m007 jm2m008 jm2m009 jm2m010 jm2m011 jm2m012
    jm2m013 jn9m001 jn9m002 jn9m003 jn9m004 jn9m005 jn9m006 jn9m007
```

```

jn9m008 jn9m009 jn9m010 jn9m011 jn9m012 jn9m013 jn9m014 jn9m015
jn9m016 jn9m017 jn9m018 jn9m019 jn9m020 jn9m021 jn9m022 jn9m023
jn9m024 jn9m025 jn9m026 jn9m027 jn9m028 jn9m029 jn9m030 jn9m031
jn9m032 jn9m033 jn9m034 jn9m035 jocm001 jocm002 jocm003 jocm004
jocm005 jocm006 jocm007 jocm008 joim001 jtim001 j4tm001

```

182

183

184 *race calc*

185 rename jmae001 pop2006place

186

```

187 rename (jmbe002 jmbe003 jmbe004 jmbe005 jmbe006 jmbe007 jmbe008) (
whitealone2006place blkalone2006place nativealone2006place
asianalone2006place pialone2006place otheralone2006place
two_or_more2006place)

```

188

189 drop jmbe001 jmbe009 jmbe010

190

191 *drop unwanted geographic variables*

```

192 drop gisjoin regiona divisiona state statea countya cousuba tracta
blkgrp concita aianhha res_onlya trusta aihhtli aitscea anrca
cbsaa csaa metdiva nectaa cnectaa nectadiva uaa cdcurra sldua sldla
submcda sdelma sdseca sdunia pci pumaa geoid bttra btbga name_e

```

193

194

195 *travel time calc*

```

196 gen weighted_sum_commute = 2.5*jm2e002 + 7*jm2e003 + 12*jm2e004 +
17*jm2e005 + 22*jm2e006 + 27*jm2e007 + 32*jm2e008 + 37*jm2e009 + 42
*jm2e010 + 52*jm2e011 + 74.5*jm2e012 + 95*jm2e013

```

197 gen avgcommtime2006place = weighted_sum_commute / jm2e001

198

```

199 drop weighted_sum_commute jm2e001 jm2e002 jm2e003 jm2e004 jm2e005
jm2e006 jm2e007 jm2e008 jm2e009 jm2e010 jm2e011 jm2e012 jm2e013

```

200

201 *educational attainment*

```

202 gen bach_prop_place2006 = (jn9e015 + jn9e016 + jn9e017 + jn9e018 +
jn9e032 + jn9e033 + jn9e034 + jn9e035) / jn9e001

```

203

```

204 drop jn9e001 jn9e002 jn9e003 jn9e004 jn9e005 jn9e006 jn9e007
jn9e008 jn9e009 jn9e010 jn9e011 jn9e012 jn9e013 jn9e014 jn9e015
jn9e016 jn9e017 jn9e018 jn9e019 jn9e020 jn9e021 jn9e022 jn9e023
jn9e024 jn9e025 jn9e026 jn9e027 jn9e028 jn9e029 jn9e030 jn9e031
jn9e032 jn9e033 jn9e034 jn9e035

```

205

206 *drop poverty info*

```

207 drop joce001 joce001 joce002 joce003 joce004 joce005 joce006
joce007 joce008

```

208

209 rename joie001 med_hh_inc2006place

