



# Missing Persons

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# Cumulative NamUs Cases

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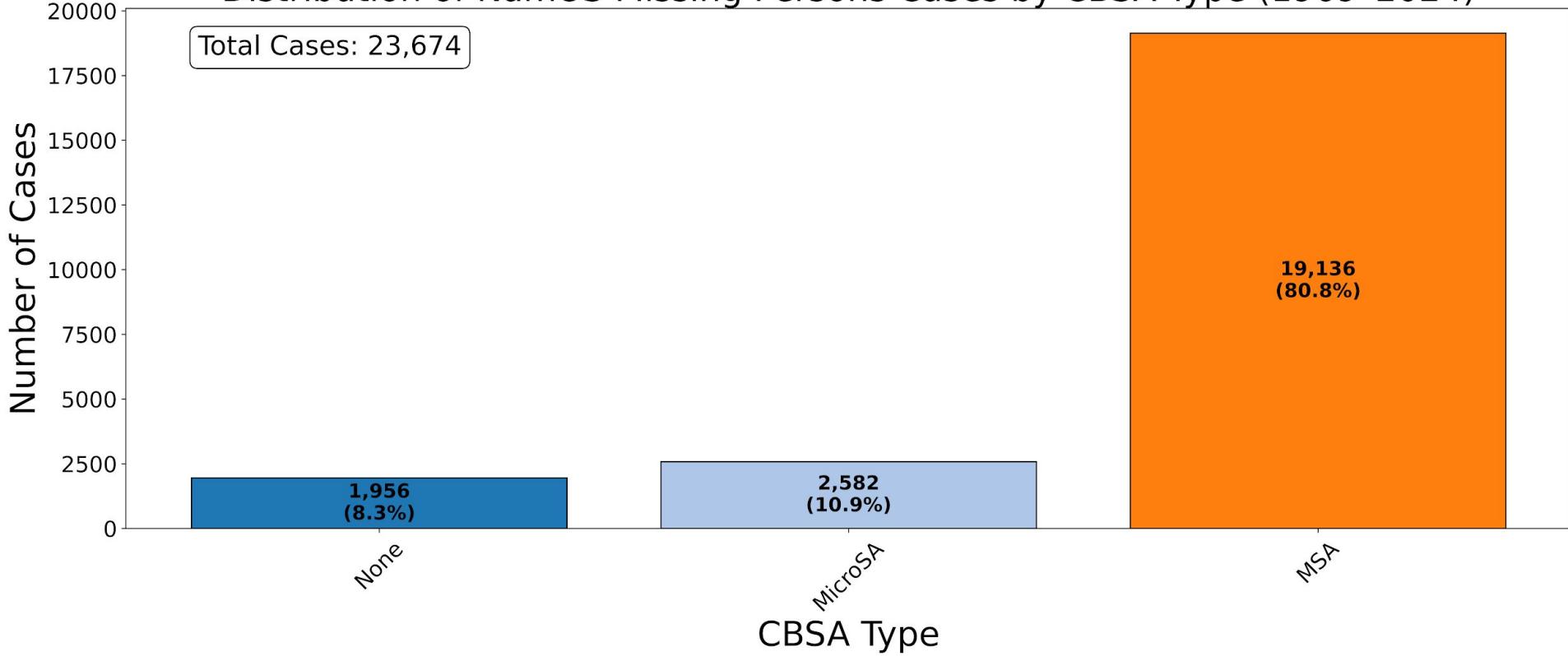
- Scaling of Cumulative Cases vs Population
- Choropleths
- Demographic Analysis of Cases
  - Population Pyramids
  - Sex Distribution
  - Race/Ethnicity Distribution

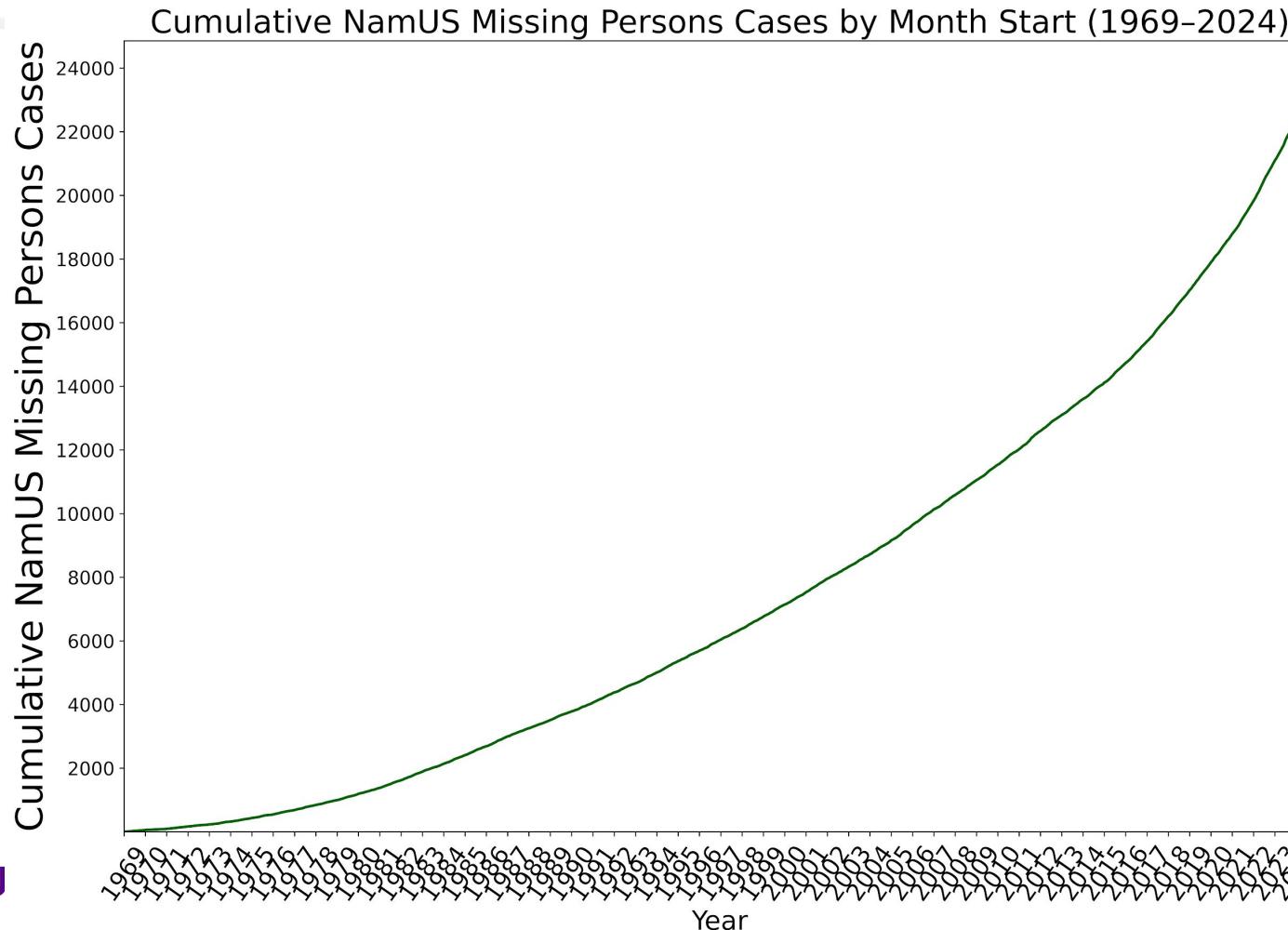
# NamUs Missing Persons Cases Data Characteristics

- We have **25,630** available records and use **16,370** records (from 2000-2024), within the decades:
  - 1900-1910: 1
  - 1910-1920: 2
  - 1920-1930: 6
  - 1930-1940: 8
  - 1940-1950: 30
  - 1950-1960: 86
  - 1960-1970: 268
  - 1970-1980: 1272
  - 1980-1990: 2961
  - 1990-2000: 3534
  - 2000-2010: 4465
  - 2010-2020: 6396
  - 2020-2024: 5899
  - 2025: 702
- The data missing per column is as follows:
  - CaseID: 0.00%
  - FirstName: 0.00%
  - MiddleName: 24.78%
  - LastName: 0.00%
  - Nicknames: 72.19%
  - CurrentMinAge: 0.00%
  - CurrentMaxAge: 0.00%
  - Sex: 0.00%
  - Ethnicity: 0.00%
  - HeightInches: 0.14%
  - WeightPounds: 0.19%
  - EyeColor: 2.41%
  - HairColor: 1.76%
  - DisappearanceDate: 0.00%
  - City: 0.42%
  - State: 0.00%
  - County: 0.31%
  - InvestigatingAgency: 0.01%

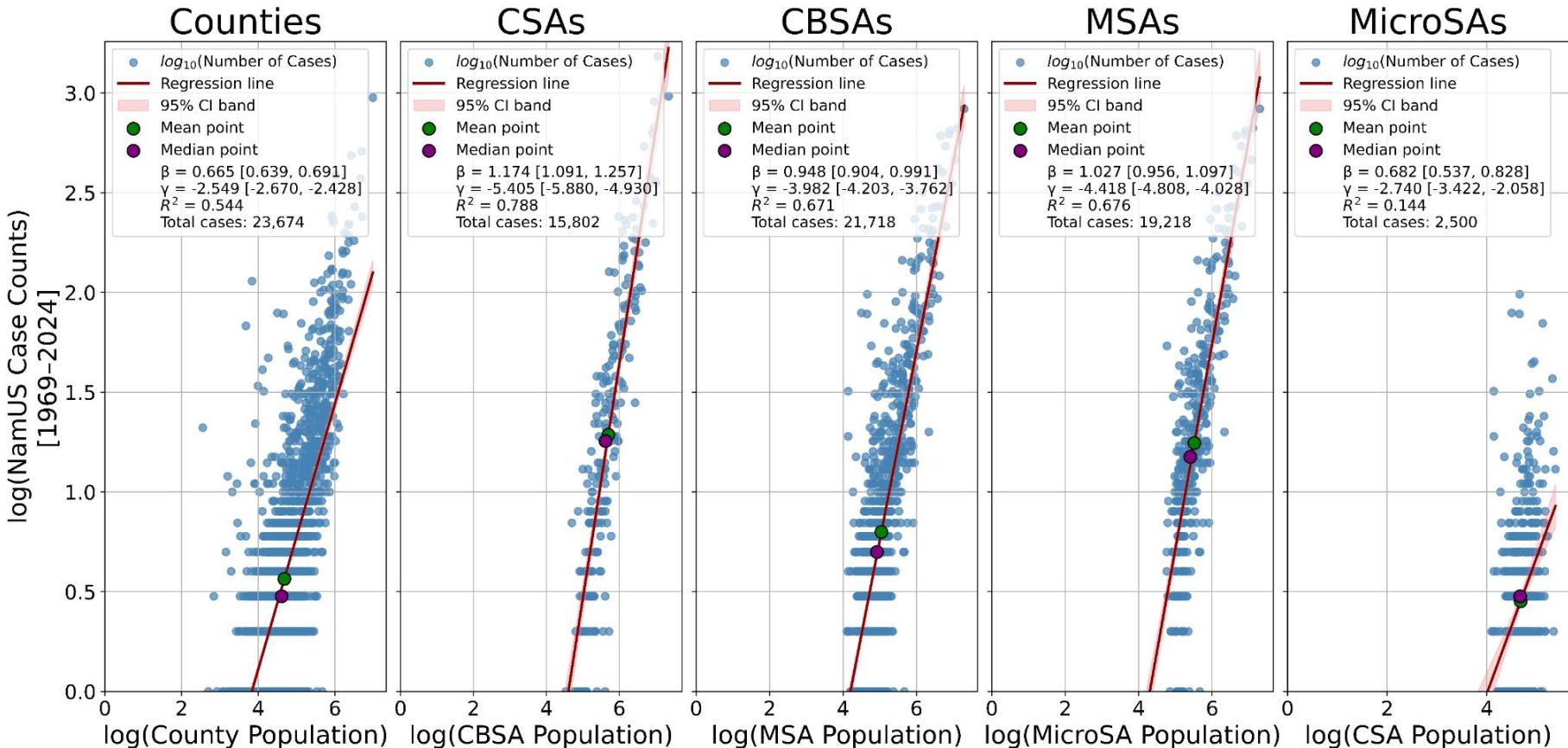
# NamUs Cases [1969-2024]

