## **Analysis Data File:**

Final Richmond Counties COI Inequality by Racial/Ethnic Group Dataset

## **Unit of Observation**

Each row in this dataset represents a specific Richmond county's COI (Child Opportunity Index), meaning that each row corresponds to a specific Richmond, VA county collected from datadiversitykids.org 2020 census.

### **Variable Definitions and Summaries**

## 1. Census\_FIPS\_Code

- **Definition**: FIPS code is an 11 digit code that indicates a specific 2-digit-state code, 3-digit-county code, and 6-digit-census tract number. For example, Amelia County, VA in Richmond, VA in year 2012 has the code 51007930101
- Source Data:
  - website: datadiversitykids.org
    - Datasets:
      - COI 3.0 overall index and three domains Child Opportunity Levels, Scores and composite z-scores for the overall index and three domains (2020 census tracts)
      - Child population data Number of children aged 0-17 years by race/ethnicity (2020 census tracts)
- Processing Steps: Downloaded directly from datadiversitykids.org
- Missing Observations: N/A
- Summary Statistics:

E1007020101	F1007020102	51007930200	F1026600100	E1026600200	F1026600200	F1041100106	E1041100107	F1041100206
10	10	10	10	10	10	10	10	10
		51041100210						
10	10	10	10	10	10	10	10	10
		51041100409						
10	10	10	10	10	10	10	10	10
51041100510	51041100600	51041100701	51041100702	51041100704	51041100705	51041100804	51041100805	51041100806
10	10	10	10	10	10	10	10	10
51041100807	51041100812	51041100814	51041100815	51041100816	51041100817	51041100818	51041100819	51041100820
10	10	10	10	10	10	10	10	10
51041100821	51041100822	51041100823	51041100902	51041100907	51041100910	51041100912	51041100915	51041100919
10	10	10	10	10	10	10	10	10
51041100920	51041100921	51041100922	51041100923	51041100924	51041100926	51041100928	51041100929	51041100930
10	10	10	10	10	10	10	10	10
51041100931	51041100932	51041100933	51041100934	51041100935	51041100936	51041100937	51041100938	51041101003
10	10	10	10	10	10	10	10	10
51041101004	51041101007	51041101008	51041101009	51041101011	51041101012	51041101013	51041101014	51041101015
10	10	10	10	10	10	10	10	10
51053840101	51053840102	51053840200	51053840300	51053840400	51053840500	51053840601	51053840602	51053980100
10	10	10	10	10	10	10	10	2
51075400101	51075400102	51075400200	51075400300	51075400400	51075400500	51085320100	51085320200	51085320300
10	10	10	10	10	10	10	10	10
		51085320601					51085320803	51085320804
10	10	10	10	10	10	10	10	10
		51085320902						
31003320803	21002250901	31003320902	31003321001	31003321003	31003321004	31003321100	31003321201	31003321202

```
$1085321500 $1085321401 $1085321402 $1085321403 $108720016 $1087200103 $1087200102 $1087200102 $1087200103 $1087200102 $1087200103 $1087200103 $1087200103 $1087200103 $1087200103 $1087200103 $1087200103 $1087200103 $1087200103 $1087200103 $1087200103 $1087200103 $1087200103 $1087200103 $1087200103 $1087200103 $1087200103 $1087200103 $1087200103 $1087200103 $1087200103 $1087200103 $1087200103 $1087200103 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $1087200104 $108720
```

### 2. Year

Definition: The date of observation.

Source Data:

website: datadiversitykids.org

Datasets:

- COI 3.0 overall index and three domains Child Opportunity Levels, Scores and composite z-scores for the overall index and three domains (2020 census tracts)
- Child population data Number of children aged 0-17 years by race/ethnicity (2020 census tracts)
- Processing Steps: Downloaded directly from datadiversitykids.org
- Missing Observations: N/A
- Summary Statistics:

```
Year n
1 2012 332
2 2013 332
3 2014 328
4 2015 328
5 2016 328
6 2017 328
7 2018 328
8 2019 328
9 2020 328
10 2021 328
```

## 3. Native American\_AlaskaNative

- **Definition**: The number of children aged 0-17 who are American Indian and Alaska Native alone.
- Source Data:
  - website: datadiversitykids.org
    - Data: Child population data Number of children aged 0-17 years by race/ethnicity (2020 census tracts).
- Processing Steps: Downloaded directly from datadiversitykids.org
- Missing Observations: N/A
- Summary Statistics:

```
Min. 1st Qu. Median Mean 3rd Qu. Max.

O 0.000 0.000 2.649 0.000 296.887
```

#### 3. Asian

- Definition: The number of children aged 0-17 who are Asian or Pacific Islander alone.
- Source Data:
  - website: datadiversitykids.org
    - Data: Child population data Number of children aged 0-17 years by race/ethnicity (2020 census tracts).
- Processing Steps: Downloaded directly from datadiversitykids.org
- Missing Observations: N/A
- Summary Statistics:

```
Min. 1st Qu. Median Mean 3rd Qu. Max. 0.0000 0.0000 0.0636 31.5777 28.9762 924.0000
```