```

210 rename jtie001 med_home_price2006place
211
212 rename j4te001 gini2006place
213
214 duplicates tag identifier, gen(dup_id)
215 drop if dup_id != 0
216 drop dup_id
217
218 save "$mainpath/data/2006place_clean.dta", replace
219
220
221
222
223
224 ***2006 cousub data***
225 use "$mainpath/data/2006cousub_nogini.dta", clear
226
227 merge 1:1 gisjoin using "$mainpath/data/2006cousub_gini.dta"
228 drop _merge
229
230 gen identifier = string(statea, "%02.0f") + string(cousuba,
"%05.0f")
231 rename stusab stateab
232
233 drop gisjoin regiona divisiona state statea county countya placea
tracta blkgrpa concita aianhha res_onlya trusta aihhtli aitscea
anrca cbsaa csaa metdiva nectaa cnectaa nectadiva uaa cdcurra sldua
sldla submcda sdelma sdseca sdunia pci pumaa geoid bttra btbga
name_e
234
235 *drop MoE variables*
236 drop name_m jmam001 jmbm001 jmbm002 jmbm003 jmbm004 jmbm005 jmbm006
jmbm007 jmbm008 jmbm009 jmbm010 jm2m001 jm2m002 jm2m003 jm2m004
jm2m005 jm2m006 jm2m007 jm2m008 jm2m009 jm2m010 jm2m011 jm2m012
jm2m013 jn9m001 jn9m002 jn9m003 jn9m004 jn9m005 jn9m006 jn9m007
jn9m008 jn9m009 jn9m010 jn9m011 jn9m012 jn9m013 jn9m014 jn9m015
jn9m016 jn9m017 jn9m018 jn9m019 jn9m020 jn9m021 jn9m022 jn9m023
jn9m024 jn9m025 jn9m026 jn9m027 jn9m028 jn9m029 jn9m030 jn9m031
jn9m032 jn9m033 jn9m034 jn9m035 jocm001 jocm002 jocm003 jocm004
jocm005 jocm006 jocm007 jocm008 joim001 jtim001 j4tm001 jmjm001
jmjm002 jmjm003 jmjm004 jmjm005 jmjm006 jmjm007 jmjm008 jmjm009
jmjm010 jmjm011 jmjm012 jmjm013 jmjm014 jmjm015 jmjm016 jmjm017
jmjm018 jmjm019 jmjm020 jmjm021
237
238 *drop hispanic variables*
239 drop jmje001 jmje002 jmje003 jmje004 jmje005 jmje006 jmje007
jmje008 jmje009 jmje010 jmje011 jmje012 jmje013 jmje014 jmje015
jmje016 jmje017 jmje018 jmje019 jmje020 jmje021

```

```
242 *race calc*
243 rename jmae001 pop2006cousub
244
245 rename (jmbe002 jmbe003 jmbe004 jmbe005 jmbe006 jmbe007 jmbe008) (
whitealone2006cousub blkalone2006cousub nativealone2006cousub
asianalone2006cousub pialone2006cousub otheralone2006cousub
two_or_more2006cousub)
246
247 drop jmbe001 jmbe009 jmbe010
248
249
250 *travel time calc*
251 gen weighted_sum_commute = 2.5*jm2e002 + 7*jm2e003 + 12*jm2e004 +
17*jm2e005 + 22*jm2e006 + 27*jm2e007 + 32*jm2e008 + 37*jm2e009 + 42
*jm2e010 + 52*jm2e011 + 74.5*jm2e012 + 95*jm2e013
252 gen avgcommtime2006cousub = weighted_sum_commute / jm2e001
253
254 drop weighted_sum_commute jm2e001 jm2e002 jm2e003 jm2e004 jm2e005
jm2e006 jm2e007 jm2e008 jm2e009 jm2e010 jm2e011 jm2e012 jm2e013
255
256 *educational attainment*
257 gen bach_prop2006cousub = (jn9e015 + jn9e016 + jn9e017 + jn9e018 +
jn9e032 + jn9e033 + jn9e034 + jn9e035) / jn9e001
258
259 drop jn9e001 jn9e002 jn9e003 jn9e004 jn9e005 jn9e006 jn9e007
jn9e008 jn9e009 jn9e010 jn9e011 jn9e012 jn9e013 jn9e014 jn9e015
jn9e016 jn9e017 jn9e018 jn9e019 jn9e020 jn9e021 jn9e022 jn9e023
jn9e024 jn9e025 jn9e026 jn9e027 jn9e028 jn9e029 jn9e030 jn9e031
jn9e032 jn9e033 jn9e034 jn9e035
260
261 *drop poverty info*
262 drop joce001 joce001 joce002 joce003 joce004 joce005 joce006
joce007 joce008
263
264 rename joie001 med_hh_inc2006cousub
265 rename jtie001 med_home_price2006cousub
266
267 rename j4te001 gini2006cousub
268
269 duplicates tag identifier, gen(dup_id)
270 drop if dup_id != 0
271 drop dup_id
272
273 save "$mainpath/data/2006cousub_clean.dta", replace
274
275
276
277 ***NHGIS MERGES***
```