# Distribution of NamUS Missing Persons Cases by CBSA Type (1969–2024)

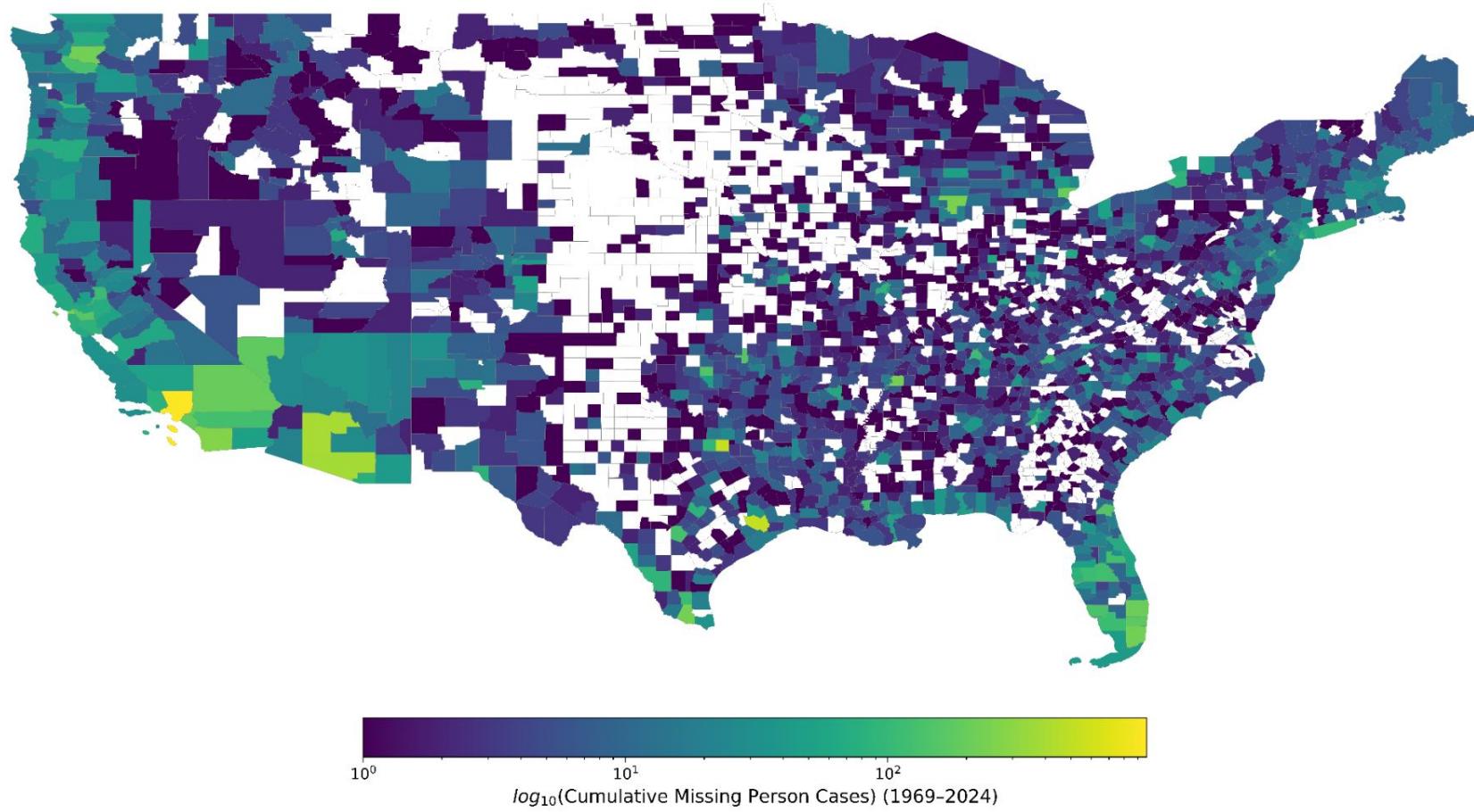




# Scaling Exponent ( $\beta$ ) of NamUs Missing Persons Cases vs GEOID Population [1969–2024]

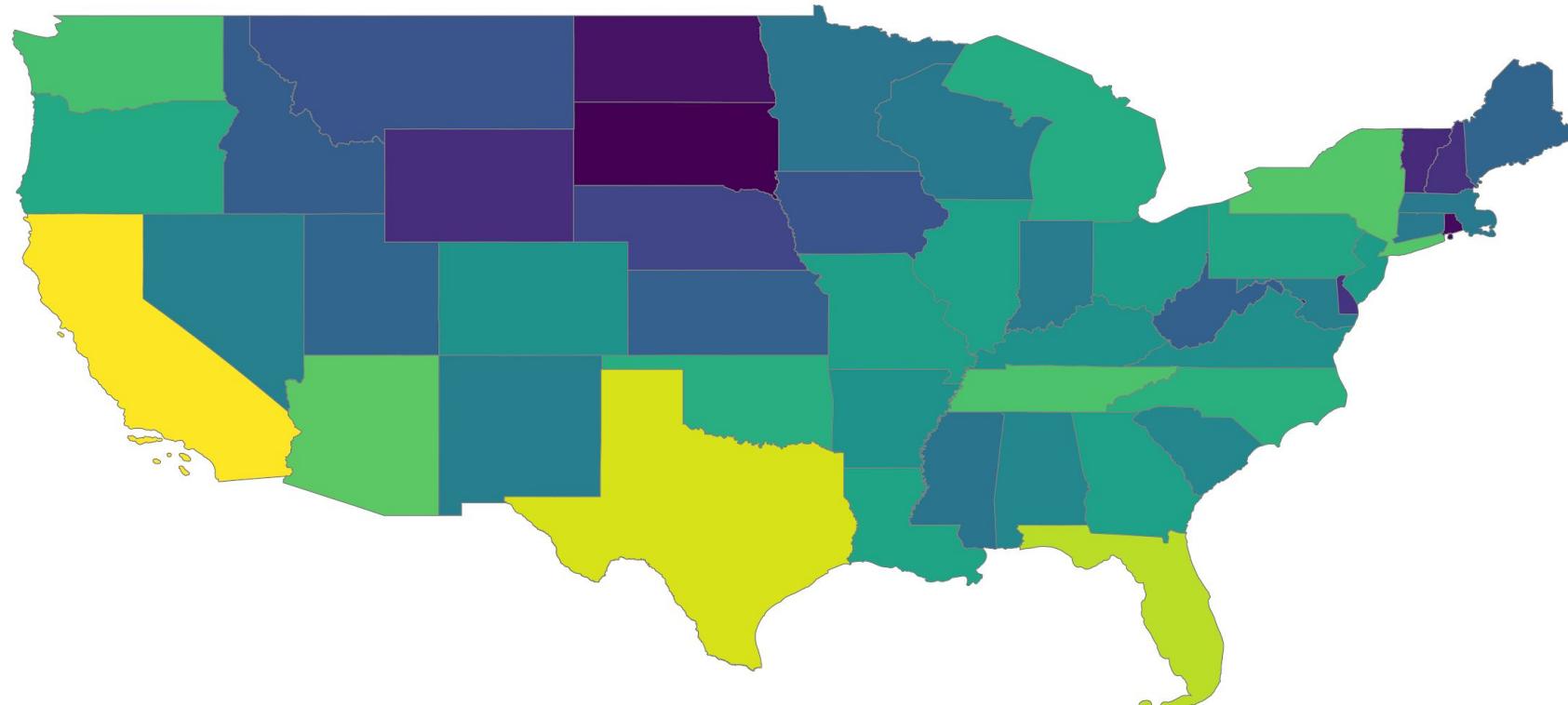


# Cumulative NamUs Missing Person Cases by County (Continental U.S., 1969-2024)

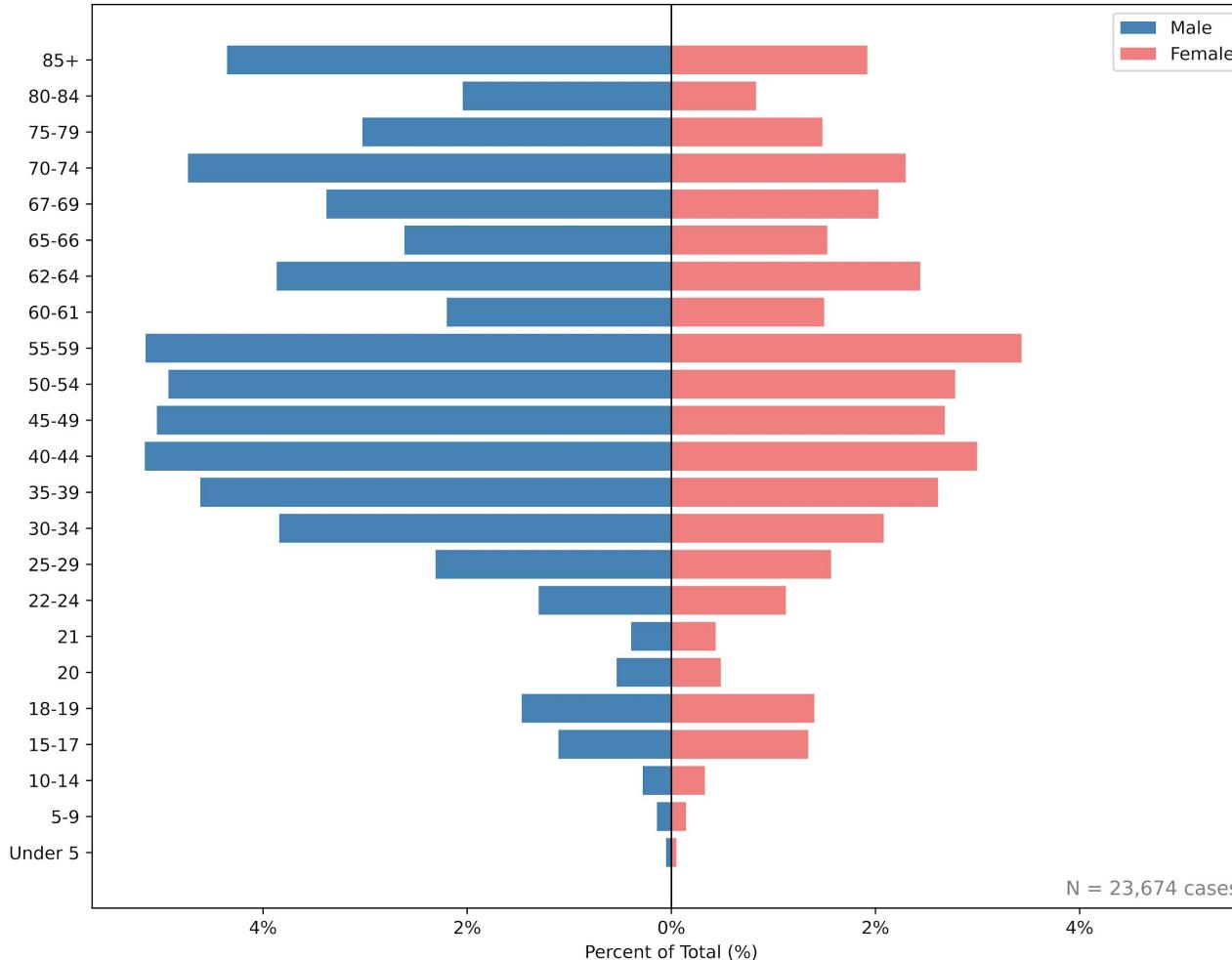


$\log_{10}(\text{Cumulative Missing Person Cases}) \text{ (1969-2024)}$

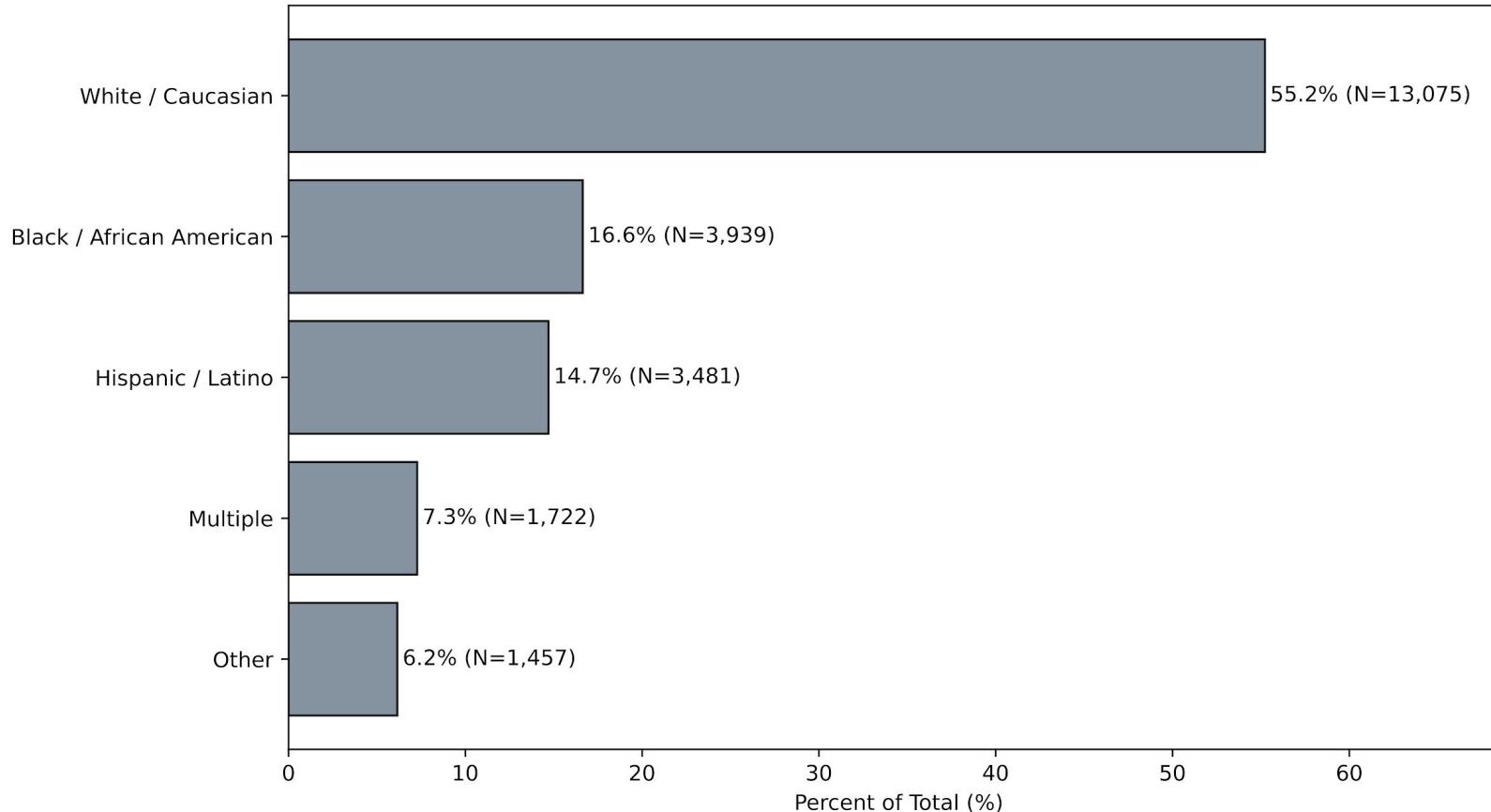
# Cumulative NamUs Missing Person Cases by State (Continental U.S., 1969-2024)



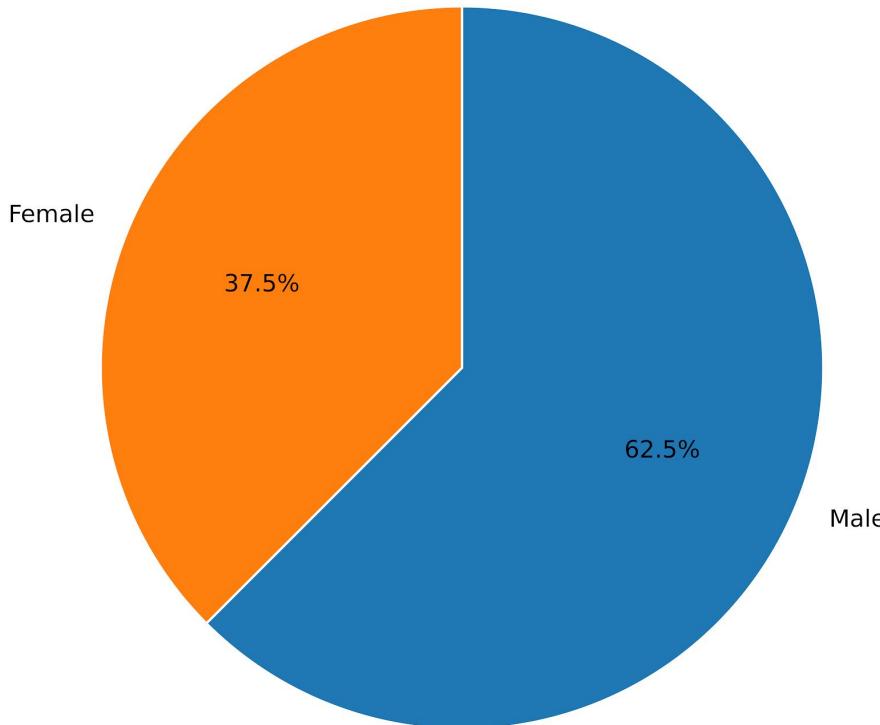
### Age / Sex Distribution of Cumulative Missing Persons Cases [1969-2024]



## Ethnicity Distribution of Cumulative NamUs Missing Persons[1969-2024] Cases (N = 23,674 cases)

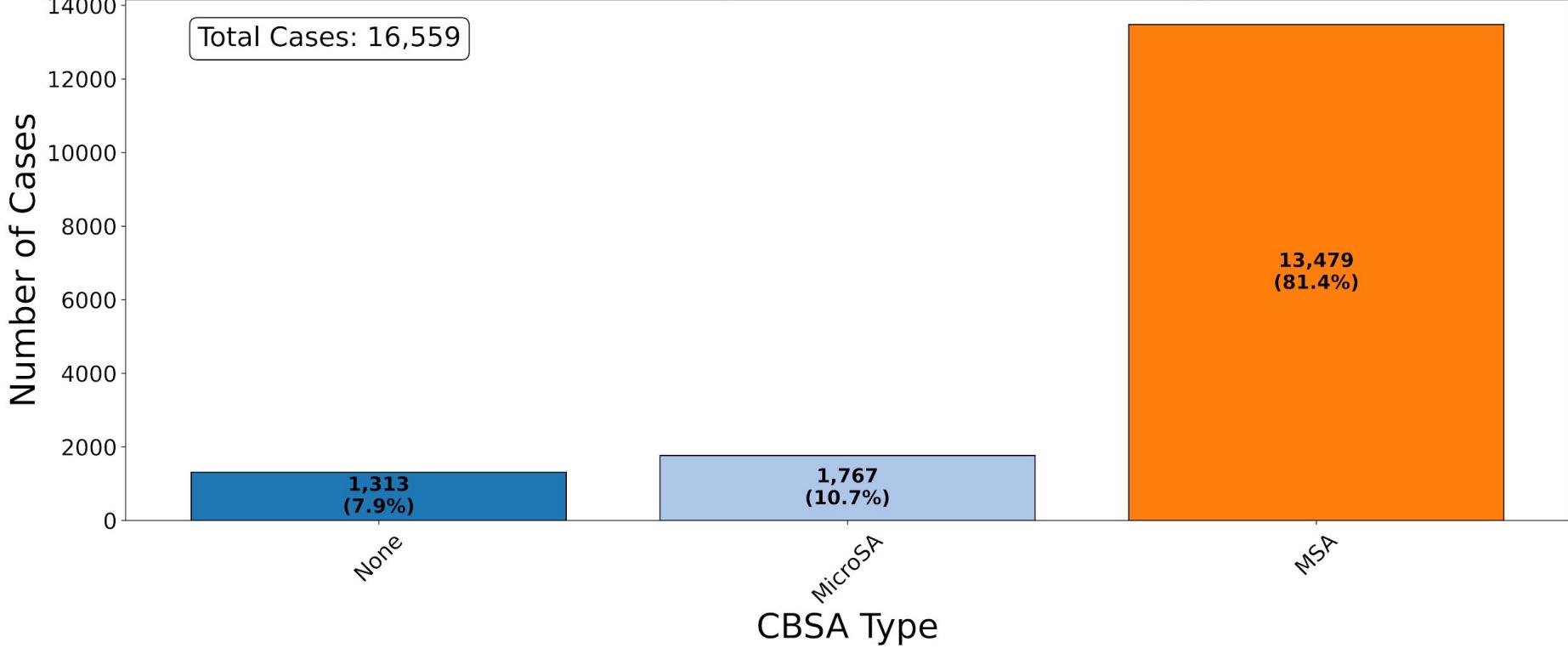


**Sex Distribution of Cumulative NamUs Missing Persons[1969-2024] Cases  
(N = 23,674 cases)**

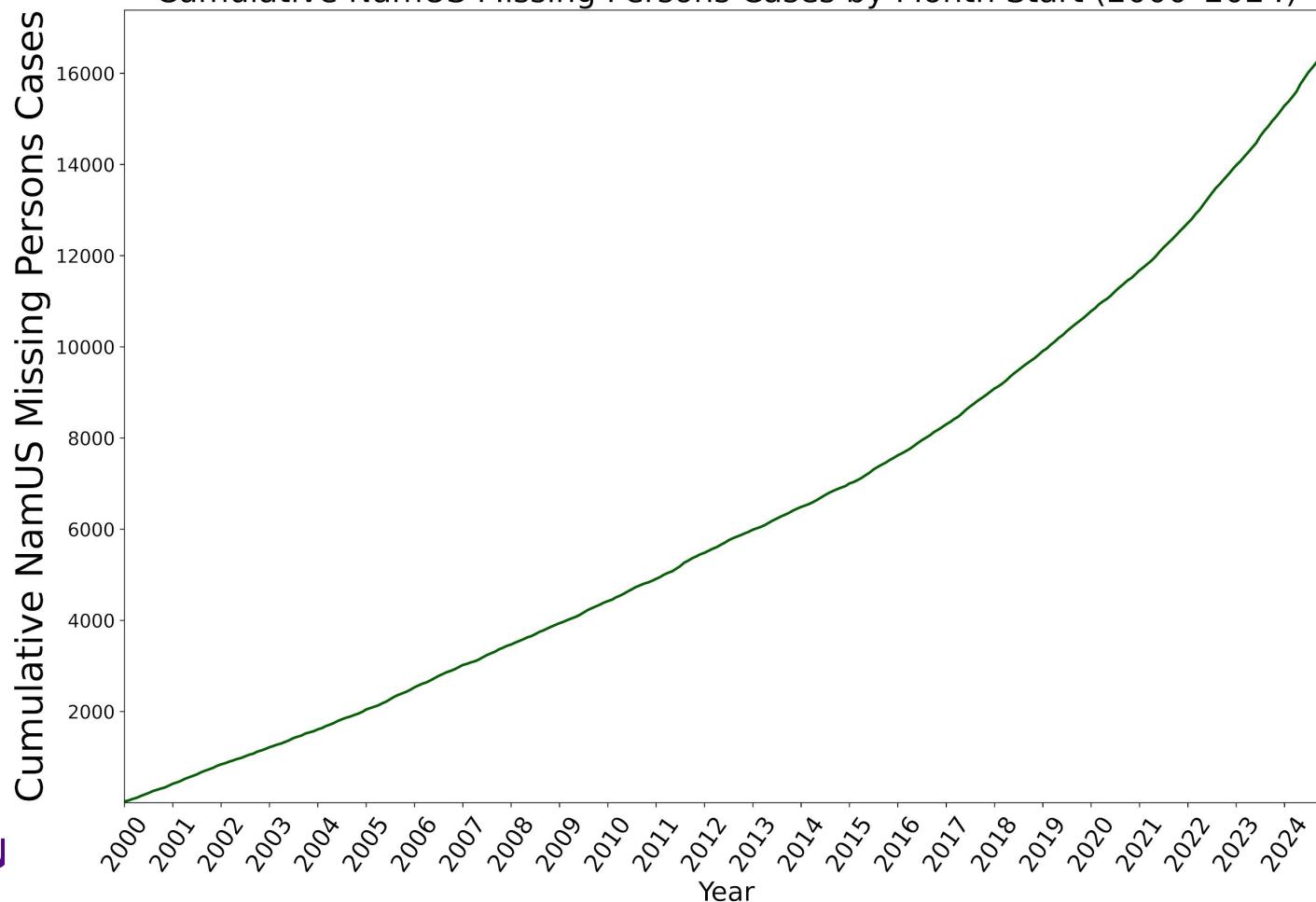


# NamUs Cases [2000-2024]

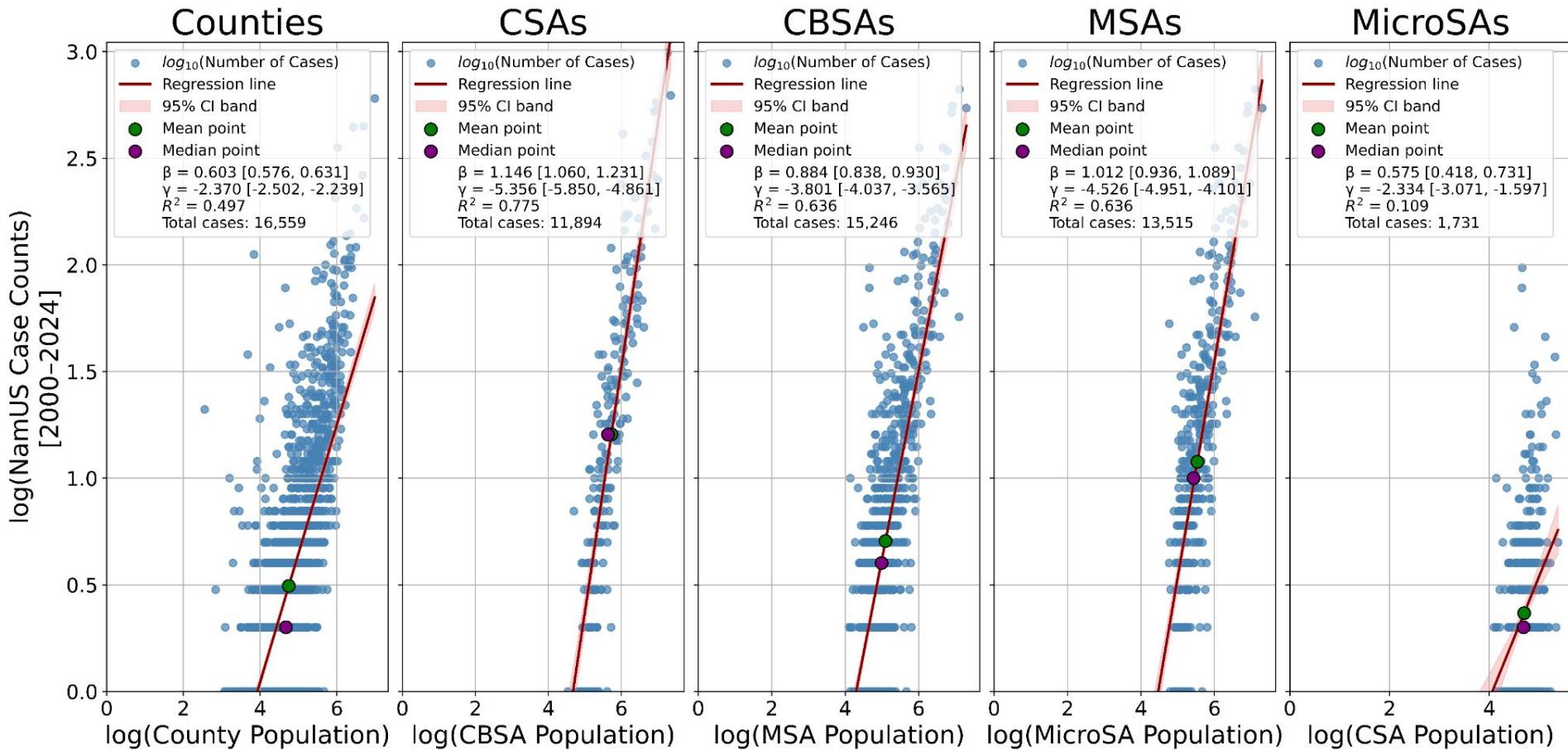
# Distribution of NamUS Missing Persons Cases by CBSA Type (2000-2024)



