A-1. METHODS AND DOCUMENTATION

Herein is a summary of the methods I used to evaluate the proximity of disadvantaged communities to two types of "ports": airports and seaports. Finding that the literature suggests that the exposure profile of co-pollutants such as Particulate Matter (PM2.5) near ports follows roughly an exponential decline as a function of distance,[1] I defined proximity as either being directly on (intersecting) or within 1 mile of any of the point sources.

This documentation is structured as follows below.

Sector-specific steps to gather datasets for the following analyses:

1. Airports and disadvantaged communities (national scale)
2. Seaports and disadvantaged communities (national scale)
3. Seaports and disadvantaged communities (California only)
4. Benchmark 2010 Census data for national analyses

I first used ArcGIS Pro to develop these datasets; I further refined some datasets in RStudio.

Analysis in RStudio: I then assessed these datasets collectively as a function in RStudio.

[1] *See, e.g.*, Harshit Agrawal et al., *Primary Particulate Matter from Ocean-Going Engines in the Southern California Air Basin*, 43 ENV'T. SCI. TECH. 5398, 5401 (2009). Here, the authors had the closest PM2.5 monitors at a distance of 9.7 km from the port; owing to the number of census tracts likely located within 9.7 km of each of these locations as well as the roughly exponential decline of exposure as a function of distance, I opted to define proximity as a 1 mile radius of the ports.

1. National Airport Analysis

I ran an assessment of available data to determine which major U.S. airports are located near designated Disadvantaged Communities per Executive Order 14,008.[2] I also was interested specifically in looking at airports with international aviation capacity.

I. Methods:

(1) ArcGIS Pro Data Processing

Using ArcGIS software, I gathered data from the United States Bureau of Transportation Statistics identifying the locations of each of the country's airports, a dataset containing 19,850 data points representing "all official and operational aerodromes as of July 16, 2020".[3] I also gathered data from the White House Council on Environmental Quality Climate and Economic Justice Screening Tool which identified designated "Disadvantaged Communities" (also known as "Justice40 Communities").[4]

Step 1: I began by loading the following data sources into a new map project in ArcGIS Pro:

Justice40 Communities:

ESRI DEMOGRAPHICS, JUSTICE40 COMMUNITIES MAP (Nov. 2022), https://perma.cc/5R7U-EG9Z.

Map > Add Data > Data From Path > https://www.arcgis.com/home/item.html?id=f95344889cab44bd84207052f44cb940

Note: The Justice40 Communities dataset contains all 2010 U.S. Census Tracts (including tracts that are not identified as a disadvantaged community). All identified disadvantaged communities are indicated in the dataset with a "1" for variable "SN_C".[5] Because of this (and in order to keep all census tract data for analysis), I subsequently analyzed data in RStudio after ArcGIS Pro processing.

Airport Data:

I downloaded a zip file of the following dataset from the Bureau of Transportation Statistics in Shapefile format:

U.S. DEP'T OF TRANSP., BUREAU OF TRANSP. STATISTICS, AIRPORTS (Nov. 15, 2022), .

Map > Add Data > Data > geo_export_d3414d12-17ee-46ff-88fc-7c4f53674746.shp

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[2] 86 Fed. Reg. 7619 § 222 (Jan. 27, 2021).
[3] Bureau OF TRANSP. STATISTICS, U.S. DEP'T OF TRANSP., AIRPORTS (Nov. 15, 2022), https://perma.cc/26Q2-CJHM.
[4] ESRI DEMOGRAPHICS, JUSTICE40 COMMUNITIES MAP (Nov. 2022), https://perma.cc/5R7U-EG9Z; 86 Fed. Reg. 7619 §§ 222-223 (Jan. 27, 2021).
[5] CLIMATE AND ECONOMIC JUSTICE SCREENING TOOL, DOWNLOADS, SHAPEFILE, https://perma.cc/7XP3-XRCQ (archived Apr. 11, 2024).