```
278 use "$mainpath/data/2018place_clean.dta", clear
279 merge 1:1 identifier using "$mainpath/data/2018cousub_clean.dta"
280 replace identifier = "3460915" in 17637
281 rename _merge _2018demmerge
282 save "$mainpath/data/2018dem_merge.dta", replace
283
284 use "$mainpath/data/2006place_clean.dta", clear
285 merge 1:1 identifier using "$mainpath/data/2006cousub_clean.dta"
286 rename _merge _2006demmerge
287 save "$mainpath/data/2006dem_merge.dta", replace
288
289
290
291
292 ***clean WRLURI dataset***
293 use "$mainpath/data/WRLURI_2020.dta", clear
294
295 gen placename_clean = lower(trim(communityname18))
296 rename state stateab
297 gen identifier = string(statecode, "%02.0f") + string(
fipsplacecode18, "%05.0f")
298 drop if metro18==0
299 save "$mainpath/data/WRLURI_2018_clean.dta", replace
300
301
302 ***mange WRULUR 2006 data***
303 use "$mainpath/data/WRLURI_2006.dta", clear
304 replace stacode = 1 if statename == "AL"
305 replace stacode = 2 if statename == "AK"
306 replace stacode = 4 if statename == "AZ"
307 replace stacode = 5 if statename == "AR"
308 replace stacode = 6 if statename == "CA"
309 replace stacode = 8 if statename == "CO"
310 replace stacode = 9 if statename == "CT"
311 replace stacode = 10 if statename == "DE"
312 replace stacode = 12 if statename == "FL"
313 replace stacode = 13 if statename == "GA"
314 replace stacode = 15 if statename == "HI"
315 replace stacode = 16 if statename == "ID"
316 replace stacode = 17 if statename == "IL"
317 replace stacode = 18 if statename == "IN"
318 replace stacode = 19 if statename == "IA"
319 replace stacode = 20 if statename == "KS"
320 replace stacode = 21 if statename == "KY"
321 replace stacode = 22 if statename == "LA"
322 replace stacode = 23 if statename == "ME"
323 replace stacode = 24 if statename == "MD"
324 replace stacode = 25 if statename == "MA"
```

```
325 replace stacode = 26 if statename == "MI"
326 replace stacode = 27 if statename == "MN"
327 replace stacode = 28 if statename == "MS"
328 replace stacode = 29 if statename == "MO"
329 replace stacode = 30 if statename == "MT"
330 replace stacode = 31 if statename == "NE"
331 replace stacode = 32 if statename == "NV"
332 replace stacode = 33 if statename == "NH"
333 replace stacode = 34 if statename == "NJ"
334 replace stacode = 35 if statename == "NM"
335 replace stacode = 36 if statename == "NY"
336 replace stacode = 37 if statename == "NC"
337 replace stacode = 38 if statename == "ND"
338 replace stacode = 39 if statename == "OH"
339 replace stacode = 40 if statename == "OK"
340 replace stacode = 41 if statename == "OR"
341 replace stacode = 42 if statename == "PA"
342 replace stacode = 44 if statename == "RI"
343 replace stacode = 45 if statename == "SC"
344 replace stacode = 46 if statename == "SD"
345 replace stacode = 47 if statename == "TN"
346 replace stacode = 48 if statename == "TX"
347 replace stacode = 49 if statename == "UT"
348 replace stacode = 50 if statename == "VT"
349 replace stacode = 51 if statename == "VA"
350 replace stacode = 53 if statename == "WA"
351 replace stacode = 54 if statename == "WV"
352 replace stacode = 55 if statename == "WI"
353 replace stacode = 56 if statename == "WY"
354
355 gen identifier = string(stacode, "%02.0f") + string(ufips, "%05.0f")
356 duplicates tag identifier, gen(dup_id)
357 drop if dup_id == 1 | dup_id==2
358
359 save "$mainpath/data/WRLURI_2006_clean.dta", replace
360
361 ***merge WRLURI data***
362 merge 1:1 identifier using "$mainpath/data/WRLURI_clean.dta"
363 drop if _merge==2 | _merge==1
364 drop _merge
365 save "$mainpath/data/panel.dta", replace
366
367
368
369
370 *** MERGE WRLURI with NHGIS***
371 use "$mainpath/data/panel.dta", clear
372 merge 1:1 identifier using "$mainpath/data/2018dem_merge.dta"
```