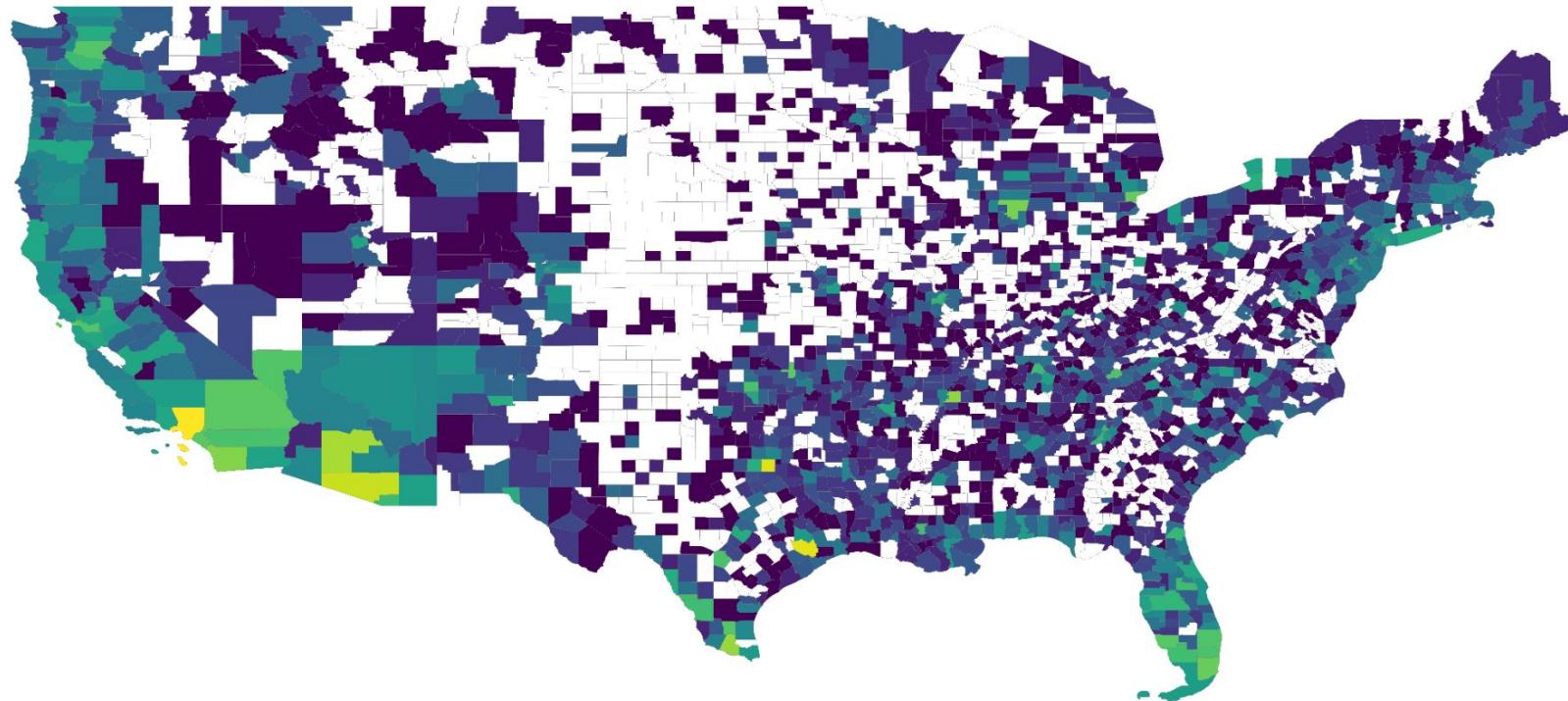
## Cumulative NamUS Missing Persons Cases by Month Start (2000-2024)



# Scaling Exponent ( $\beta$ ) of NamUs Missing Persons Cases vs GEOID Population [2000–2024]



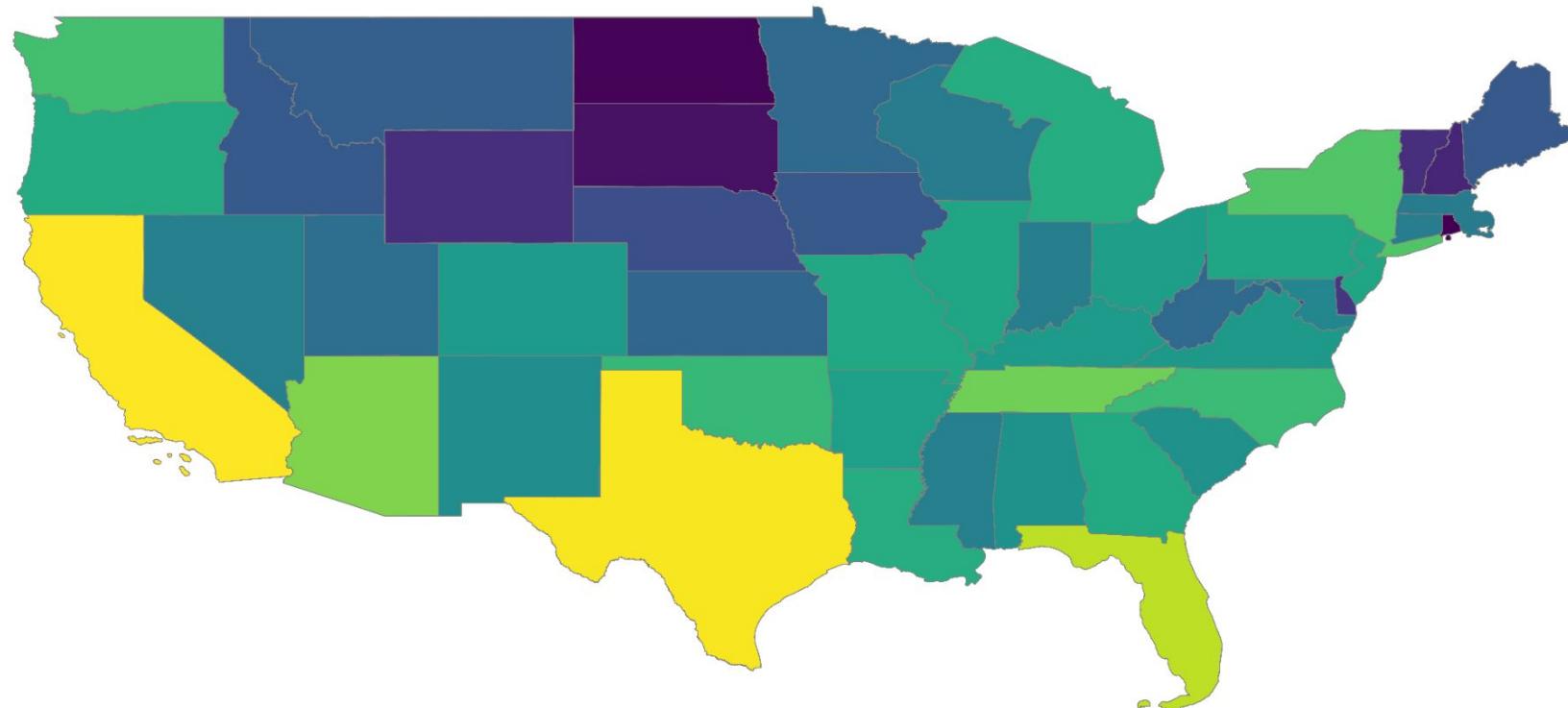
# Cumulative NamUs Missing Person Cases by County (Continental U.S., 2000-2024)



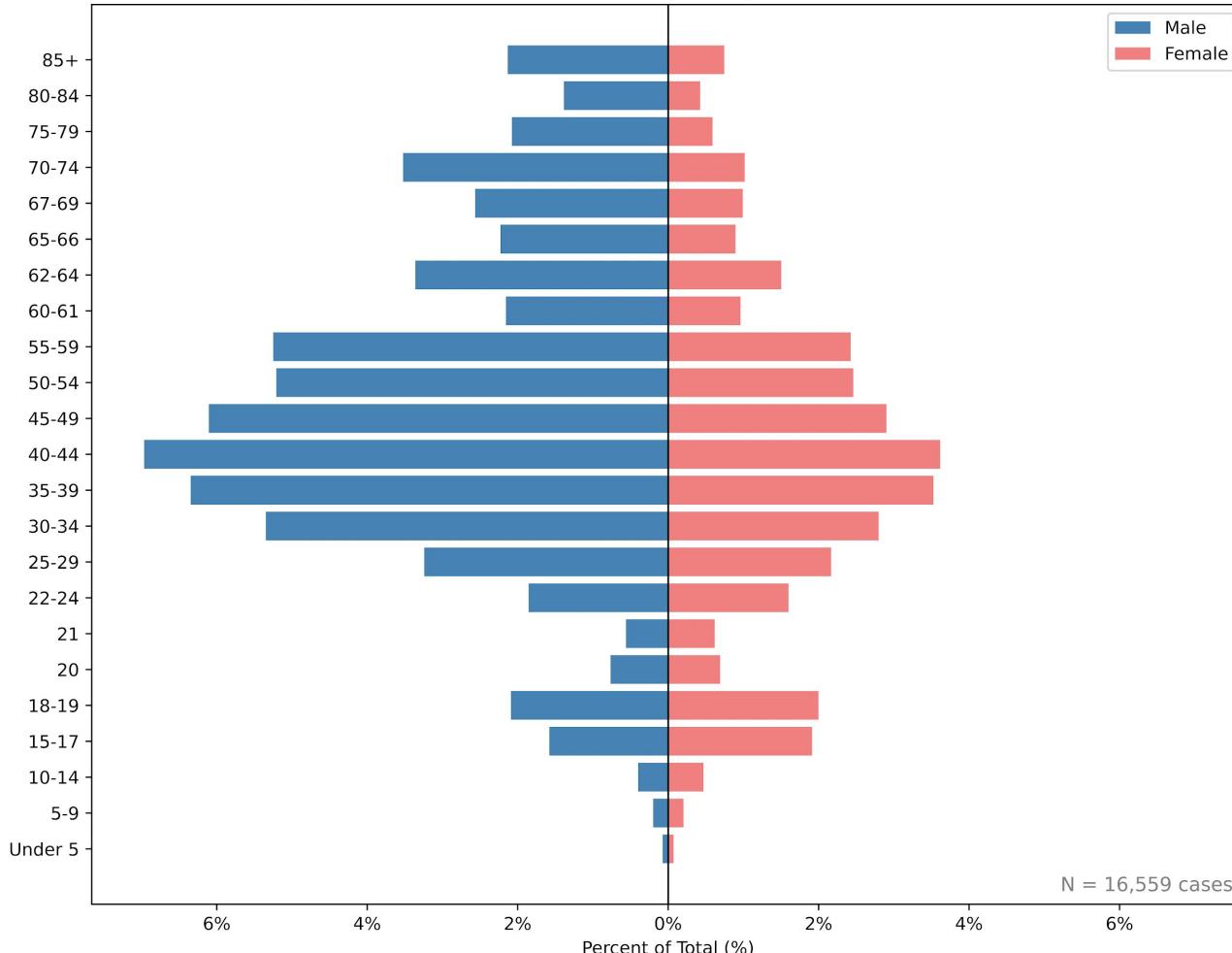
$\log_{10}(\text{Cumulative Missing Person Cases})$  (2000-2024)



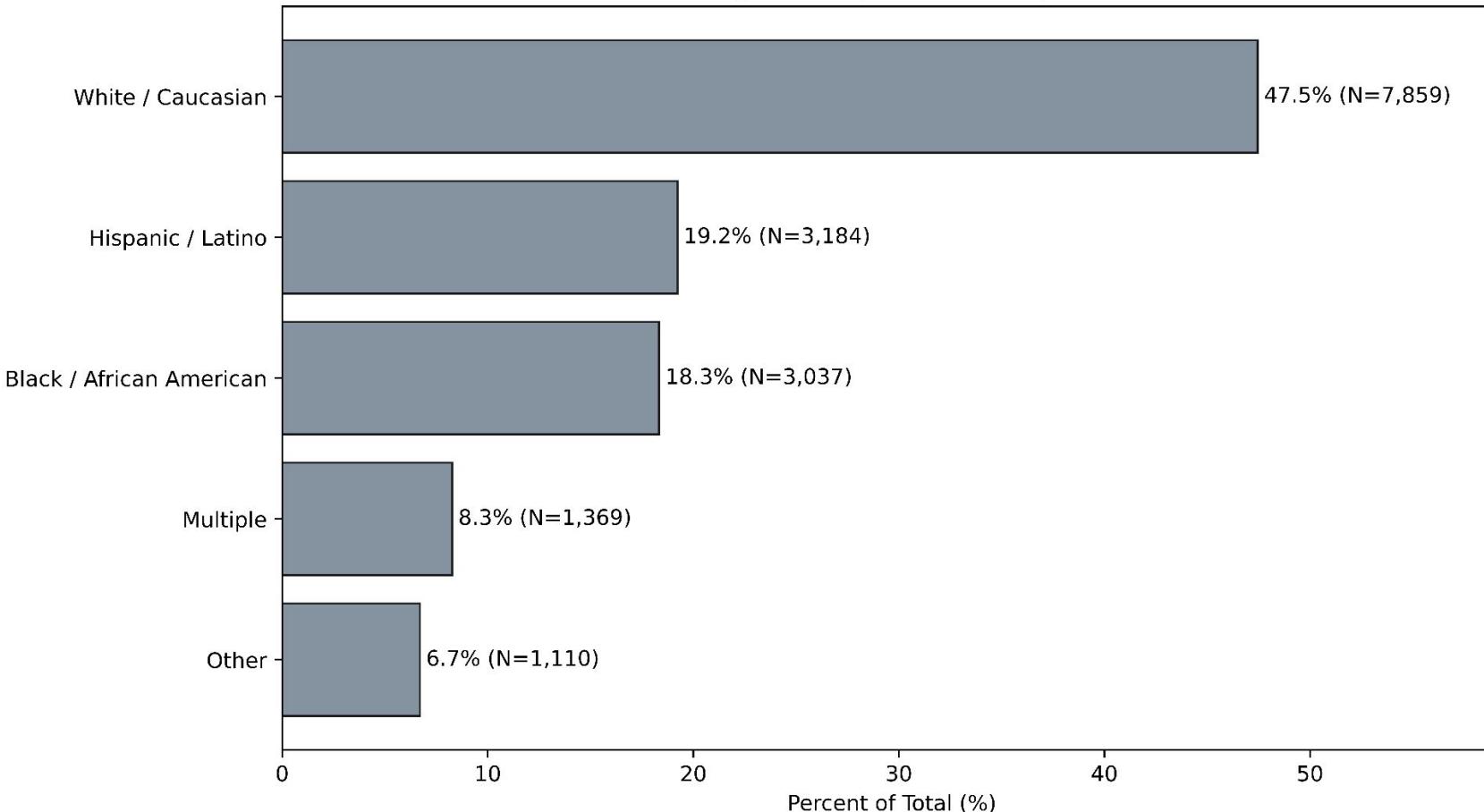
# Cumulative NamUs Missing Person Cases by State (Continental U.S., 2000-2024)



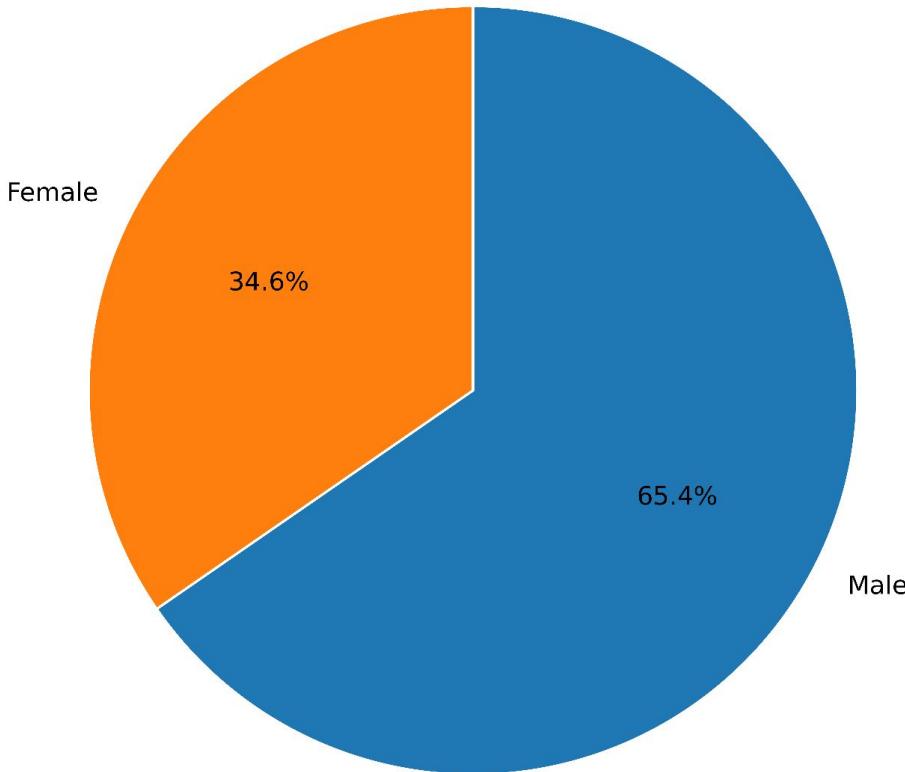
### Age / Sex Distribution of Cumulative Missing Persons Cases [2000-2024]