Note: this dataset contains many aerodrome types, including airports as well as heliports and others. I selected this dataset because it is the most comprehensive and also includes information regarding whether an airport has international customs, which I am using as a proxy to identify international airports. Because of this (and in order to keep all relevant data for analysis), I subsequently analyzed data in RStudio after ArcGIS Pro processing.

Step 2: I exported the features from these maps to have a local copy for analyses.

Contents > geo_export_d3414d12-17ee-46ff-88fc-7c4f53674746 > Right-Click Data > Export Features > Output Layer: Airports_ExportFeature

Contents > usa_november_2022 > Right-Click Data > Export Features > Output Layer: Justice40_ExportFeature

Step 3: I then proceeded to run spatial analyses joining the two datasets, specifically looking for either a direct intersection between them or proximity of at most one mile.

Direct Intersection: Find airports located directly within Justice40 census tracts
Step 4: Run Intersection Analysis
Analysis > Tools > Intersect
Input Features:
Airports_ExportFeature
Justice40_ExportFeature
Output Feature Class: Airports_Justice40_Intersect_v1
Attributes to Join: All attributes
Output Type: Same as input

Step 5: Export Table (Direct Intersection)
Right-Click Airports_Justice40_v1 > Open Attribute Table > Export > Output Table: Airports_Justice40_Intersect_v1_Table.csv

One Mile Distance: Find airports located within one mile of Justice40 census tracts
Step 6: Create 1-mile buffer around ports dataset
Analysis > Tools > Buffer
Input Features: Airports_ExportFeature
Output Feature Class: Airports_OneMileBuffer
Distance: 1 US Survey Miles
Method: Planar
Dissolve Type: No Dissolve

Step 7:
Analysis > Tools > Intersect
Input Features:
Airports_OneMileBuffer

Justice40_ExportFeature
Output Feature Class: Airports_Justice40_OneMile_v1
Attributes to Join: All attributes
Output Type: Same as input

Step 8: Export Table (One Mile)
Right-Click Airports_Justice40_v1 > Open Attribute Table > Export > Output Table: Airports_Justice40_OneMile_v1_Table.csv

2. National Seaport Analysis

I ran an assessment of available data to determine which major U.S. shipping ports are located near designated Disadvantaged Communities per Executive Order 14,008.[6]

I. Methods:

(1) ArcGIS Pro Data Processing

Using ArcGIS software, I gathered data from the United States Bureau of Transportation Statistics identifying the locations of each of the country's 150 "Principal Ports", a dataset containing "the top 150 U.S. [shipping] ports based upon total annual tonnage".[7] I also gathered data from the White House Council on Environmental Quality Climate and Economic Justice Screening Tool which identified designated "Disadvantaged Communities" (also known as "Justice40 Communities").[8]

Step 1: I began by loading the following data sources into a new map project in ArcGIS Pro:

Justice40 Communities:
ESRI DEMOGRAPHICS, JUSTICE40 COMMUNITIES MAP (Nov. 2022), https://perma.cc/5R7U-EG9Z.

Map > Add Data > Data From Path >
https://www.arcgis.com/home/item.html?id=f95344889cab44bd84207052f44cb940

Note: The Justice40 Communities dataset contains all 2010 U.S. Census Tracts (including tracts that are not identified as a disadvantaged community). All identified disadvantaged communities are indicated in the dataset with a "1" for variable "SN_C".[9] Because of this (and in order to keep all census tract data for analysis), I subsequently analyzed data in RStudio after ArcGIS Pro processing.

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[6] 86 Fed. Reg. 7619 § 222 (Jan. 27, 2021).
[7] BUREAU OF TRANSP. STATISTICS, U.S. DEP'T OF TRANSP., PRINCIPAL PORTS (Aug. 9, 2022), https://perma.cc/2WZJ-UKX3.
[8] ESRI DEMOGRAPHICS, *supra* note 4; 86 Fed. Reg. 7619 §§ 222-223 (Jan. 27, 2021).
[9] CLIMATE AND ECONOMIC JUSTICE SCREENING TOOL, *supra* note 5.