```
373 save "matched_on_identifier.dta", replace
374 keep if _merge==3
375 rename _merge _merge2018panel
376
377
378 merge 1:1 identifier using "$mainpath/data/2006dem_merge.dta"
379 keep if _merge==3
380
381
382 ***CLEANING MERGED DATA***
383 gen pop2018 = pop2018place if _2018demmerge == 1 | _2018demmerge ==
384 3
385 replace pop2018 = pop2018cousub if _2018demmerge == 2
386
387 gen whitealone2018 = whitealone2018place if _2018demmerge == 1 |
388 _2018demmerge == 3
389 replace whitealone2018 = whitealone2018cousub if _2018demmerge == 2
390
391 gen blkalone2018 = blkalone2018place if _2018demmerge == 1 |
392 _2018demmerge == 3
393 replace blkalone2018 = blkalone2018cousub if _2018demmerge == 2
394
395 gen nativealone2018 = nativealone2018place if _2018demmerge == 1 |
396 _2018demmerge == 3
397 replace nativealone2018 = nativealone2018cousub if _2018demmerge ==
398 2
399
400 gen asianalone2018 = asianalone2018place if _2018demmerge == 1 |
401 _2018demmerge == 3
402 replace asianalone2018 = asianalone2018cousub if _2018demmerge == 2
403
404 gen pialone2018 = pialone2018place if _2018demmerge == 1 |
405 _2018demmerge == 3
406 replace pialone2018 = pialone2018cousub if _2018demmerge == 2
407
408 gen otheralone2018 = otheralone2018place if _2018demmerge == 1 |
409 _2018demmerge == 3
410 replace otheralone2018 = otheralone2018cousub if _2018demmerge == 2
411
412 gen two_or_more2018 = two_or_more2018place if _2018demmerge == 1 |
413 _2018demmerge == 3
414 replace two_or_more2018 = two_or_more2018cousub if _2018demmerge ==
415 2
416
417 gen med_hh_inc2018 = med_hh_inc2018place if _2018demmerge == 1 |
418 _2018demmerge == 3
419 replace med_hh_inc2018 = med_hh_inc2018cousub if _2018demmerge == 2
420
```

```
_2018demmerge == 2
412
413 gen gini2018 = gini2018place if _2018demmerge == 1 | _2018demmerge
    == 3
414 replace gini2018 = gini2018cousub if _2018demmerge == 2
415
416 gen avgcommtime2018 = avgcommtime2018place if _2018demmerge == 1 |
    _2018demmerge == 3
417 replace avgcommtime2018 = avgcommtime2018cousub if _2018demmerge ==
    2
418
419 gen bach_prop2018 = bach_prop_place2018 if _2018demmerge == 1 |
    _2018demmerge == 3
420 replace bach_prop2018 = bach_prop2018cousub if _2018demmerge == 2
421
422 drop pop2018place whitealone2018place blkalone2018place
    nativealone2018place asialone2018place pialone2018place
    otheralone2018place two_or_more2018place med_hh_inc2018place
    med_home_price2018place gini2018place avgcommtime2018place
    bach_prop_place2018 pop2018cousub whitealone2018cousub
    blkalone2018cousub nativealone2018cousub asialone2018cousub
    pialone2018cousub otheralone2018cousub two_or_more2018cousub
    med_hh_inc2018cousub med_home_price2018cousub gini2018cousub
    avgcommtime2018cousub bach_prop2018cousub
423
424 ***REPEAT FOR 2006***
425
426 gen pop2006 = pop2006place if _2006demmerge == 1 | _2006demmerge ==
    3
427 replace pop2006 = pop2006cousub if _2006demmerge == 2
428
429 gen whitealone2006 = whitealone2006place if _2006demmerge == 1 |
    _2006demmerge == 3
430 replace whitealone2006 = whitealone2006cousub if _2006demmerge == 2
431
432
433 gen blkalone2006 = blkalone2006place if _2006demmerge == 1 |
    _2006demmerge == 3
434 replace blkalone2006 = blkalone2006cousub if _2006demmerge == 2
435
436 gen nativealone2006 = nativealone2006place if _2006demmerge == 1 |
    _2006demmerge == 3
437 replace nativealone2006 = nativealone2006cousub if _2006demmerge ==
    2
438
439 gen asialone2006 = asialone2006place if _2006demmerge == 1 |
    _2006demmerge == 3
440 replace asialone2006 = asialone2006cousub if _2006demmerge == 2
```