## Ethnicity Distribution of Cumulative NamUs Missing Persons [2000-2024] Cases (N = 16,559 cases)

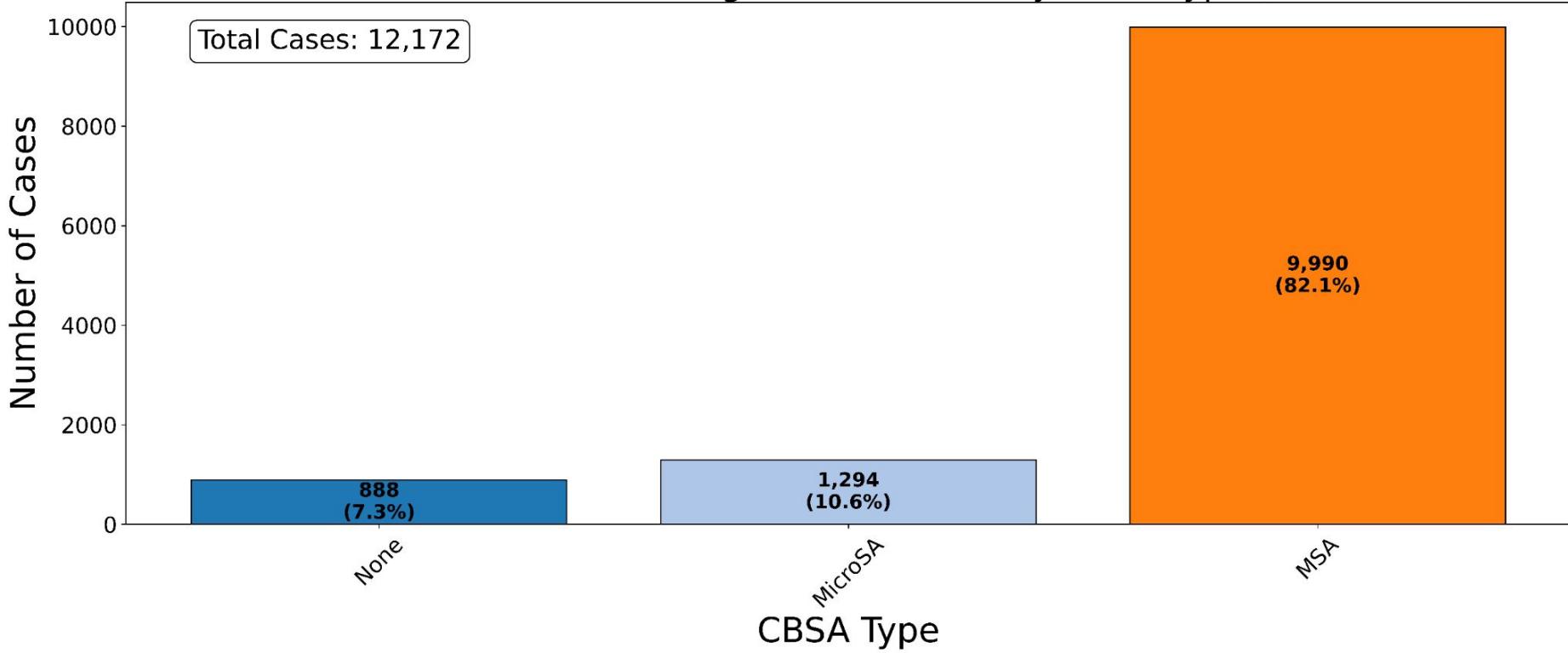


## **Sex Distribution of Cumulative NamUs Missing Persons [2000-2024] Cases (N = 16,559 cases)**

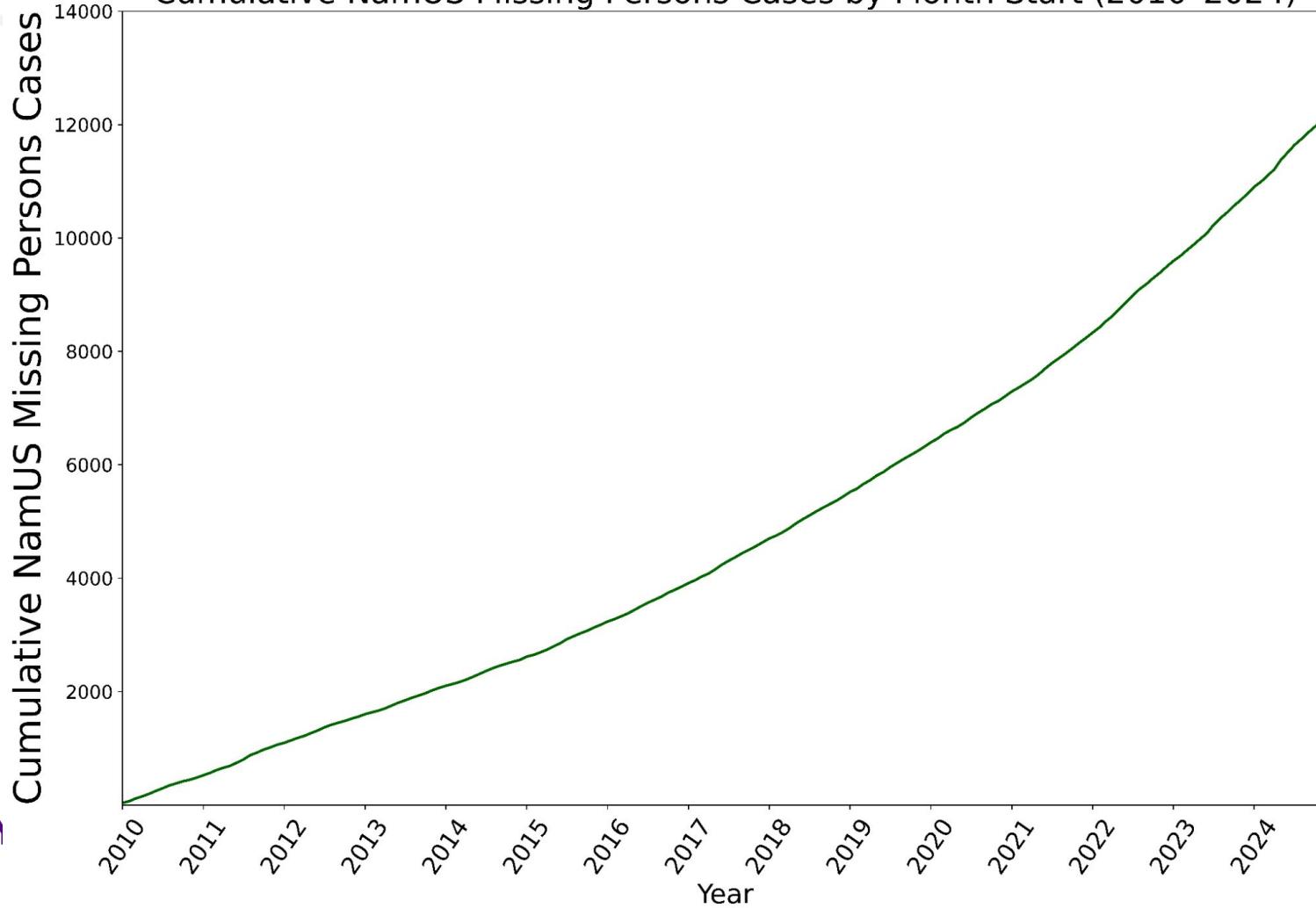


# NamUs Cases [2010-2024]

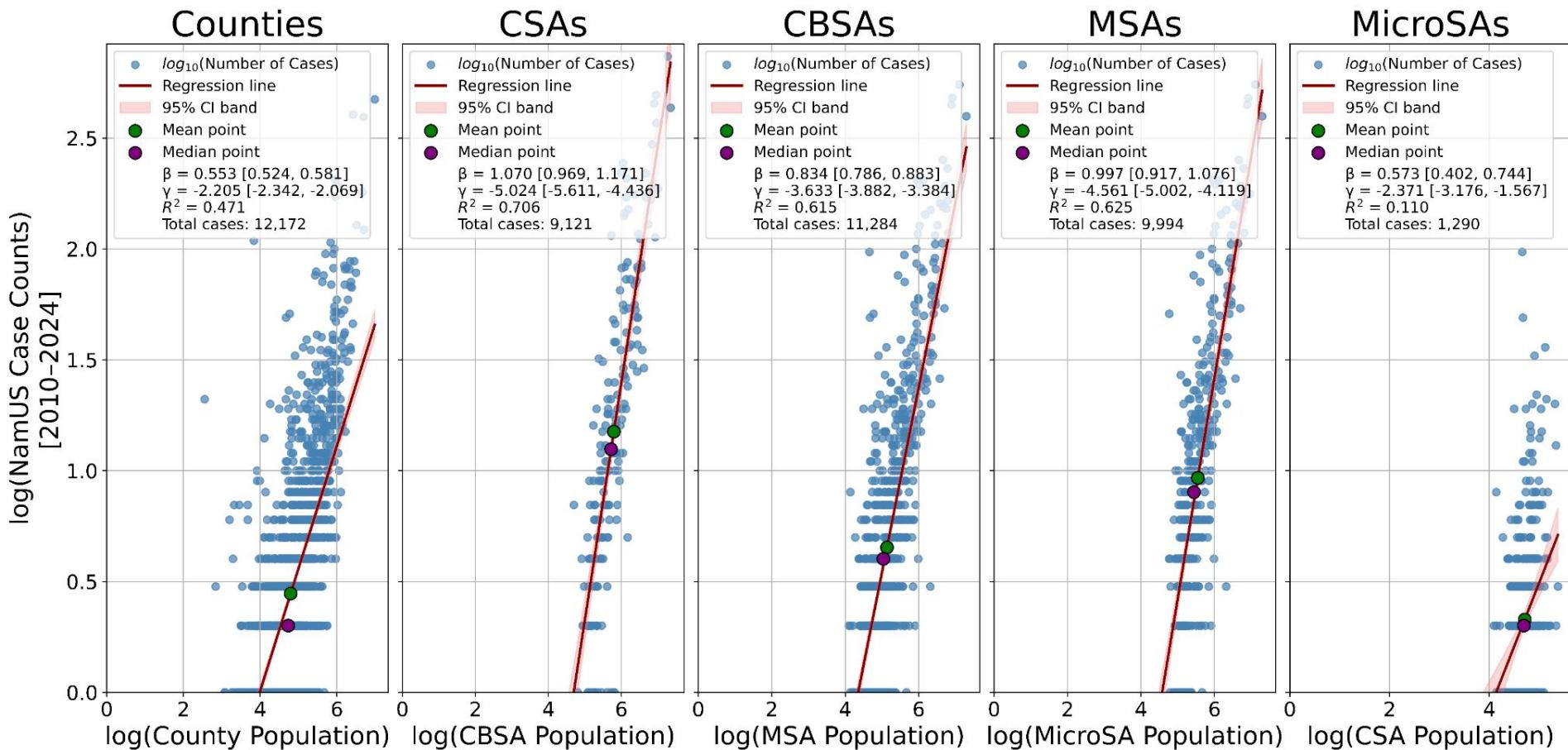
## Distribution of NamUS Missing Persons Cases by CBSA Type (2010-2024)



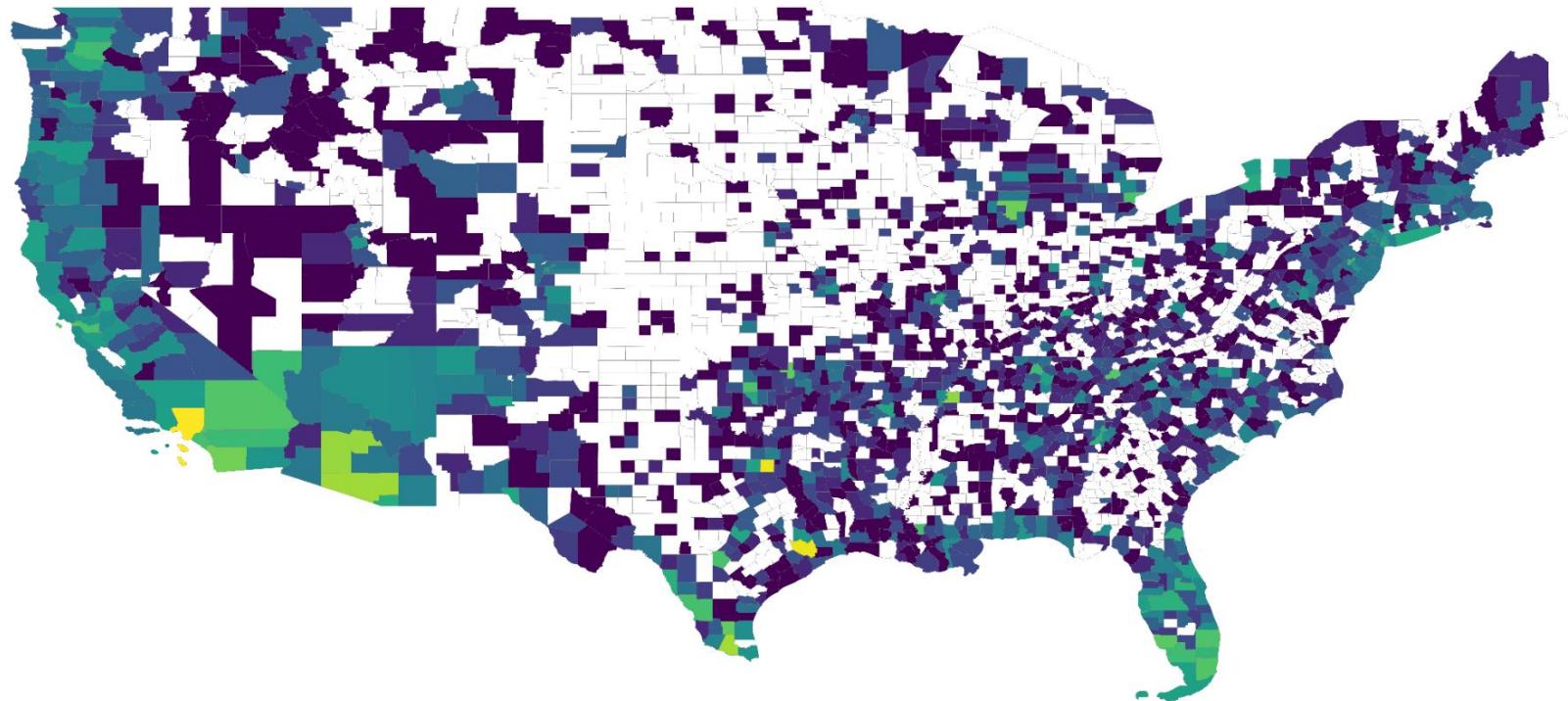
## Cumulative NamUS Missing Persons Cases by Month Start (2010–2024)



# Scaling Exponent ( $\beta$ ) of NamUs Missing Persons Cases vs GEOID Population [2010–2024]



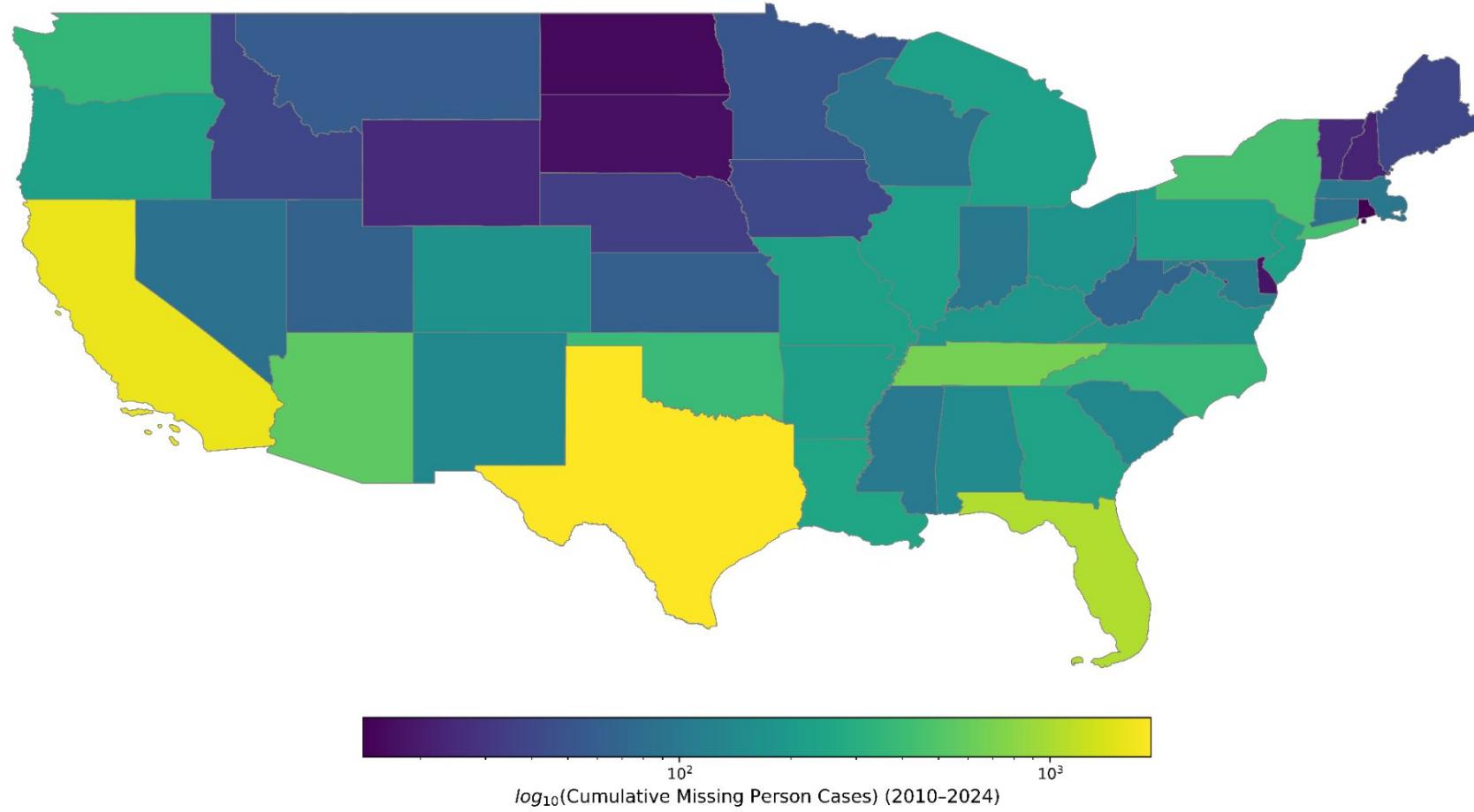
# Cumulative NamUs Missing Person Cases by County (Continental U.S., 2010-2024)