U.S. Principal Ports:

U.S. DEP'T OF TRANSP., BUREAU OF TRANSP. STATISTICS, PRINCIPAL PORTS (Aug. 9, 2022), https://perma.cc/2WZJ-UKX3.

Map > Add Data > Data From Path > https://www.arcgis.com/home/item.html?id=e3b6065cce144be8a13a59e03c4195fe

Step 2: I exported the features from these maps to have a local copy for analyses.

Contents > Principal Port > Right-Click Data > Export Features > Output Layer: PrincipalPort_ExportFeatures

Contents > usa_november_2022 > Right-Click Data > Export Features > Output Layer: Justice40_ExportFeature

Step 3: I then proceeded to run spatial analyses joining the two datasets, specifically looking for either a direct intersection between them or proximity of at most one mile.

Direct Intersection: Find seaports located directly within Justice40 census tracts
Step 4: Run Intersection Analysis

Analysis > Tools > Intersect

Input Features:

PrincipalPort_ExportFeatures

Justice40_ExportFeature

Output Feature Class: PrincipalPorts_Justice40_Intersect_v1

Attributes to Join: All attributes

Output Type: Same as input

Step 5: Export Table (Direct Intersection)

Right-Click PrincipalPorts_Justice40_v1 > Open Attribute Table > Export > Output Table: PrincipalPorts_Justice40_Intersect_v1_Table.csv

One Mile Distance: Find seaports located within one mile of Justice40 census tracts
Step 6: Create 1-mile buffer around ports dataset

Analysis > Tools > Buffer

Input Features: PrincipalPort_ExportFeatures

Output Feature Class: PrincipalPorts_OneMileBuffer

Distance: 1 US Survey Miles

Method: Planar

Dissolve Type: No Dissolve

Step 7:

Analysis > Tools > Intersect

Input Features:

PrincipalPorts_OneMileBuffer

Justice40_ExportFeature
Output Feature Class: PrincipalPorts_Justice40_OneMile_v1
Attributes to Join: All attributes
Output Type: Same as input

Step 8: Export Table (One Mile)
Right-Click PrincipalPorts_Justice40_v1 > Open Attribute Table > Export > Output Table: PrincipalPorts_Justice40_OneMile_v1_Table.csv

3. California Seaport Analysis

I ran an assessment of available data to determine which California ports are located on or near designated Disadvantaged Communities.

I. Methods:

(1) ArcGIS Pro Data Processing

Using ArcGIS software, I gathered data from the State of California Geoportal identifying the locations of each of the state's twelve ports. I also gathered data from the California Office of Environmental Health Hazard Assessment that identified the geolocations of designated Disadvantaged Communities per SB 535 (Cal. Health & Safety Code § 39711).

Step 1: I began by loading the following data sources into a new map project in ArcGIS Pro:

California Ports:
CAL. STATE GEOPORTAL, MAP SERVICE: PORTS (Mar. 24, 2020), https://gis.data.ca.gov/datasets/aea6dd67f6424083b6d957071532d00d_0/about, archived at https://perma.cc/8FTM-PASG.

Map > Add Data > Data From Path > https://caltrans-gis.dot.ca.gov/arcgis/rest/services/CHrailroad/Ports/FeatureServer/0

SB535 Communities:
OEHHA, *SB 535 Disadvantaged Communities*, Cal. Env't Prot. Agency (2022), https://perma.cc/M4K3-A9R5.

Map > Add Data > Data From Path > https://services1.arcgis.com/PCHfdHz4GlDNAhBb/arcgis/rest/services/SB_535_Disadvantaged_Communities_2022/FeatureServer

Step 2: I exported the features from these maps to have a local copy for analyses.