```
443 replace pialone2006 = pialone2006cousub if _2006demmerge == 2
444
445 gen otheralone2006 = otheralone2006place if _2006demmerge == 1 |
    _2006demmerge == 3
446 replace otheralone2006 = otheralone2006cousub if _2006demmerge
447
448 gen two_or_more2006 = two_or_more2006place if _2006demmerge == 1 |
    _2006demmerge == 3
449 replace two_or_more2006 = two_or_more2006cousub if _2006demmerge ==
    2
450
451 gen med_hh_inc2006 = med_hh_inc2006place if _2006demmerge == 1 |
    _2006demmerge == 3
452 replace med_hh_inc2006 = med_hh_inc2006cousub if _2006demmerge == 2
453
454 gen med_home_price2006 = med_home_price2006place if _2006demmerge
    == 1 | _2006demmerge == 3
455 replace med_home_price2006 = med_home_price2006cousub if
    _2006demmerge == 2
456
457 gen gini2006 = gini2006place if _2006demmerge == 1 | _2006demmerge
    == 3
458 replace gini2006 = gini2006cousub if _2006demmerge == 2
459
460 gen avgcommtime2006 = avgcommtime2006place if _2006demmerge == 1 |
    _2006demmerge == 3
461 replace avgcommtime2006 = avgcommtime2006cousub if _2006demmerge ==
    2
462
463 gen bach_prop2006 = bach_prop_place2006 if _2006demmerge == 1 |
    _2006demmerge == 3
464 replace bach_prop2006 = bach_prop2006cousub if _2006demmerge == 2
465
466 drop _2018demmerge _merge2018panel pop2006place whitealone2006place
    blkalone2006place nativealone2006place asianalone2006place
    pialone2006place otheralone2006place two_or_more2006place
    med_hh_inc2006place med_home_price2006place gini2006place
    avgcommtime2006place bach_prop_place2006 pop2006cousub
    whitealone2006cousub blkalone2006cousub nativealone2006cousub
    asianalone2006cousub pialone2006cousub otheralone2006cousub
    two_or_more2006cousub med_hh_inc2006cousub med_home_price2006cousub
    gini2006cousub avgcommtime2006cousub bach_prop2006cousub
    _2006demmerge _merge
467
468 save "$mainpath/data/final_panel.dta", replace
469
470
471
```

```
474
475 gen white_prop2018 = whitealone2018 / pop2018
476 gen blk_prop2018 = blkalone2018 / pop2018
477 gen native_prop2018 = nativealone2018 / pop2018
478 gen asian_prop2018 = asialone2018 / pop2018
479 gen pi_prop2018 = pialone2018 / pop2018
480 gen other_prop2018 = pialone2018 /pop2018
481 gen mixed_prop2018 = two_or_more2018 / pop2018
482
483
484 gen white_prop2006 = whitealone2006 / pop2006
485 gen blk_prop2006 = blkalone2006 / pop2006
486 gen native_prop2006 = nativealone2006 / pop2006
487 gen asian_prop2006 = asialone2006 / pop2006
488 gen pi_prop2006 = pialone2006 / pop2006
489 gen other_prop2006 = pialone2006 /pop2006
490 gen mixed_prop2006 = two_or_more2006 / pop2006
491
492 *** reshape into panel***
493 gen id = _n
494
495 reshape long LPPI SPII SCII LZAI LPAI DRI LAI OSI EI SRI ADI WRLURI
    pop med_hh_inc med_home_price gini avgcommtime bach_prop
    white_prop blk_prop native_prop asian_prop pi_prop other_prop
    mixed_prop units_per_hh housingunits hhnum popdens cs_mn_all unem,
    i(id) j(year)
496
497 xtset id d18
498
499
500
501 ***GENERATE INIT POP VARIABLE FOR WEIGHTING ***
502 gen init_pop = .
503 bysort id (year): replace init_pop = pop if year == 2006
504 bysort id (year): replace init_pop = init_pop[_n-1] if missing(
    init_pop)
505
506
507 ***Generate Density Quintiles***
508 xtile densbuck = popdens, nq(5)
509
510
511
512 *** REGRESSIONS***
513
514 *model 1; can easily alter for different density quintile and
    regulation explanatory variable"
515
```

```
    gini avgcommtime unem bach_prop white_prop d18 [aw=init_pop] if  
densbuck==1, fe vce(cluster id)
```

517

518

```
*model 2; can easily alter for different density quintile"
```

520

```
521 eststo dens1: xtreg logunitsperhh zDRI zADI EI popdens win_inc  
win_home_price gini avgcommtime unem bach_prop white_prop d18 [aw=  
init_pop] if densbuck==1, fe vce(cluster id)
```

522

```
*model 3; can easily alter for different density quintile"
```

524

```
525 eststo dens1: xtreg logunitsperhh c.zDRI##i.EI czADI##i.EI popdens  
win_inc win_home_price gini avgcommtime unem bach_prop white_prop  
d18 [aw=init_pop] if densbuck==1, fe vce(cluster id)
```

526

527

528