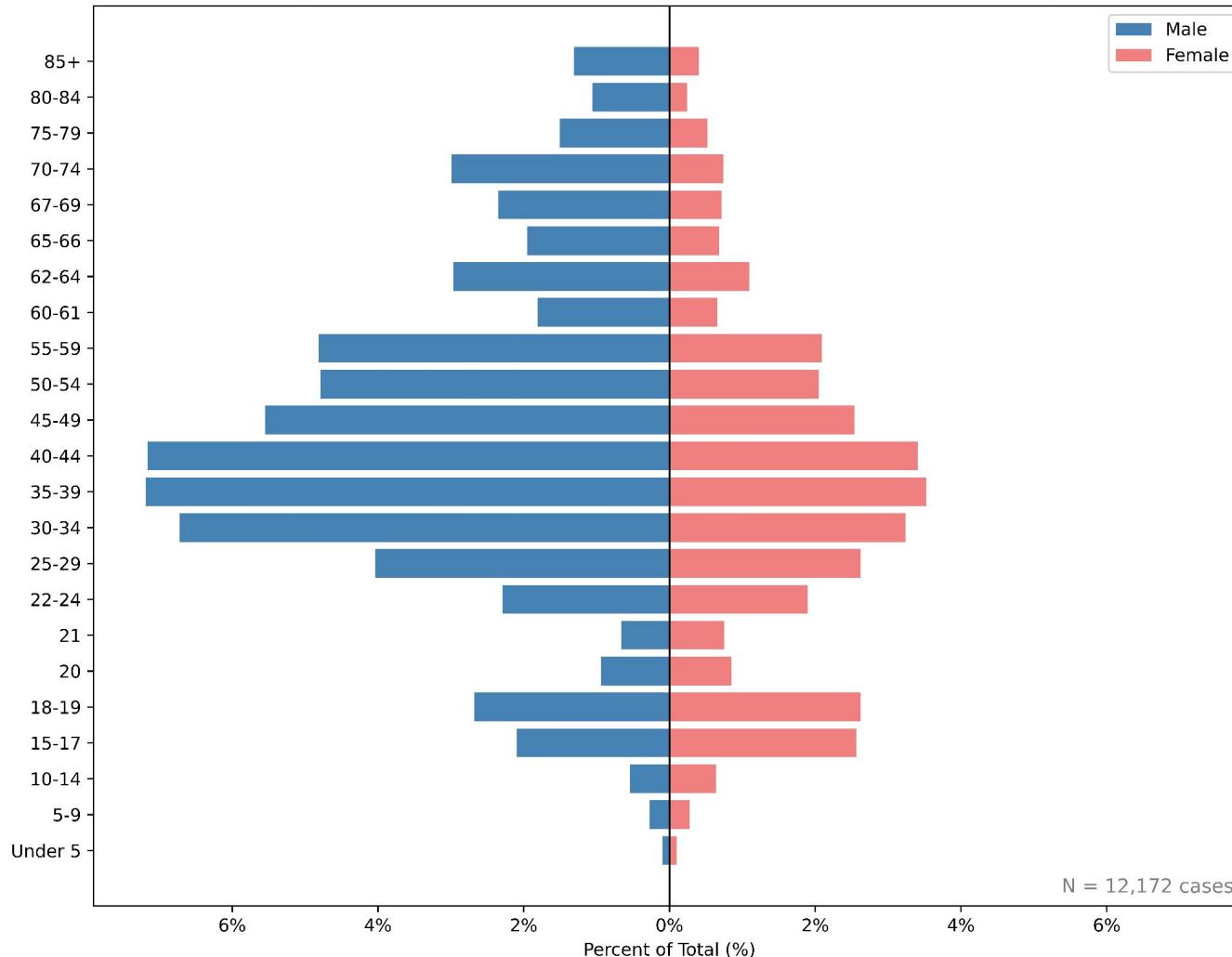
$\log_{10}(\text{Cumulative Missing Person Cases})$  (2010-2024)



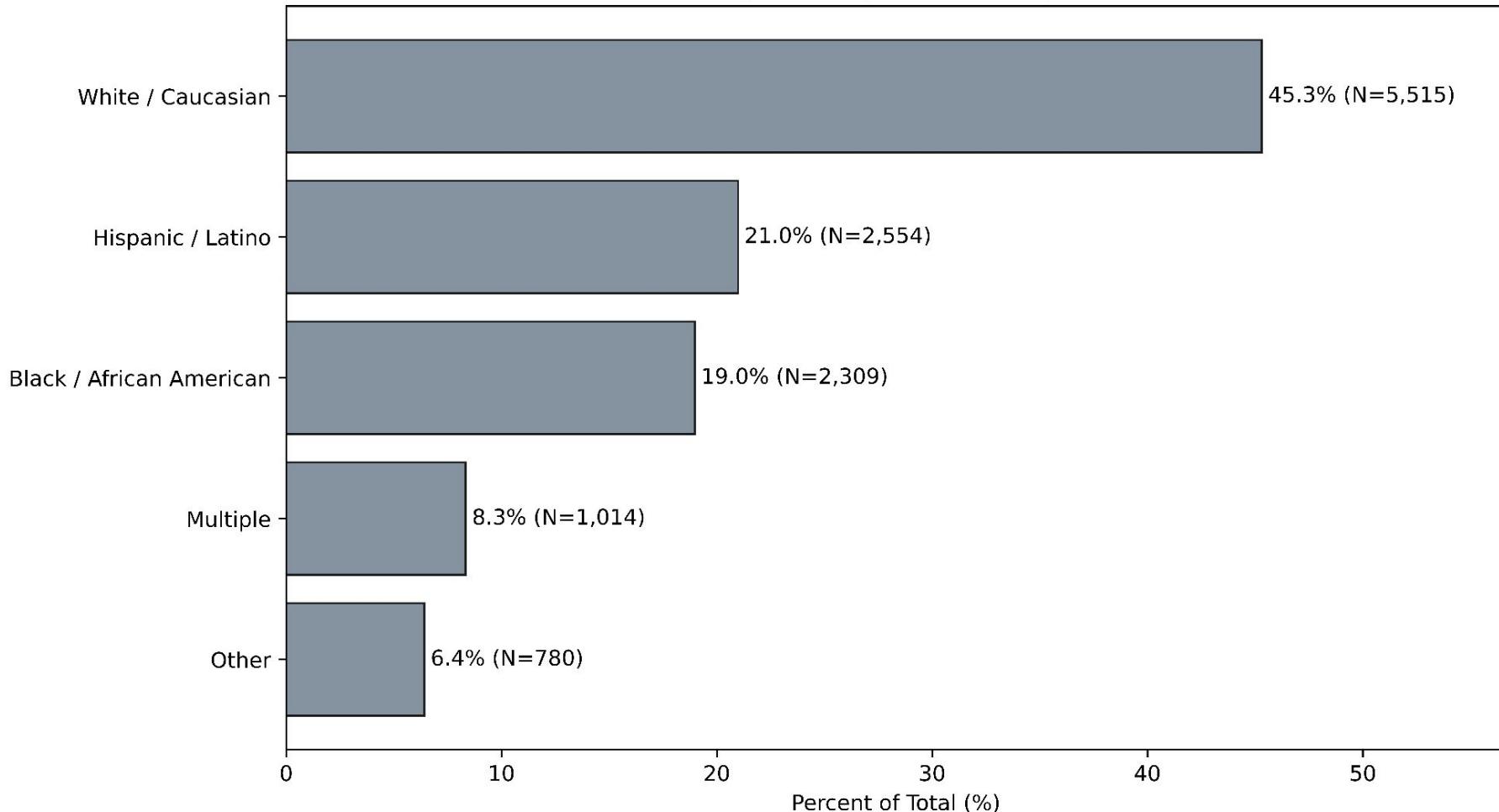
# Cumulative NamUs Missing Person Cases by State (Continental U.S., 2010-2024)



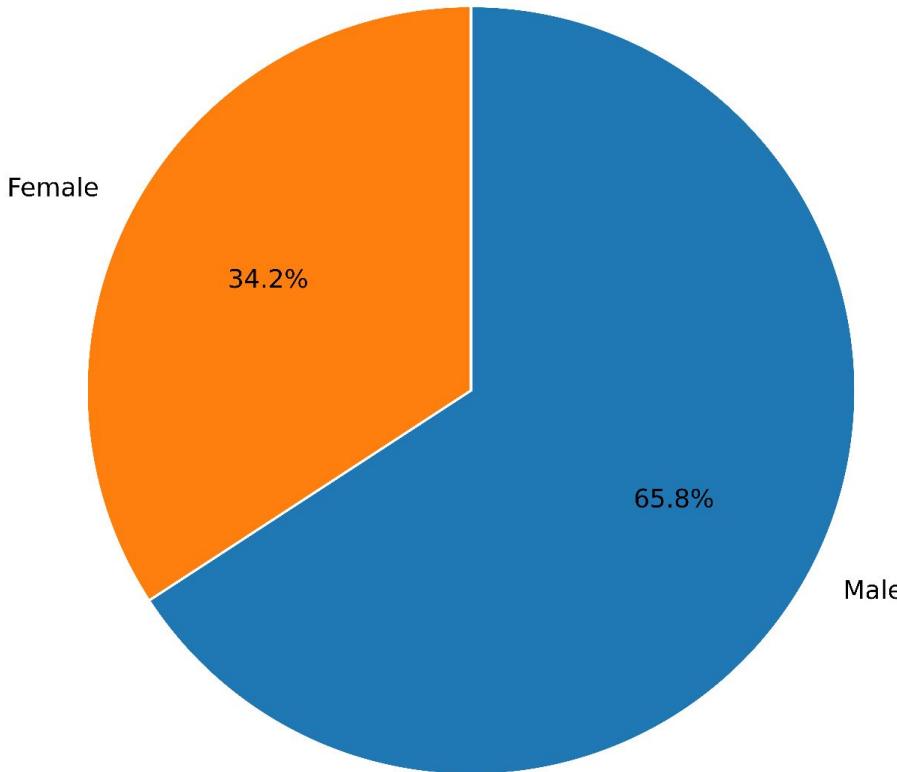
## Age / Sex Distribution of Cumulative Missing Persons Cases [2010-2024]



# Ethnicity Distribution of Cumulative NamUs Missing Persons [2010-2024] Cases (N = 12,172 cases)



## **Sex Distribution of Cumulative NamUs Missing Persons [2010-2024] Cases (N = 12,172 cases)**

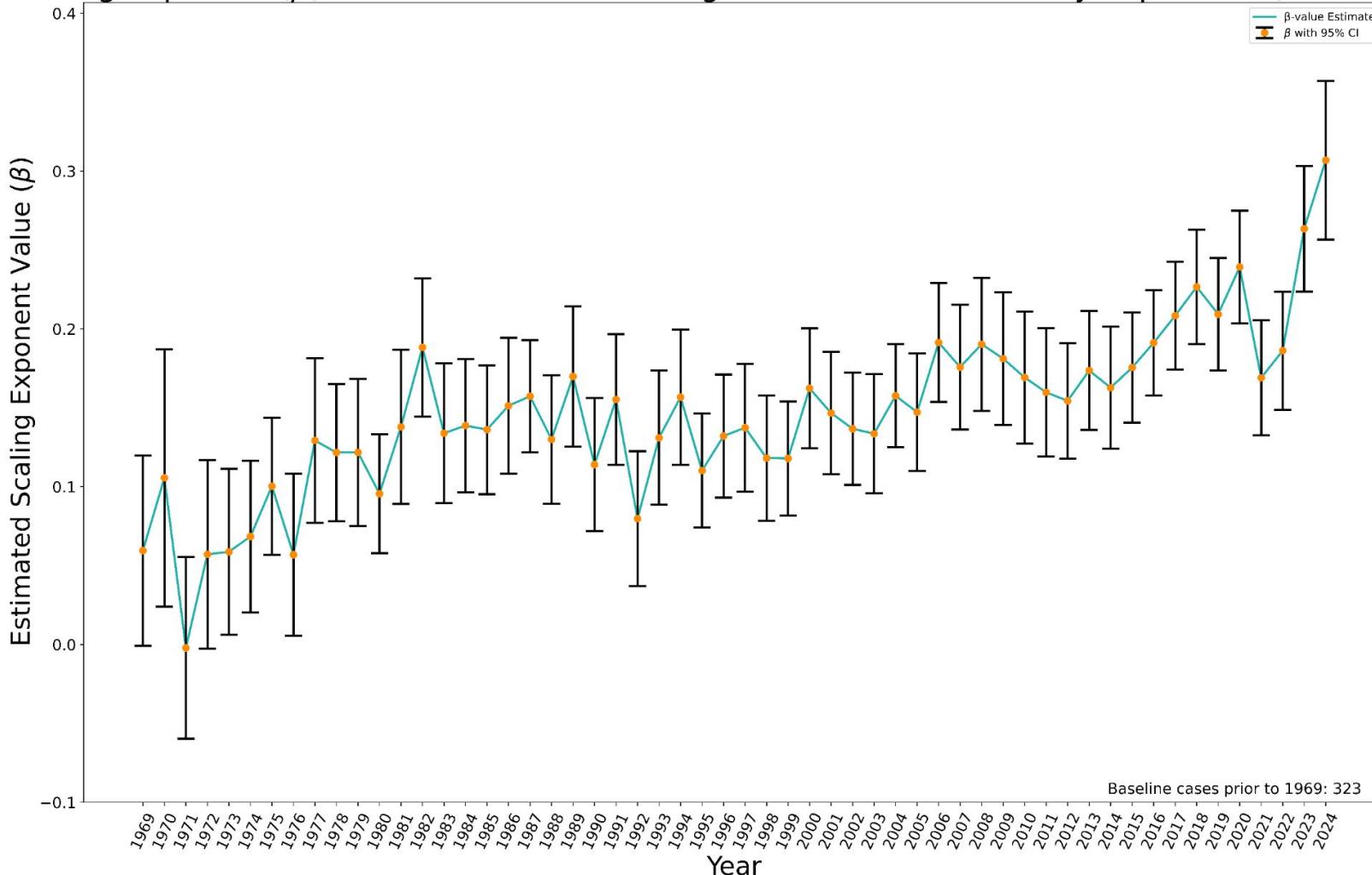


# Annual NamUs Cases

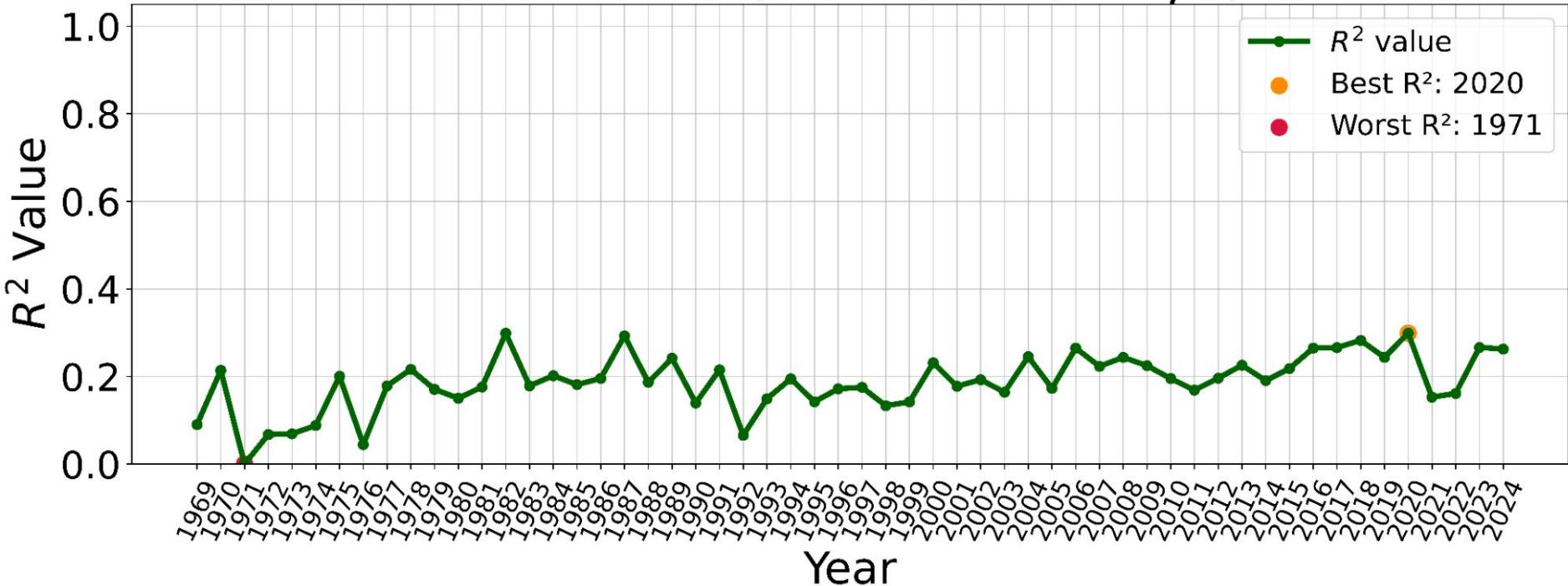
- Time-series of Scaling Exponent of Annual Cases vs GEOF Population from [1969-2024]
  - Counties
  - CSAs
  - CBSAs; MSAs and MicroSAs
- R-squared Time Series [1969-2024]
- Best and Worst Year R-squared Regression Plots