### 4. Black AfricanAmerican

- **Definition:** The number of children aged 0-17 who are Black or African American alone.
- Source Data:
  - website: datadiversitykids.org
    - Data: Child population data Number of children aged 0-17 years by race/ethnicity (2020 census tracts).
- Processing Steps: Downloaded directly from datadiversitykids.org
- Missing Observations: N/A
- Summary Statistics:

```
Min. 1st Qu. Median Mean 3rd Qu. Max. 0.00 58.34 158.47 263.26 366.00 2213.00
```

## 5. Hispanic

- **Definition:** The number of children aged 0-17 who are Hispanic alone.
- Source Data:
  - website: datadiversitykids.org
    - Data: Child population data Number of children aged 0-17 years by race/ethnicity (2020 census tracts).
- Processing Steps: Downloaded directly from datadiversitykids.org
- Missing Observations: N/A
- Summary Statistics:

Min. 1st Qu. Median Mean 3rd Qu. Max. 0.00 3.00 33.00 75.33 96.86 1278.00

### 5. White

- **Definition:** The number of children aged 0-17 who are White alone.
- Source Data:
  - website: datadiversitykids.org
    - Data: Child population data Number of children aged 0-17 years by race/ethnicity (2020 census tracts).
- Processing Steps: Downloaded directly from datadiversitykids.org
- Missing Observations: N/A
- Summarized Data:

Min. 1st Qu. Median Mean 3rd Qu. Max. 0.0 92.0 352.0 426.1 672.2 2902.0

### 5. TotalNumberChildren

- **Definition:** The number of children aged 0-17 total.
- Source Data:
  - website: datadiversitykids.org
    - Data: Child population data Number of children aged 0-17 years by race/ethnicity (2020 census tracts).
- Processing Steps: Downloaded directly from datadiversitykids.org
- Missing Observations: N/A
- Summarized Data:

Min. 1st Qu. Median Mean 3rd Qu. Max. 0.0 486.0 775.5 840.0 1149.2 3741.0

## 6. County\_name

- Definition: Richmond counties
- Source Data:
  - website: datadiversitykids.org
    - Datasets:
      - COI 3.0 overall index and three domains Child Opportunity Levels, Scores and composite z-scores for the overall index and three domains (2020 census tracts)
      - Child population data Number of children aged 0-17 years by race/ethnicity (2020 census tracts)
- Processing Steps: Downloaded directly from datadiversitykids.org
- Missing Observations: N/A
- Summarized Data:
  - [1] "Amelia County, Virginia"
  - [2] "Charles City County, Virginia"
  - [3] "Chesterfield County, Virginia"
  - [4] "Dinwiddie County, Virginia"
  - [5] "Goochland County, Virginia"
  - [6] "Hanover County, Virginia"
    [7] "Henrico County, Virginia"
  - [8] "King and Queen County, Virginia"
  - [9] "King William County, Virginia"
  - [10] "New Kent County, Virginia"
  - [11] "Powhatan County, Virginia"
  - [12] "Prince George County, Virginia"
  - [13] "Sussex County, Virginia"
  - 14] "Colonial Heights city, Virginia"
  - [15] "Hopewell city, Virginia"
  - [16] "Petersburg city, Virginia"
  - [17] "Richmond city, Virginia"

#### 7. Metro Name

- **Definition:** The number of children aged 0-17 total.
- Source Data:
  - website: datadiversitykids.org
    - Data: Child population data Number of children aged 0-17 years by race/ethnicity (2020 census tracts).
- Processing Steps: Downloaded directly from datadiversitykids.org
- Missing Observations: N/A
- Summarized Data: Every entry is Richmond, VA

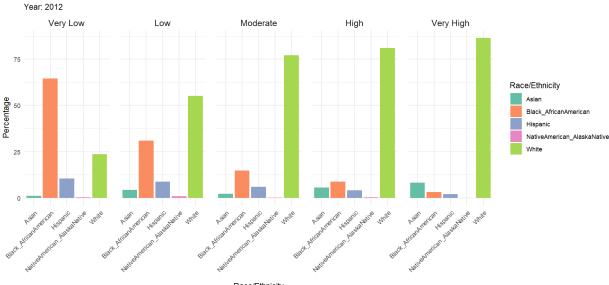
## 8. COI Level Metro

- **Definition:** Metro normed Child Opportunity Levels (from very low to very high) for the Child Opportunity Index
- Source Data:
  - website: datadiversitykids.org
    - Data: Child population data Number of children aged 0-17 years by race/ethnicity (2020 census tracts).
- Processing Steps: Downloaded directly from datadiversitykids.org
- Missing Observations: N/A
- Summarized Data:

Very Low	Low	Moderate	High Ve	ery High
1028	821	471	607	361

## Visualization

Distribution of Opportunity Levels by Race/Ethnicity (2012)



