Dataset | People of Color

Communities of Opportunity Displacement Risk Assessment

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Introduction

This datset comes from the American Community Survey. General information about the structure of this dataset can be found here.

This dataset is used to create the indicator "Percent People of Color", which is defined as the percentage of the population that is a race other than non-Hispanic White.

Metadata

Program	Data Set	Table
American Community Survey	2010-2014 American Community Survey 5-Year Estimates	B03002 - HISPANIC OR LATI

	Abbr.	Full Column Name
1	B03002_001	Hispanic or Latino by Race: Total:
2	B03002_002	Hispanic or Latino by Race: Not Hispanic or Latino:
3	B03002_003	Hispanic or Latino by Race: Not Hispanic or Latino: White alone
4	B03002_004	Hispanic or Latino by Race: Not Hispanic or Latino: Black or African American alone
5	B03002_005	Hispanic or Latino by Race: Not Hispanic or Latino: American Indian and Alaska Native alone
6	B03002_006	Hispanic or Latino by Race: Not Hispanic or Latino: Asian alone
7	B03002_007	Hispanic or Latino by Race: Not Hispanic or Latino: Native Hawaiian and Other Pacific Islander alone
8	B03002_008	Hispanic or Latino by Race: Not Hispanic or Latino: Some other race alone
9	B03002_009	Hispanic or Latino by Race: Not Hispanic or Latino: Two or more races:
10	B03002_010	Hispanic or Latino by Race: Not Hispanic or Latino: Two or more races: Two races including Some oth
11	B03002_011	Hispanic or Latino by Race: Not Hispanic or Latino: Two or more races: Two races excluding Some oth
12	B03002_012	Hispanic or Latino by Race: Hispanic or Latino:
13	B03002_013	Hispanic or Latino by Race: Hispanic or Latino: White alone
14	B03002_014	Hispanic or Latino by Race: Hispanic or Latino: Black or African American alone
15	B03002_015	Hispanic or Latino by Race: Hispanic or Latino: American Indian and Alaska Native alone
16	B03002_016	Hispanic or Latino by Race: Hispanic or Latino: Asian alone
17	B03002_017	Hispanic or Latino by Race: Hispanic or Latino: Native Hawaiian and Other Pacific Islander alone
18	B03002_018	Hispanic or Latino by Race: Hispanic or Latino: Some other race alone
19	B03002_019	Hispanic or Latino by Race: Hispanic or Latino: Two or more races:
20	B03002_020	Hispanic or Latino by Race: Hispanic or Latino: Two or more races: Two races including Some other ra
21	B03002_021	Hispanic or Latino by Race: Hispanic or Latino: Two or more races: Two races excluding Some other ra

Raw Data

The data is structured in a special format that retains important metadata about the variable, including the standard error values needed to calculate confidence intervals.

```
## ACS DATA:
##  2010 -- 2014 ;
##   Estimates w/90% confidence intervals;
```

```
##   for different intervals, see confint()
##                                                Hispanic or Latino by Race: Total:
## Census Tract 1, King County, Washington    6377 +/- 463
## Census Tract 2, King County, Washington    7819 +/- 487
## Census Tract 3, King County, Washington    2619 +/- 249
## Census Tract 4.01, King County, Washington 6236 +/- 637
## Census Tract 4.02, King County, Washington 4890 +/- 481
## Census Tract 5, King County, Washington    3009 +/- 185
```

New Column: People of Color

```
poc_acs2 <- poc_acs[, "B03002_001"] - poc_acs[, "B03002_003"]

acs.colnames(poc_acs2) <- "POC"

poc_acs2 %<>% cbind(poc_acs, .)

poc_acs3 <-
        apply(
                X = poc_acs2[, 22],
                MARGIN = 1,
                FUN = divide.acs,
                denominator = poc_acs2[, 1],
                method = "proportion",
                verbose = FALSE
        )

acs.colnames(poc_acs3) <- "POC_PCT"

readr::write_rds(poc_acs3,"./2_intermediate/poc_acs.rds")

head(poc_acs3[])
```

```
## ACS DATA:
##  2010 -- 2014 ;
##   Estimates w/90% confidence intervals;
##   for different intervals, see confint()
##                                                POC_PCT
## Census Tract 1, King County, Washington    0.423239767915948 +/- 0.0919826991817042
## Census Tract 2, King County, Washington    0.399411689474357 +/- 0.0818933044024027
## Census Tract 3, King County, Washington    0.284077892325315 +/- 0.121657000882263
## Census Tract 4.01, King County, Washington 0.408755612572162 +/- 0.132596472643495
## Census Tract 4.02, King County, Washington 0.259304703476483 +/- 0.121704991357779
## Census Tract 5, King County, Washington    0.176138251910934 +/- 0.0896471799890667
```

Conversion to a Dataframe

```
poc_acs <- readr::read_rds("./2_intermediate/poc_acs.rds")

poc_df <-
        data.frame(
                geography(poc_acs)["tract"],
```

```
                estimate(poc_acs),
                1.645 * standard.error(poc_acs)) %>%
        `colnames<-`(., c("GEOID6", "POC_PCT_EST","POC_PCT_MOE")) %>%
        mutate(UPPER = POC_PCT_EST + POC_PCT_MOE,
               LOWER = POC_PCT_EST - POC_PCT_MOE,
               UPPER = if_else(UPPER > 1, 1, UPPER),
               LOWER = if_else(LOWER < 0, 0, LOWER))

readr::write_rds(poc_df,"./2_intermediate/poc_df.rds")
as_tibble(poc_df)
```

```
## # A tibble: 398 × 5
##    GEOID6 POC_PCT_EST POC_PCT_MOE     UPPER      LOWER
## *   <chr>       <dbl>       <dbl>     <dbl>      <dbl>
## 1  000100   0.4232398  0.09198270 0.5152225 0.33125707
## 2  000200   0.3994117  0.08189330 0.4813050 0.31751839
## 3  000300   0.2840779  0.12165700 0.4057349 0.16242089
## 4  000401   0.4087556  0.13259647 0.5413521 0.27615914
## 5  000402   0.2593047  0.12170499 0.3810097 0.13759971
## 6  000500   0.1761383  0.08964718 0.2657854 0.08649107
## 7  000600   0.3570549  0.11386183 0.4709167 0.24319305
## 8  000700   0.4132928  0.10619668 0.5194895 0.30709609
## 9  000800   0.1678600  0.10234762 0.2702076 0.06551236
## 10 000900   0.2063330  0.11949929 0.3258323 0.08683370
## # ... with 388 more rows
```