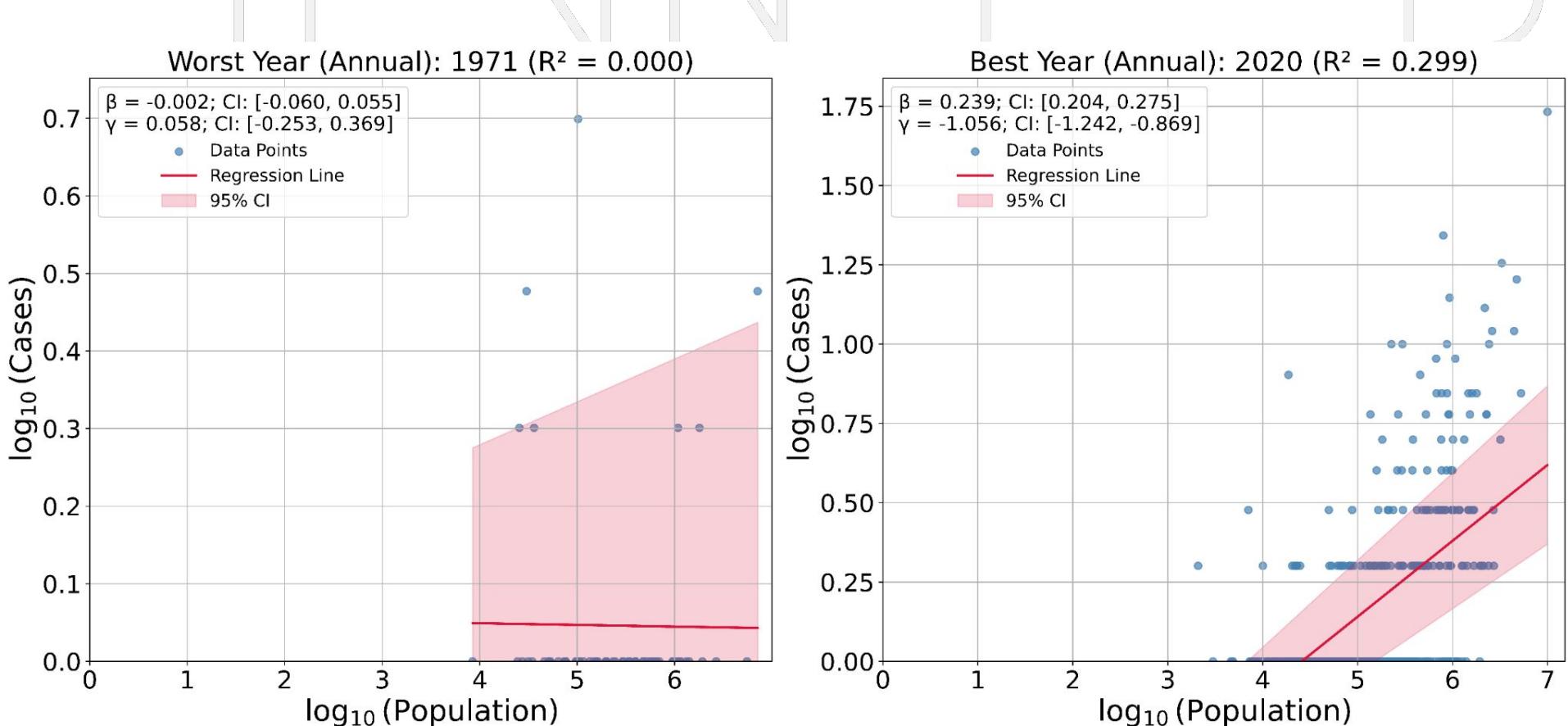
# County-level

# Scaling Exponent ( $\beta$ ) of Annual NamUS Missing Person Cases vs County Population (1969-2024)



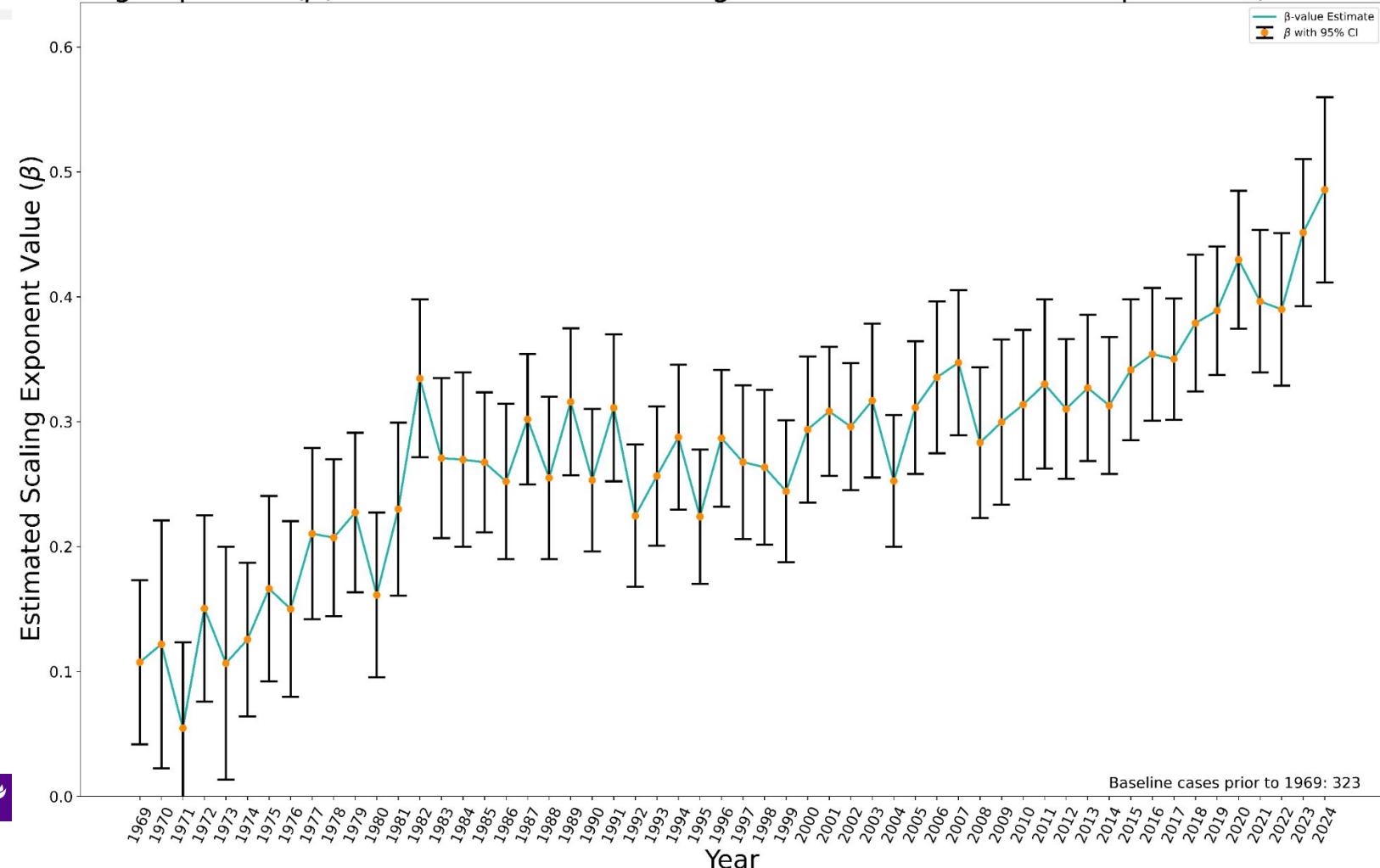
# Time Series of $R^2$ Values (1969–2024) for $\beta$ (Annual Cases)





# CBSA-level

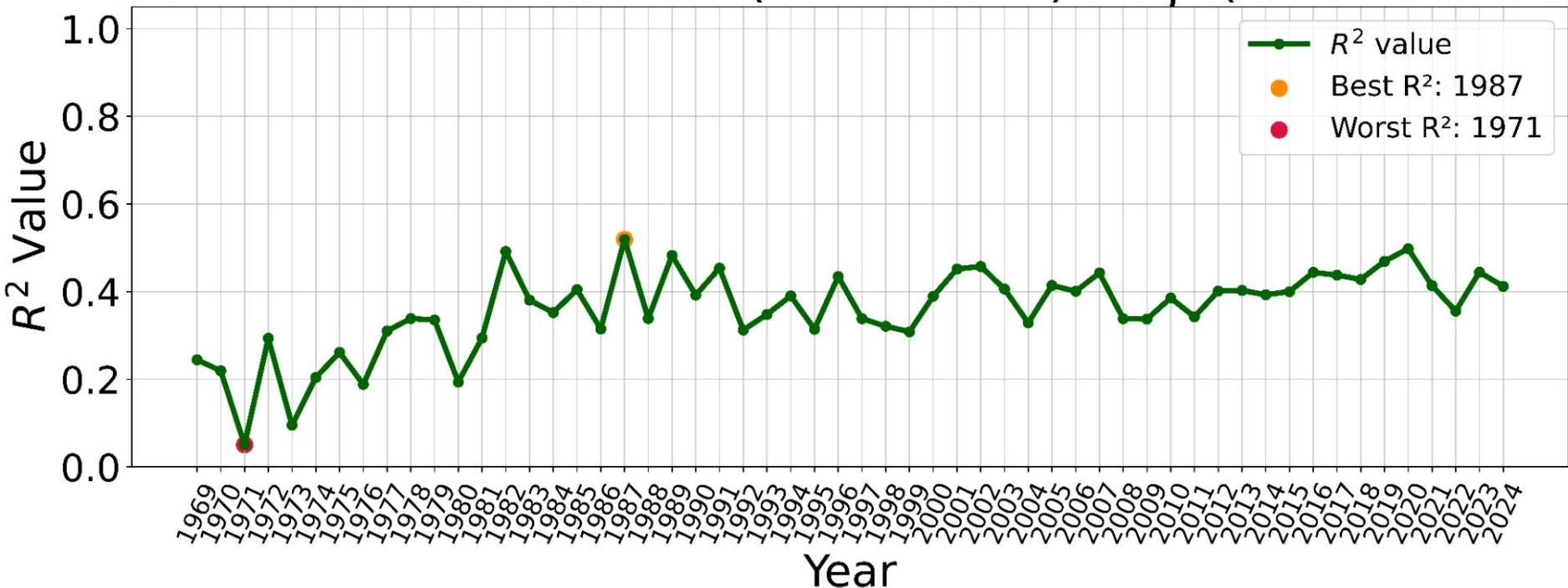
# Scaling Exponent ( $\beta$ ) of Annual NamUS Missing Person Cases vs CBSA Population (1969–2024)



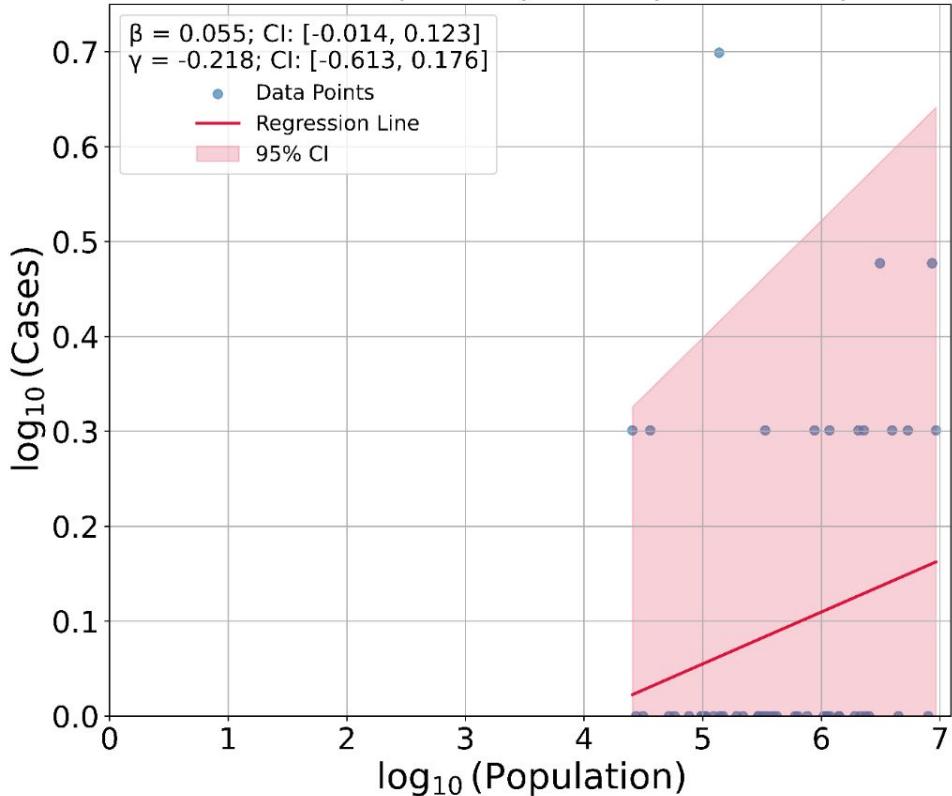
Baseline cases prior to 1969: 323



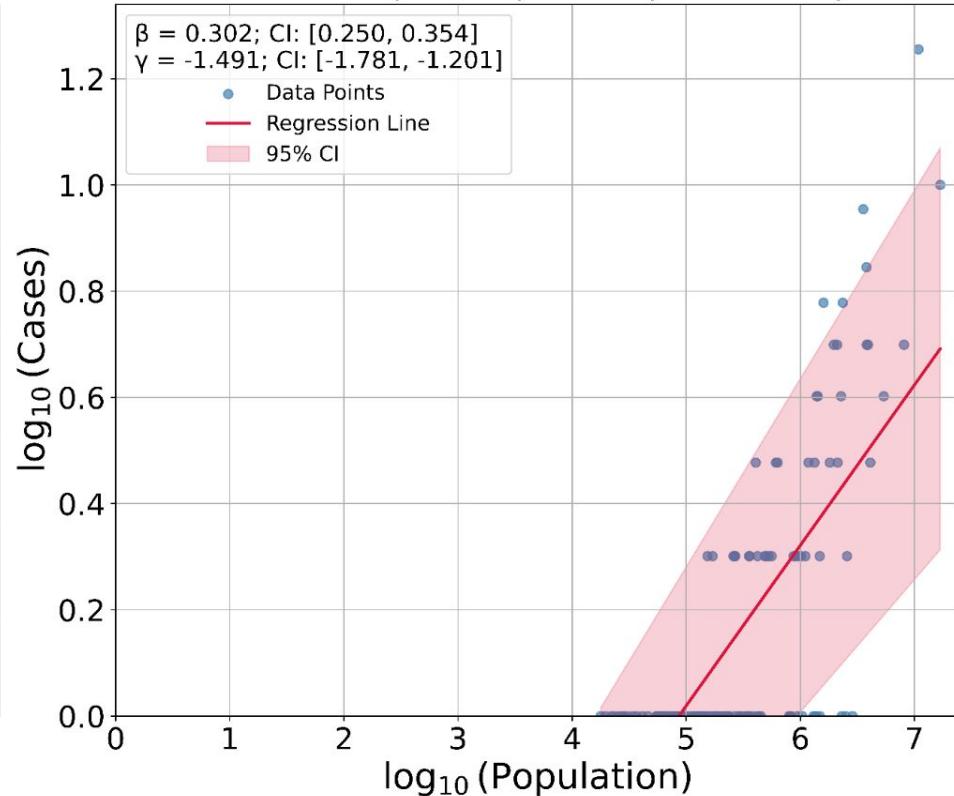
# Time Series of $R^2$ Values (1969–2024) for $\beta$ (Annual Cases)



Worst Year (Annual): 1971 ( $R^2 = 0.051$ )

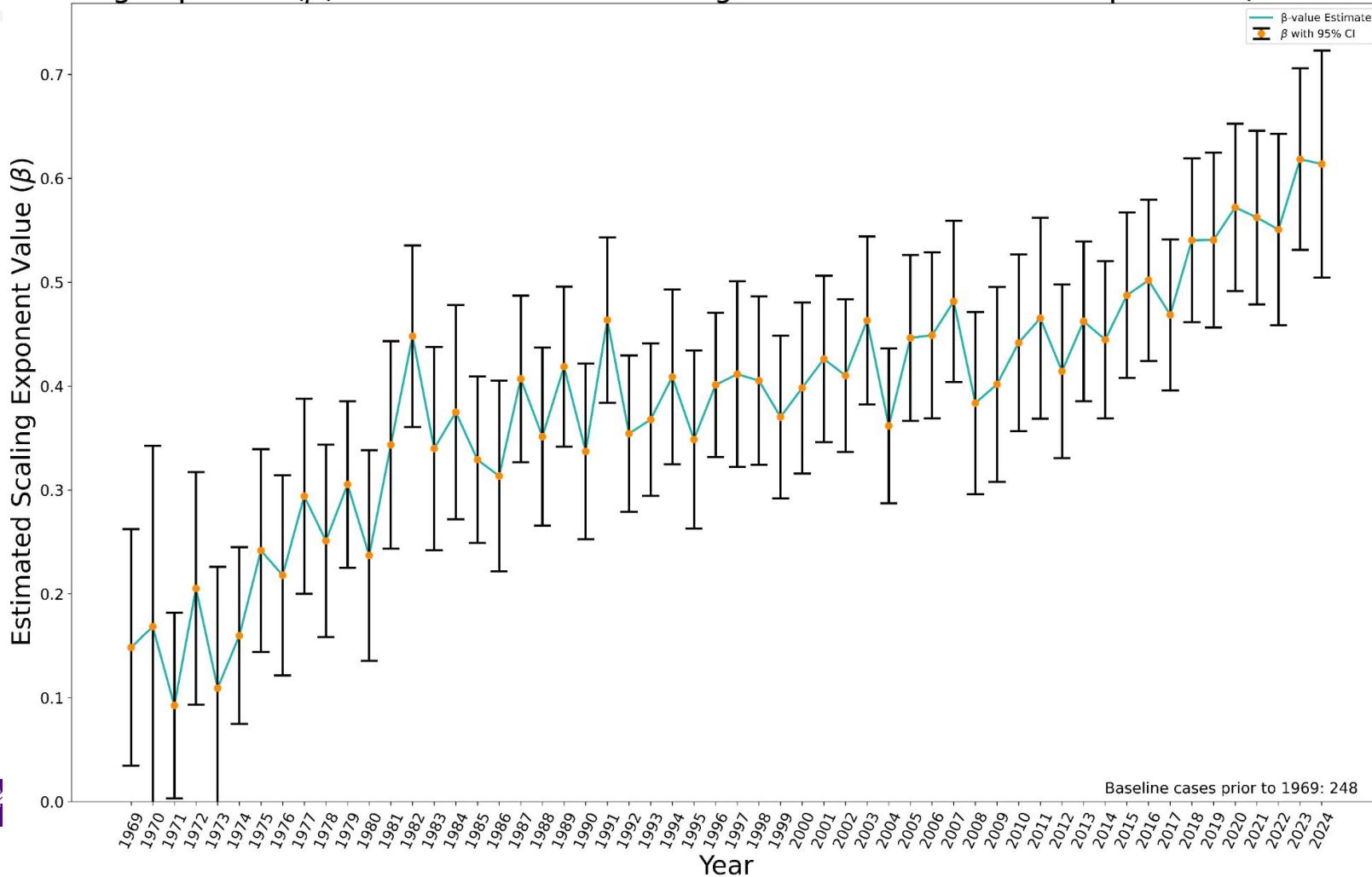


Best Year (Annual): 1987 ( $R^2 = 0.519$ )