Contents > Ports > Right-Click Data > Export Features > Output Layer: Ports_ExportFeatures

Contents > SB 535 Disadvantaged Communities 2022 (Census Tracts and Tribal Areas) > Right-Click Data > Export Features > Output Layer: SB535Disadv_ExportFeature

Step 3: I then proceeded to run spatial analyses joining the two datasets, specifically looking for either a direct intersection between them or proximity of at most one mile.

Direct Intersection: Find seaports located directly within an SB535 community

Step 4: Run Intersection Analysis
Analysis > Tools > Intersect
Input Features:
Ports_ExportFeatures
SB535Disadv_ExportFeature
Output Feature Class: Ports_SB535_Intersect_v1
Attributes to Join: All attributes
Output Type: Same as input

Step 5: Export Table (Direct Intersection)
Right-Click Ports_SB535_Intersect_v1 > Open Attribute Table > Export > Output Table: Ports_SB535_Intersect_v1_Table.csv

One Mile Distance: Find seaports located within one mile of an SB535 community
Step 6: Create 1-mile buffer around ports dataset
Analysis > Tools > Buffer
Input Features: Ports_ExportFeatures
Output Feature Class: Ports_OneMileBuffer
Distance: 1 US Survey Miles
Method: Planar
Dissolve Type: No Dissolve

Step 7:
Analysis > Tools > Intersect
Input Features:
Ports_OneMileBuffer
SB535Disadv_ExportFeature
Output Feature Class: Ports_SB535_OneMile_v1
Attributes to Join: All attributes
Output Type: Same as input

Step 8: Export Table (One Mile)
Right-Click Ports_SB535_OneMile_v1 > Open Attribute Table > Export > Output Table: Ports_SB535_OneMile_v1_Table.csv

II. Results:

The Ports of Long Beach, Los Angeles, Oakland, Stockton, and West Sacramento are all located within designated SB 535 Disadvantaged Communities. The four additional ports within a mile radius of an SB 535 Disadvantaged Community are: Hueneme, Richmond, San Diego, and San Francisco.

4. Benchmark Census Data

I ran an assessment to better understand the demographics of designated Disadvantaged Communities per Executive Order 14,008.[10] I wanted to know the total area of the different census tracts in addition to the information already contained in the Justice40 dataset.

I. Methods:

(1) ArcGIS Pro Data Processing

Using ArcGIS software, I gathered data from the White House Council on Environmental Quality Climate and Economic Justice Screening Tool which identified designated "Disadvantaged Communities" (also known as "Justice40 Communities").[11]

Step 1: I began by loading the following data source into a new map project in ArcGIS Pro:

Justice40 Communities:

CLIMATE AND ECONOMIC JUSTICE SCREENING TOOL, DOWNLOADS, SHAPEFILE, https://screeningtool.geoplatform.gov/en/downloads, archived at https://perma.cc/7XP3-XRCQ.

Download "Shapefile"

Add to map:

Map > Add Data > Data > usa.shp

Step 2: I calculated the area for each census tract:

Contents > usa > Open Attribute Table > Add Field
Label: "Area"
Type: Float
> Save

Go to Field header ("Area") >Right-Click > Calculate Geometry >
Area (geodesic)

[10] 86 Fed. Reg. 7619 § 222 (Jan. 27, 2021).
[11] ESRI DEMOGRAPHICS, *supra* note 4; 86 Fed. Reg. 7619 §§ 222-223 (Jan. 27, 2021).