Race/Ethnicity

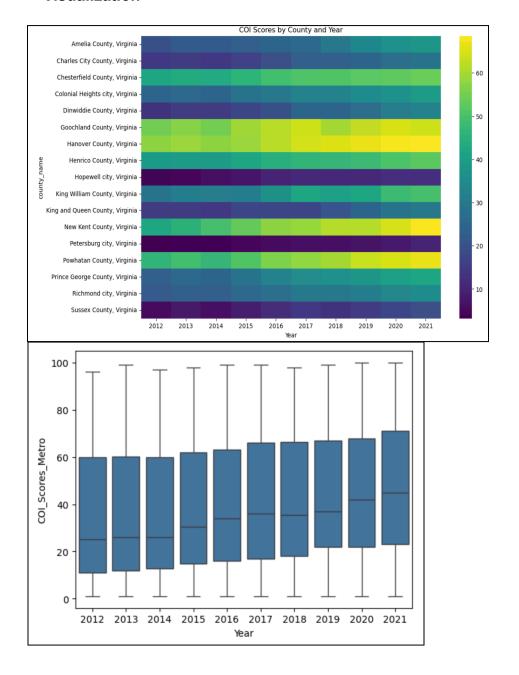
0

# 9. COI\_Scores\_Metro

- **Definition:** Metro normed Child Opportunity Scores (from 1 to 100) for the Child Opportunity Index.
- Source Data:
  - o website: datadiversitykids.org
    - Data: Child population data Number of children aged 0-17 years by race/ethnicity (2020 census tracts).
- Processing Steps: Downloaded directly from datadiversitykids.org
- Missing Observations: N/A
- Summarized Data:

Min. 1st Qu. Median Mean 3rd Qu. Max. 1.00 16.00 34.00 39.74 63.00 100.00

Visualization



## 10. Education\_Level\_Metro

- **Definition:** Metro normed Child Opportunity Levels (from very low to very high) for the education domain.
- Source Data:
  - website: datadiversitykids.org
    - Data: Child population data Number of children aged 0-17 years by race/ethnicity (2020 census tracts).
- Processing Steps: Downloaded directly from datadiversitykids.org
- Missing Observations: N/A
- Summarized Data:

	Very Low	Low	Moderate	High	Very High
0	784	808	604	656	436

# 11. Education\_Score\_Metro

- **Definition:** Metro normed Child Opportunity Scores (from 1 to 100) for the education domain.
- Source Data:
  - website: datadiversitykids.org
    - Data: Child population data Number of children aged 0-17 years by race/ethnicity (2020 census tracts).
- Processing Steps: Downloaded directly from datadiversitykids.org
- Missing Observations: N/A
- Summarized Data:

	Mın.	1st Qu.	Median	Mean	3rd Qu.	Max.
0	1.00	21.00	41.00	45.43	68.00	100.00

# 12. HealthEnviro\_Level\_Metro

- **Definition:** Metro normed Child Opportunity Levels (from very low to very high) for the health and environment domain.
- Source Data:
  - website: datadiversitykids.org
    - Data: Child population data Number of children aged 0-17 years by race/ethnicity (2020 census tracts).
- Processing Steps: Downloaded directly from datadiversitykids.org
- Missing Observations: N/A
- Summarized Data:

Very Low	Low	Moderate	High Very	High
2110	532	367	185	94

# 13. HealthEnviro\_Score\_Metro

- **Definition:**Metro normed Child Opportunity Scores (from 1 to 100) for the health and environment domain.
- Source Data:

0

- website: datadiversitykids.org
  - Data: Child population data Number of children aged 0-17 years by race/ethnicity (2020 census tracts).
- Processing Steps: Downloaded directly from datadiversitykids.org
- Missing Observations: N/A
- Summarized Data:

Min. 1st Qu. Median Mean 3rd Qu. Max. 1.00 4.00 12.00 21.15 33.00 100.00

# 14. SocialEconomic\_Level\_Metro

- **Definition:** Metro normed Child Opportunity Levels (from very low to very high) for the social and economic domain.
- Source Data:
  - website: datadiversitykids.org
    - Data: Child population data Number of children aged 0-17 years by race/ethnicity (2020 census tracts).
- Processing Steps: Downloaded directly from datadiversitykids.org
- Missing Observations: N/A
- Summarized Data:

Very	Low	Low	Moderate	High	Very High
0	921	678	650	619	418

# 15. SocialEconomic\_Score\_Metro

- **Definition:** Metro-normed Child Opportunity Scores (from 1 to 100) for the social and economic domain.
- Source Data:
  - website: datadiversitykids.org

- Data: Child population data Number of children aged 0-17 years by race/ethnicity (2020 census tracts).
- Processing Steps: Downloaded directly from datadiversitykids.org
- Missing Observations: 2
- Summarized Data:

Min. 1st Qu. Median Mean 3rd Qu. Max. NA's 1.00 19.00 42.00 43.47 68.00 100.00 2