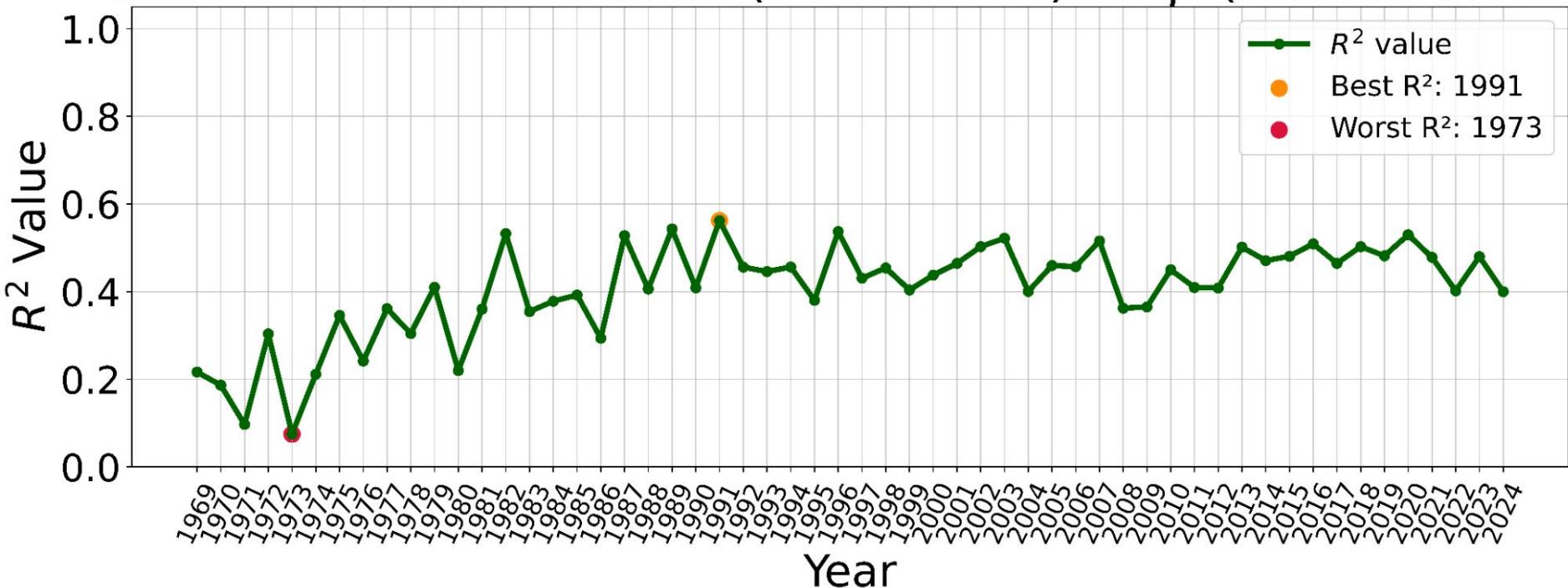
# MSA-level

# Scaling Exponent ( $\beta$ ) of Annual NamUS Missing Person Cases vs MSA Population (1969–2024)

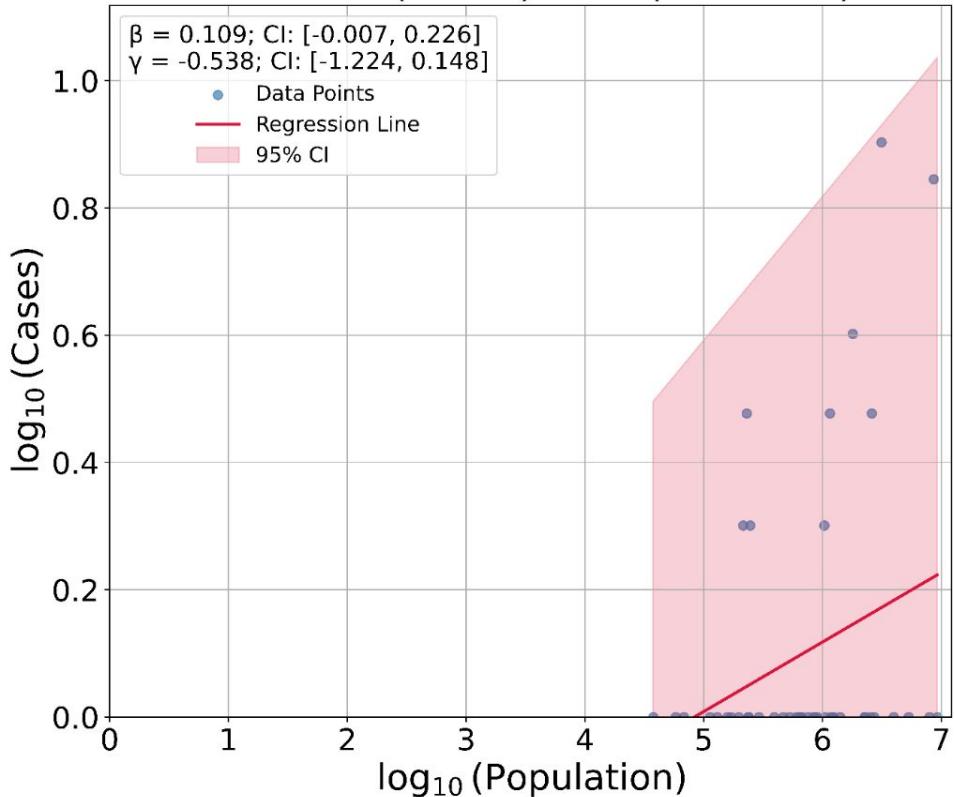


Baseline cases prior to 1969: 248

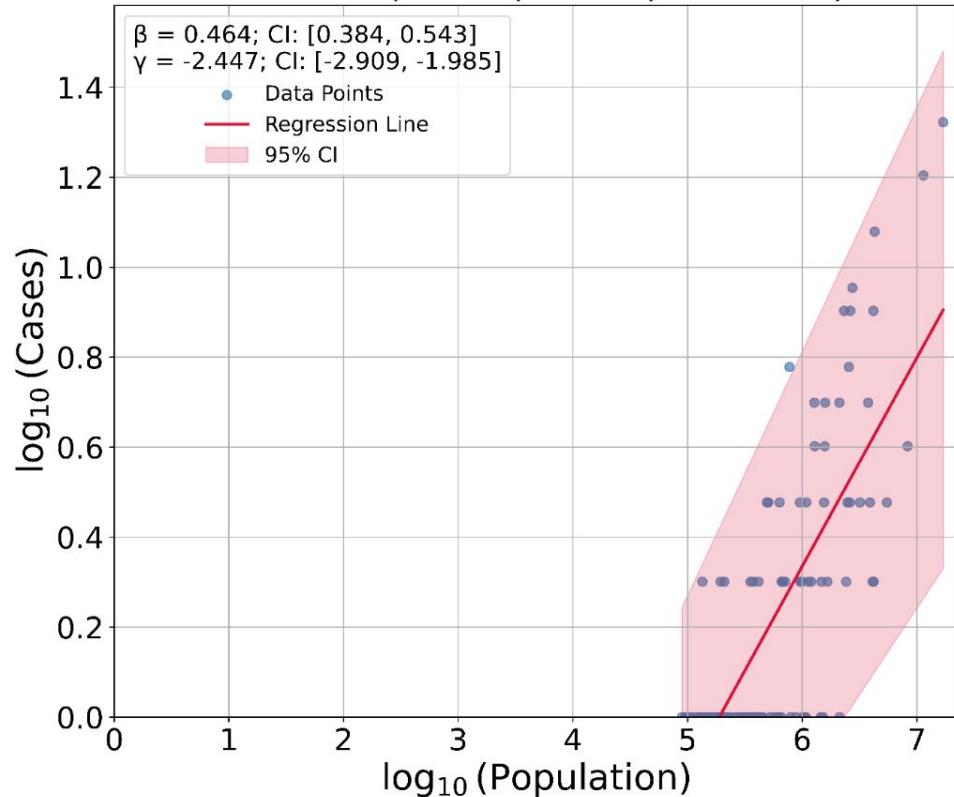
# Time Series of $R^2$ Values (1969–2024) for $\beta$ (Annual Cases)



Worst Year (Annual): 1973 ( $R^2 = 0.075$ )

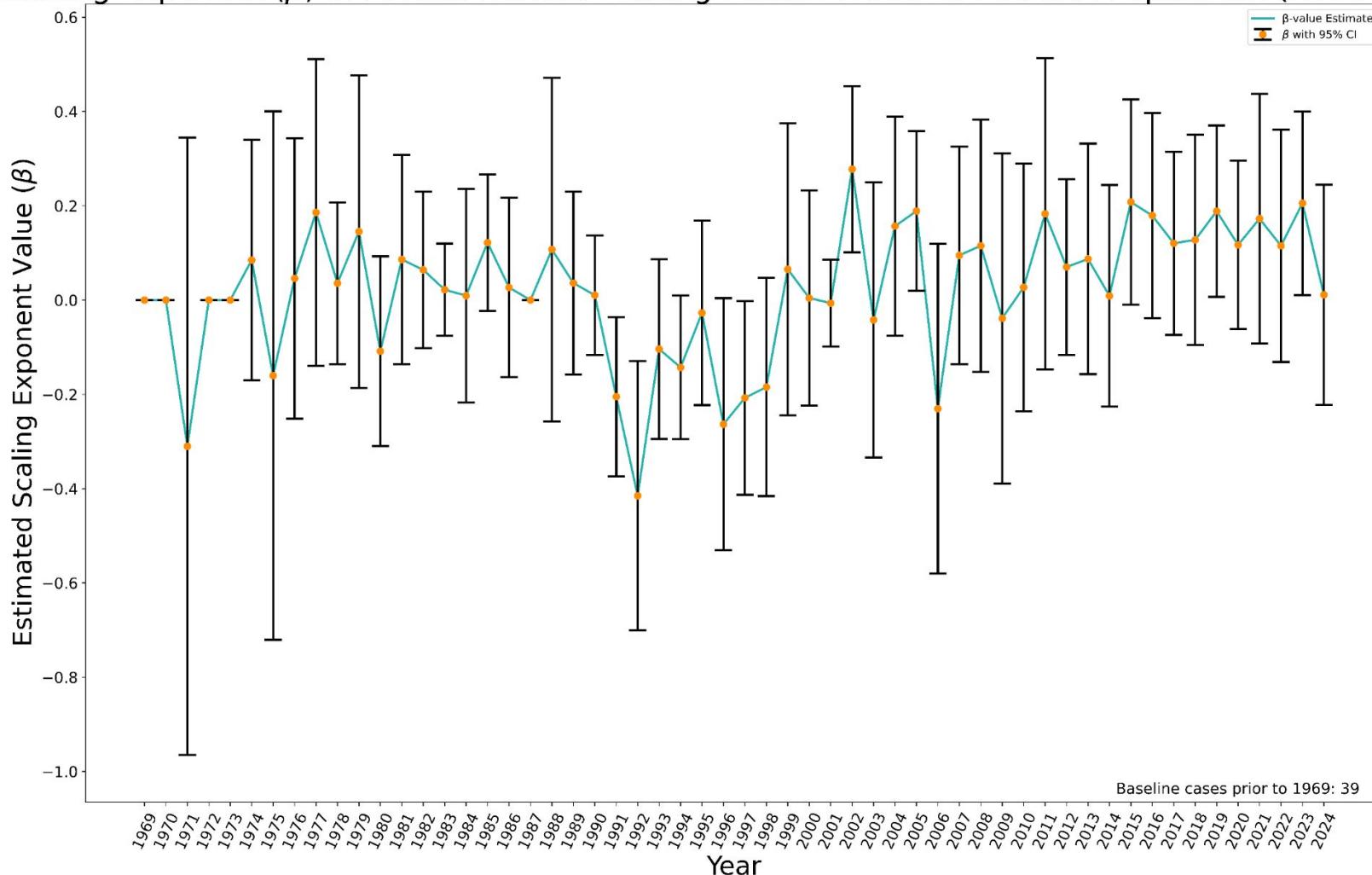


Best Year (Annual): 1991 ( $R^2 = 0.562$ )

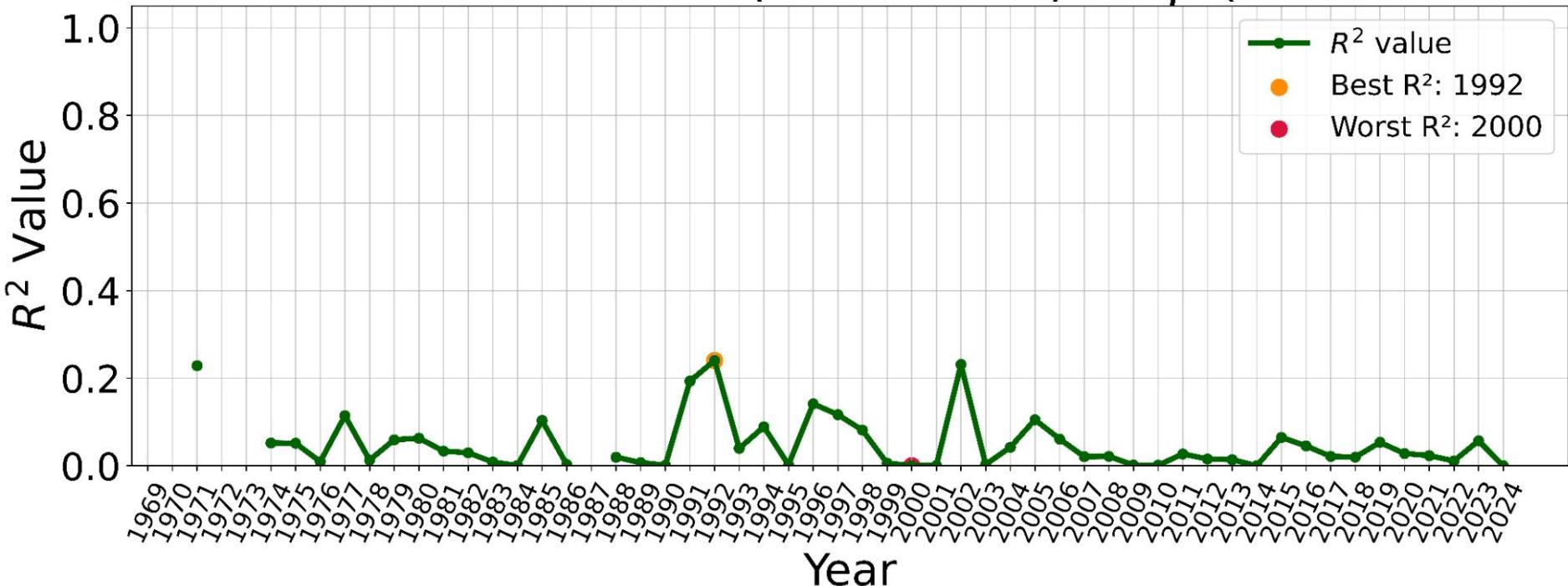


# MicroSA-level

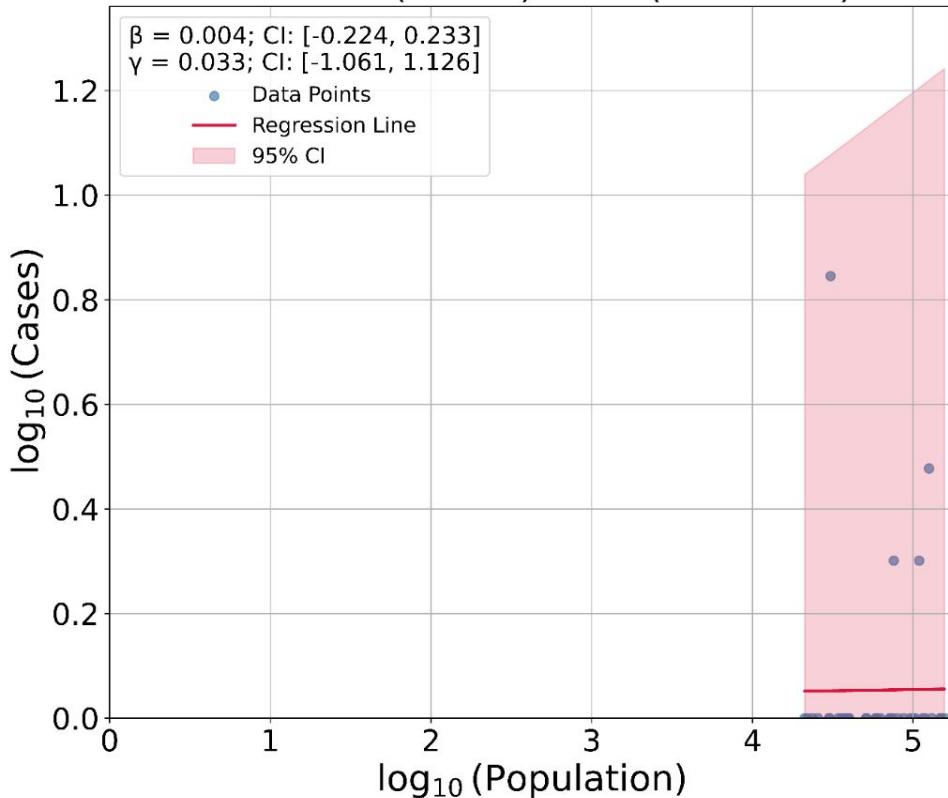
# Scaling Exponent ( $\beta$ ) of Annual NamUS Missing Person Cases vs MicroSA Population (1969-2024)



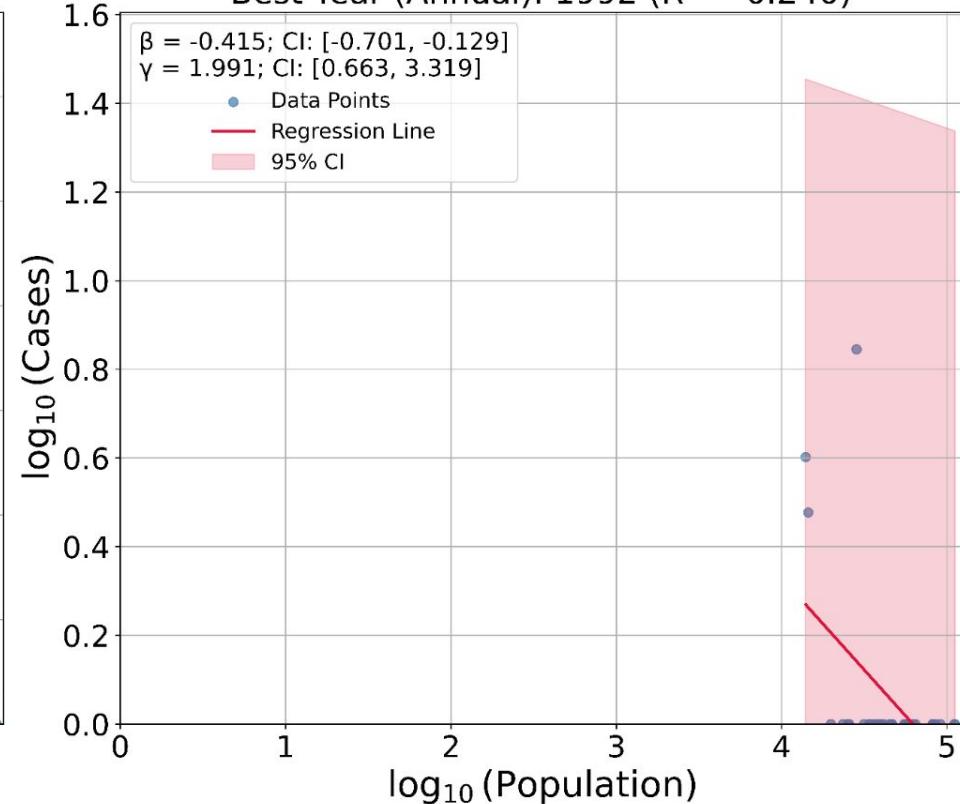
# Time Series of $R^2$ Values (1969–2024) for $\beta$ (Annual Cases)



Worst Year (Annual): 2000 ( $R^2 = 0.000$ )