Unit of measurement: square kilometers

Step 3: Export Table

Right-Click usa > Open Attribute Table > Export > Output Table: Justice40Census.csv

(2) RStudio Analyses

```
# Author's Note: ChatGPT4 was used to debug this R code

# comparing to total census data
dfcensus <- read.csv("Justice40Census.csv")

calculate_census_metrics <- function(df) {
  # Replace NA values in SN_T with 0
  df$SN_T[is.na(df$SN_T)] <- 0

  # Step 1: Sum of Area where SN_C = 1 OR SN_T = 1
  sum_area_sn_cond <- sum(df$Area[df$SN_C == 1 | df$SN_T == 1], na.rm
= TRUE)

  # Step 2: Sum of all values of Area
  total_sum_area <- sum(df$Area, na.rm = TRUE)

  # Step 3: Fraction of Step 1 / Step 2
  fraction_area <- sum_area_sn_cond / total_sum_area

  # Step 4: Count of all rows in GEOID10 where SN_C = 1 OR SN_T = 1
  count_geoid10_sn_cond <- sum(df$SN_C == 1 | df$SN_T == 1)

  # Step 5: Count of all rows in GEOID10
  total_count_geoid10 <- nrow(df)

  # Step 6: Fraction of Step 4 / Step 5
  fraction_geoid10 <- count_geoid10_sn_cond / total_count_geoid10

  # Step 7: Total sum of TPF where SN_C = 1 OR SN_T = 1
  sum_tpf_sn_cond <- sum(df$TPF[df$SN_C == 1 | df$SN_T == 1], na.rm =
TRUE)

  # Step 8: Total sum of TPF
  total_sum_tpf <- sum(df$TPF, na.rm = TRUE)

  # Step 9: Fraction of Step 7 / Step 8
  fraction_tpf <- sum_tpf_sn_cond / total_sum_tpf

  # Print results
  cat("Results:\n")
  cat("Total disadvantaged community census tract areas: ",
sum_area_sn_cond, "\n")
  cat("Total census tract areas: ", total_sum_area, "\n")
```

```
  cat("Fraction of disadvantaged community census tract areas: ",
fraction_area, "\n")
  cat("Number of disadvantaged community census tracts: ",
count_geoid10_sn_cond, "\n")
  cat("Number of census tracts: ", total_count_geoid10, "\n")
  cat("Fraction of disadvantaged community census tracts: ",
fraction_geoid10, "\n")
  cat("Total number of people in disadvantaged community census
tracts: ", sum_tpf_sn_cond, "\n")
  cat("Total number of people in census tracts: ", total_sum_tpf,
"\n")
  cat("Fraction of people in disadvantaged community census tracts: ",
fraction_tpf, "\n")
}

# use the function
calculate_census_metrics(dfcensus)
```

5. RStudio Analyses

```
# Author's Note: ChatGPT4 was used to debug this R code

PrincipalPortsIntersect <-
read.csv("PrincipalPorts_Justice40_Intersect_v1_Table.csv")

PrincipalPortsOneMile <-
read.csv("PrincipalPorts_Justice40_OneMile_v1_Table.csv")

AirportsIntersect <-
read.csv("Airports_Justice40_Intersect_v1_Table.csv")

AirportsOneMile <- read.csv("Airports_Justice40_OneMile_v1_Table.csv")

# subset of both airports data sets to include only airports with
international customs:
SubsetAirportsIntersect <- subset(AirportsIntersect, fac_type ==
"AIRPORT" & (intl_custo == "Y" | intl_cus_1 == "Y"))

SubsetAirportsOneMile <- subset(AirportsOneMile, fac_type == "AIRPORT"
& (intl_custo == "Y" | intl_cus_1 == "Y"))


# Copy 'fac_name' to a new column 'PORT_NAME' so that I can use the
function below
SubsetAirportsIntersect$PORT_NAME <- SubsetAirportsIntersect$fac_name

SubsetAirportsOneMile$PORT_NAME <- SubsetAirportsOneMile$fac_name


calculate_metrics_and_print <- function(df) {
  # Replace NA values in SN_T with 0
```

```
  df$SN_T[is.na(df$SN_T)] <- 0

  # Step 1: Count of unique PORT_NAME where SN_C = 1 or SN_T = 1
  unique_port_name_sn_c_1 <- length(unique(df$PORT_NAME[df$SN_C == 1 |
df$SN_T == 1]))

  # Step 2: Count of different values in PORT_NAME
  total_unique_port_name <- length(unique(df$PORT_NAME))

  # Step 3: Fraction of Step 1 / Step 2
  fraction_port_name <- unique_port_name_sn_c_1 /
total_unique_port_name

  # Step 4: Count of all rows in GEOID10 where SN_C = 1 or SN_T = 1
  count_geoid10_sn_c_1 <- sum(df$SN_C == 1 | df$SN_T == 1)

  # Step 5: Count of all rows in GEOID10
  total_count_geoid10 <- nrow(df)

  # Step 6: Fraction of Step 4 / Step 5
  fraction_geoid10 <- count_geoid10_sn_c_1 / total_count_geoid10

  # Step 7: Total sum of TPF where SN_C = 1 or SN_T = 1
  sum_tpf_sn_c_1 <- sum(df$TPF[df$SN_C == 1 | df$SN_T == 1], na.rm =
TRUE)

  # Step 8: Total sum of TPF
  total_sum_tpf <- sum(df$TPF, na.rm = TRUE)

  # Step 9: Fraction of Step 7 / Step 8
  fraction_tpf <- sum_tpf_sn_c_1 / total_sum_tpf

  # Print results
  cat("Results:\n")
  cat("Number of ports in or near disadvantaged communities: ",
unique_port_name_sn_c_1, "\n")
  cat("Number of ports in or near all communities: ",
total_unique_port_name, "\n")
  cat("Fraction of ports in or near disadvantaged communities: ",
fraction_port_name, "\n")
  cat("Number of disadvantaged community census tracts that contain or
are near a port: ", count_geoid10_sn_c_1, "\n")
  cat("Number of census tracts that contain or are near a port: ",
total_count_geoid10, "\n")
  cat("Fraction of disadvantaged community census tracts that contain
or are near a port: ", fraction_geoid10, "\n")
  cat("Total number of people in disadvantaged community census tracts
that contain or are near a port: ", sum_tpf_sn_c_1, "\n")
  cat("Total number of people in census tracts that contain or are
near a port: ", total_sum_tpf, "\n")
  cat("Fraction of people in disadvantaged community census tracts
that contain or are near a port: ", fraction_tpf, "\n")
```

```
}

#Use function with each of my datasets
calculate_metrics_and_print(PrincipalPortsIntersect)

calculate_metrics_and_print(PrincipalPortsOneMile)

calculate_metrics_and_print(SubsetAirportsIntersect)

calculate_metrics_and_print(SubsetAirportsOneMile)


#make everything fit nicely into a table
calculate_metrics_df <- function(df, name) {
  # Replace NA values in SN_T with 0
  df$SN_T[is.na(df$SN_T)] <- 0

  # Calculations
  unique_port_name_sn_c_1 <- length(unique(df$PORT_NAME[df$SN_C == 1 |
df$SN_T == 1]))
  total_unique_port_name <- length(unique(df$PORT_NAME))
  fraction_port_name <- unique_port_name_sn_c_1 /
total_unique_port_name
  count_geoid10_sn_c_1 <- sum(df$SN_C == 1 | df$SN_T == 1)
  total_count_geoid10 <- nrow(df)
  fraction_geoid10 <- count_geoid10_sn_c_1 / total_count_geoid10
  sum_tpf_sn_c_1 <- sum(df$TPF[df$SN_C == 1 | df$SN_T == 1], na.rm =
TRUE)
  total_sum_tpf <- sum(df$TPF, na.rm = TRUE)
  fraction_tpf <- sum_tpf_sn_c_1 / total_sum_tpf

  # Return results as a one-row data frame
  return(data.frame(
    DataSet = name,
    UniquePorts = unique_port_name_sn_c_1,
    TotalPorts = total_unique_port_name,
    FractionPorts = fraction_port_name,
    GEOIDCount = count_geoid10_sn_c_1,
    TotalGEOID = total_count_geoid10,
    FractionGEOID = fraction_geoid10,
    SumTPFSN = sum_tpf_sn_c_1,
    TotalTPF = total_sum_tpf,
    FractionTPF = fraction_tpf
  ))
}

# Define the list of data frames and their names
data_frames <- list(PrincipalPortsIntersect, PrincipalPortsOneMile,
SubsetAirportsIntersect, SubsetAirportsOneMile)
data_frame_names <- c("Principal Seaports (Direct Intersection)",
"Principal Seaports (1 Mile Radius)", "International Airports (Direct
Intersection)", "International Airports (1 Mile Radius)")
```

```
# Initialize an empty data frame for results
results_table <- data.frame()

# Loop through each data frame, applying the function
for (i in seq_along(data_frames)) {
  results <- calculate_metrics_df(data_frames[[i]],
data_frame_names[i])
  results_table <- rbind(results_table, results)
}

names(results_table) <- c("Data", "Disadvantaged Ports", "All Ports",
                          "Fraction of Disadvantaged Ports",
"Disadvantaged Census Tracts", "All Census Tracts",
                          "Fraction of Disadvantaged Census Tracts",
"Disadvantaged Population", "Total Population",
                          "Fraction of Disadvantaged Population")

# Print the combined results
print(results_table)

#export the table

folder_path <- ""

file_path <- paste0(folder_path, "/results_table.csv")

write.csv(results_table, file_path, row.names = FALSE)
```

A-2. SUPPLEMENTARY FIGURES AND TABLES

TABLE. A-1. SUMMARY OF ANALYSES COMPARING JUSTICE40 DISADVANTAGED COMMUNITIES TO INTERNATIONAL AIRPORTS AND MAJOR SEAPORTS.[12]

Data	Ports	All Ports	Fraction Disadv. Ports	Disadv. Census Tracts	All Census Tracts	Fraction Disadv. Census Tracts	Disadv. Pop.	Total Pop.	Fraction Disadv. Pop.
Principal Seaports (Direct Intersection)	80	146	54.8%	80	146	54.8%	266,584	510,650	52.2%
Principal Seaports	118	149	79.2%	416	801	51.9%	1,316,047	2,676,944	49.2%

[12] I ran an assessment of available data to determine which major U.S. airports and seaports are located near designated Disadvantaged Communities per Exec. Order No. 14,008, 86 Fed. Reg. 7619 § 222 (Jan. 27, 2021). BUREAU OF TRANSP. STATISTICS, U.S. DEP'T OF TRANSP., AIRPORTS (Nov. 15, 2022), https://perma.cc/26Q2-CJHM; BUREAU OF TRANSP. STATISTICS, U.S. DEP'T OF TRANSP., PRINCIPAL PORTS (Aug. 9, 2022), https://perma.cc/7XP3-XRCQ (archived Apr. 11, 2024). I also gathered data from the White House Council on Environmental Quality Climate and Economic Justice Screening Tool which identified designated "Disadvantaged Communities" (also known as "Justice40 Communities"). ESRI DEMOGRAPHICS, JUSTICE40 COMMUNITIES MAP (Nov. 2022), https://perma.cc/5R7U-EG9Z; 86 Fed. Reg. 7619 § 222 (Jan. 27, 2021); 86 Fed. Reg. 7619 § 223 (Jan. 27, 2021); CLIMATE AND ECONOMIC JUSTICE SCREENING TOOL, DOWNLOADS, SHAPEFILE, https://perma.cc/2WZJ-UKX3.

(1 Mile Radius)									
International Airports (Direct Intersection)	97	331	29.3%	97	331	29.3%	332,758	1,097,377	30.3%
International Airports (1 Mile Radius)	174	332	52.4%	455	1,363	33.4%	1,808,338	5,698,975	31.7%
Benchmark Census Data				27,248	74,134	36.8%	109,189,666	328,267,709	33.3%