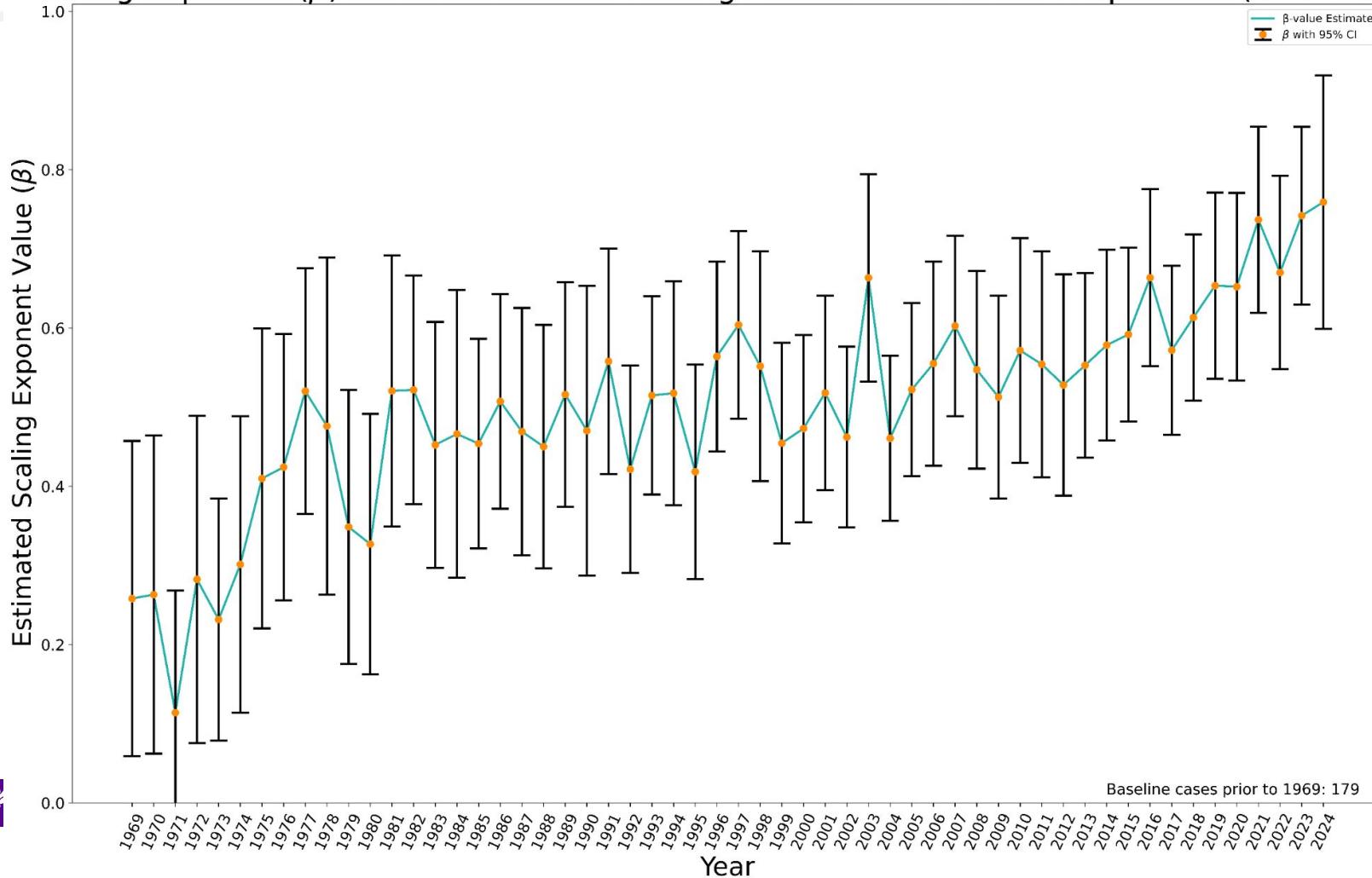


Best Year (Annual): 1992 ( $R^2 = 0.240$ )

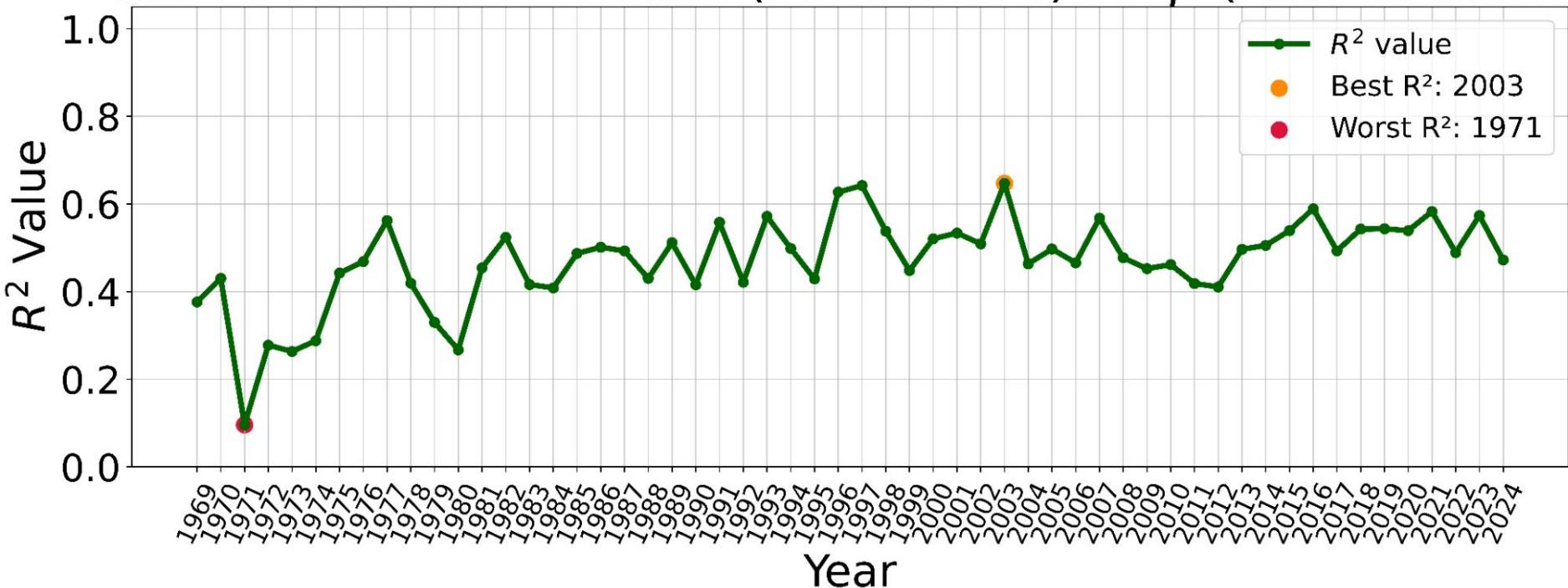


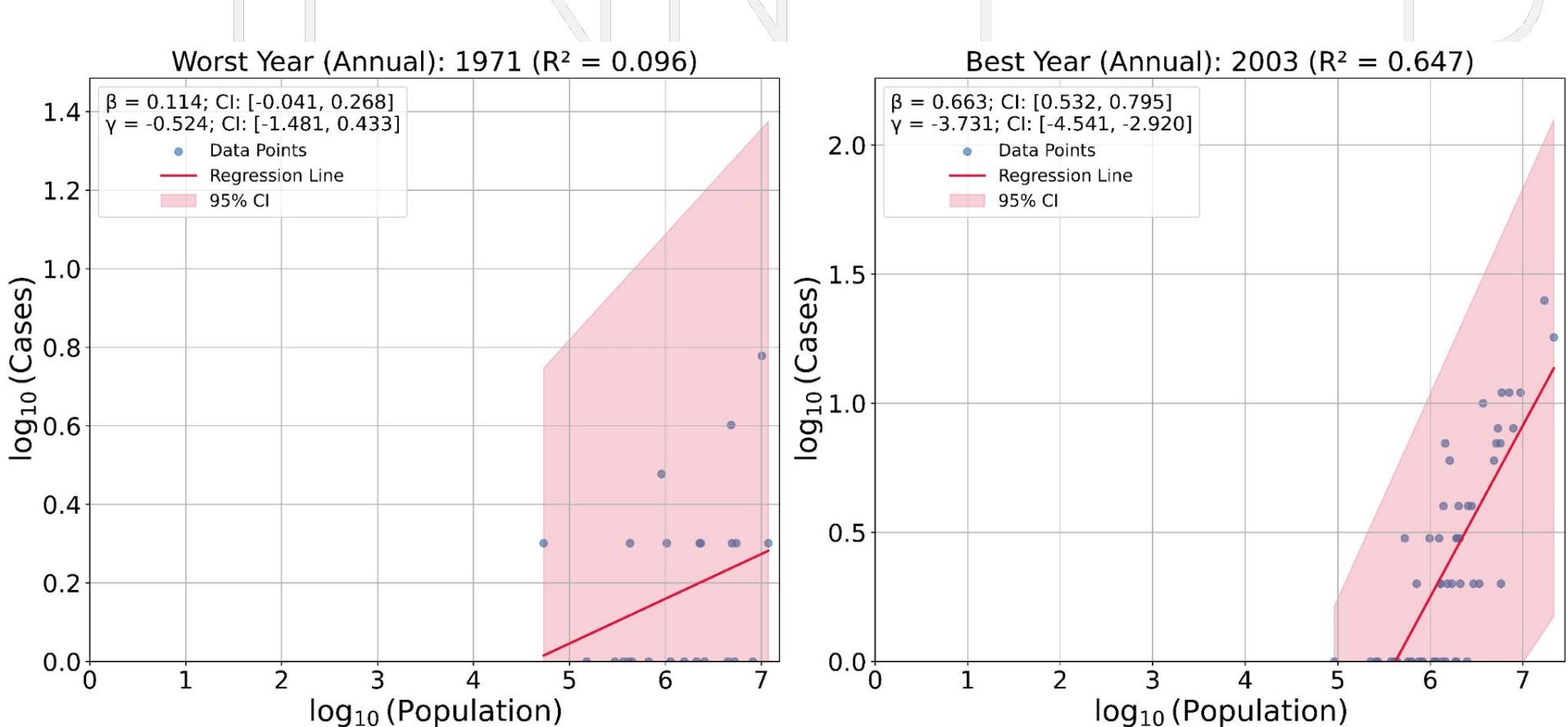
# CSA-level

# Scaling Exponent ( $\beta$ ) of Annual NamUS Missing Person Cases vs CSA Population (1969–2024)



# Time Series of $R^2$ Values (1969–2024) for $\beta$ (Annual Cases)





# Mexico INEGI Cases

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# Mexico Missing Persons Cases Data Characteristics

- We have **129,830** available records, with % \*incomplete\* by column:
  - Victim ID: **0.00%**
  - Origin Agency: **0.00%**
  - Date of Birth: **59.31%**
  - Sex: **37.05%**
  - Date of Incidence: **43.13%**
  - Date of Report: **41.52%**
  - Victim Status: **96.13%**
  - State: **2.26%**
  - State ID: **0.00%\*\***
  - Municipality: **40.92%**
  - Municipality ID: **0.00%\*\***
- Guide to Mexican Administrative Divisions
- The Mexico-American GEOFID equivalencies by average population size seem to follow:
  - Mexican 'States' == American 'States'
  - Mexican 'Municipalities' == American 'Counties?' & American 'MSAs/CBSAs'
    - Extremely wide range of population values
    - Includes:
      - 'Ciudades'
      - 'Villas'
      - 'Pueblos'
      - ...
  - Mexican 'Localities' == American 'Blocks?'
  - Mexico City 'Boroughs' == American 'Counties'

\*incomplete\* entries are 'MISSING', 'UNKNOWN', or 'CENSORED'\*

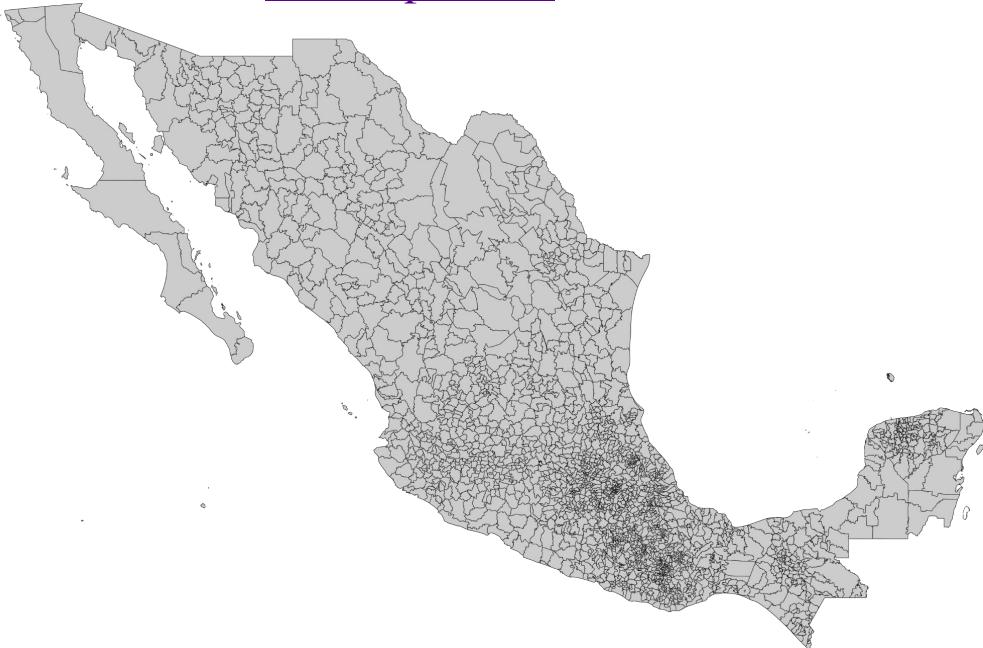
\*\*GEOFID IDs that are incomplete have a specific code\*\*

# Mexico by GEOIDS

## States:



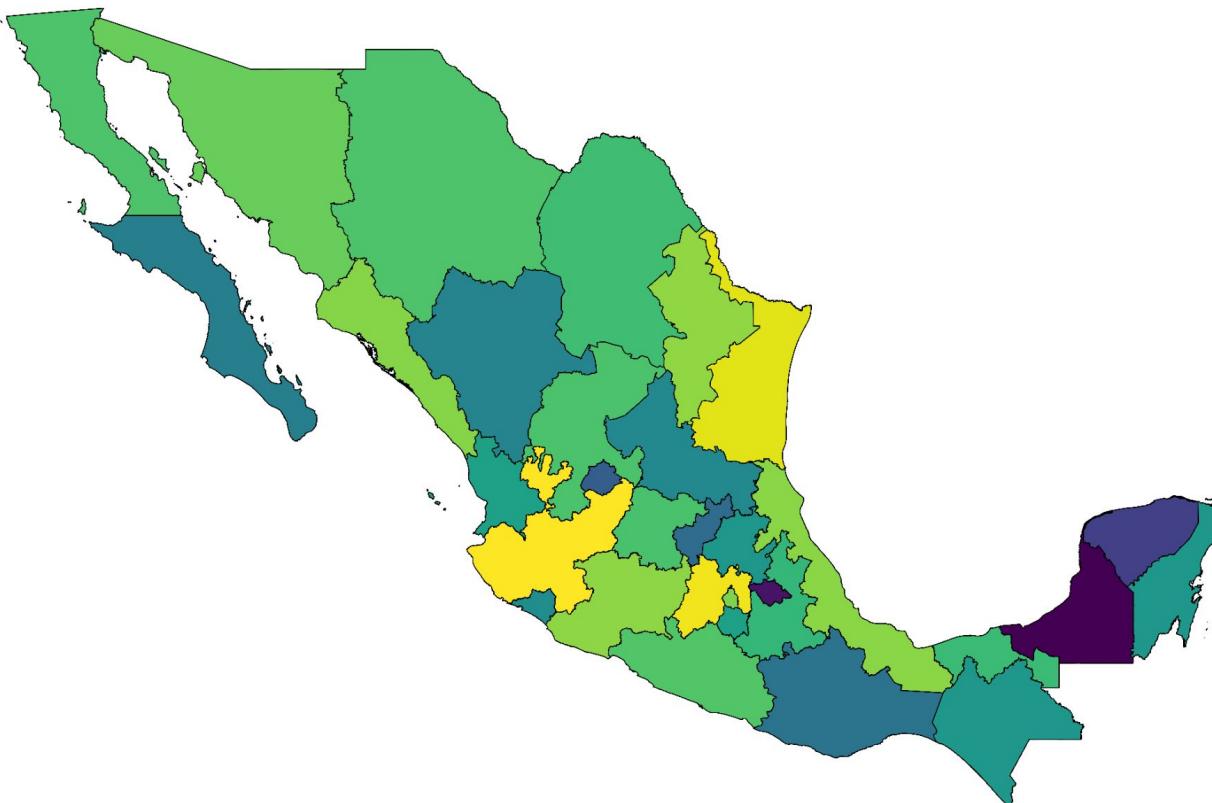
## Municipalities:



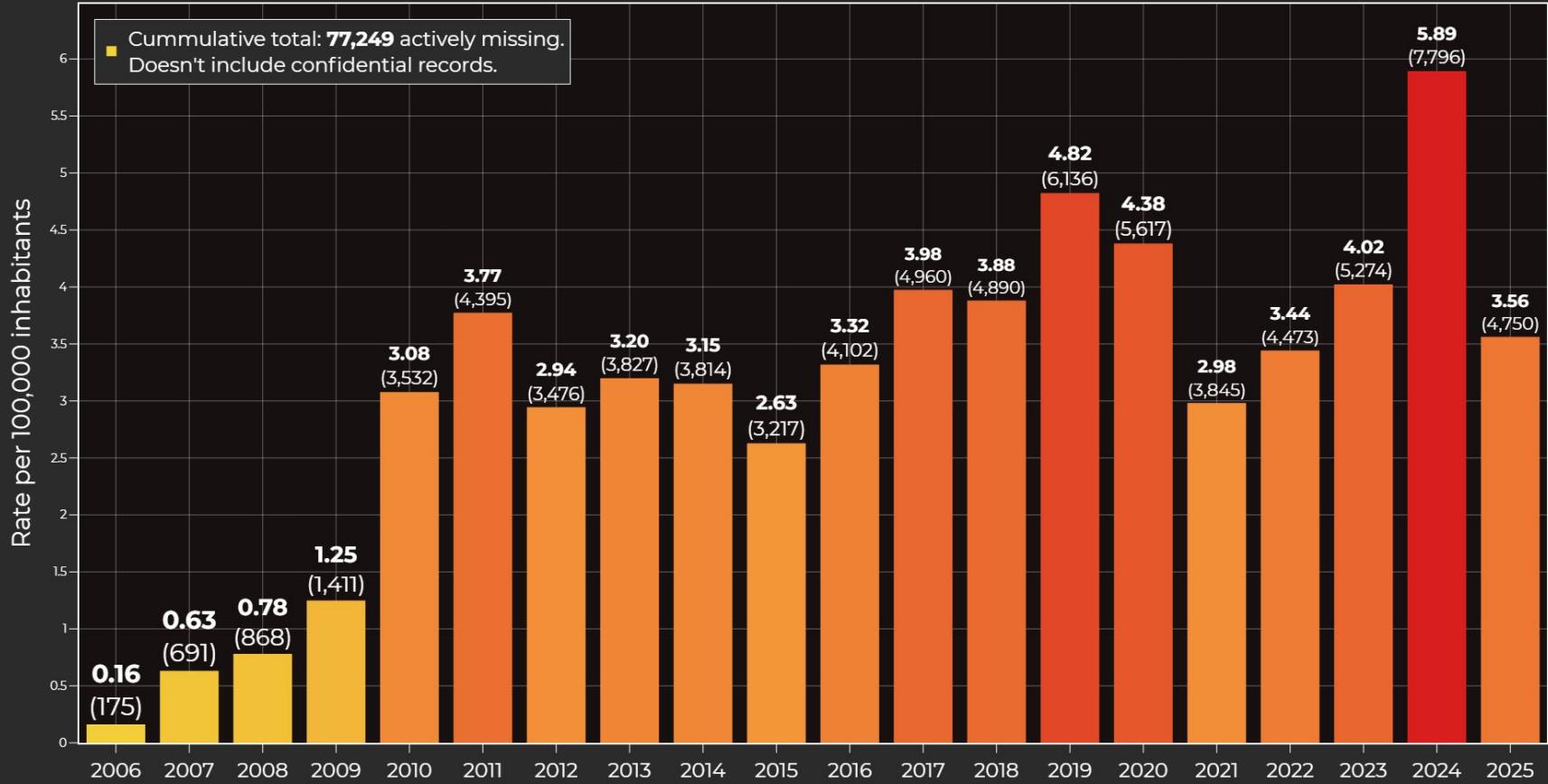
By Eddo - This W3C-unspecified vector image was created with Adobe Illustrator., CC BY-SA 3.0,  
<https://commons.wikimedia.org/w/index.php?curid=14581939>

By Goran tek-en, CC BY-SA 4.0,  
<https://commons.wikimedia.org/w/index.php?curid=96160260>

# Valid INEGI Missing Persons Cases by Mexican State (Log Scaled)



## Evolution of the rate of missing and unaccounted-for people in **Mexico** (2006-2025)

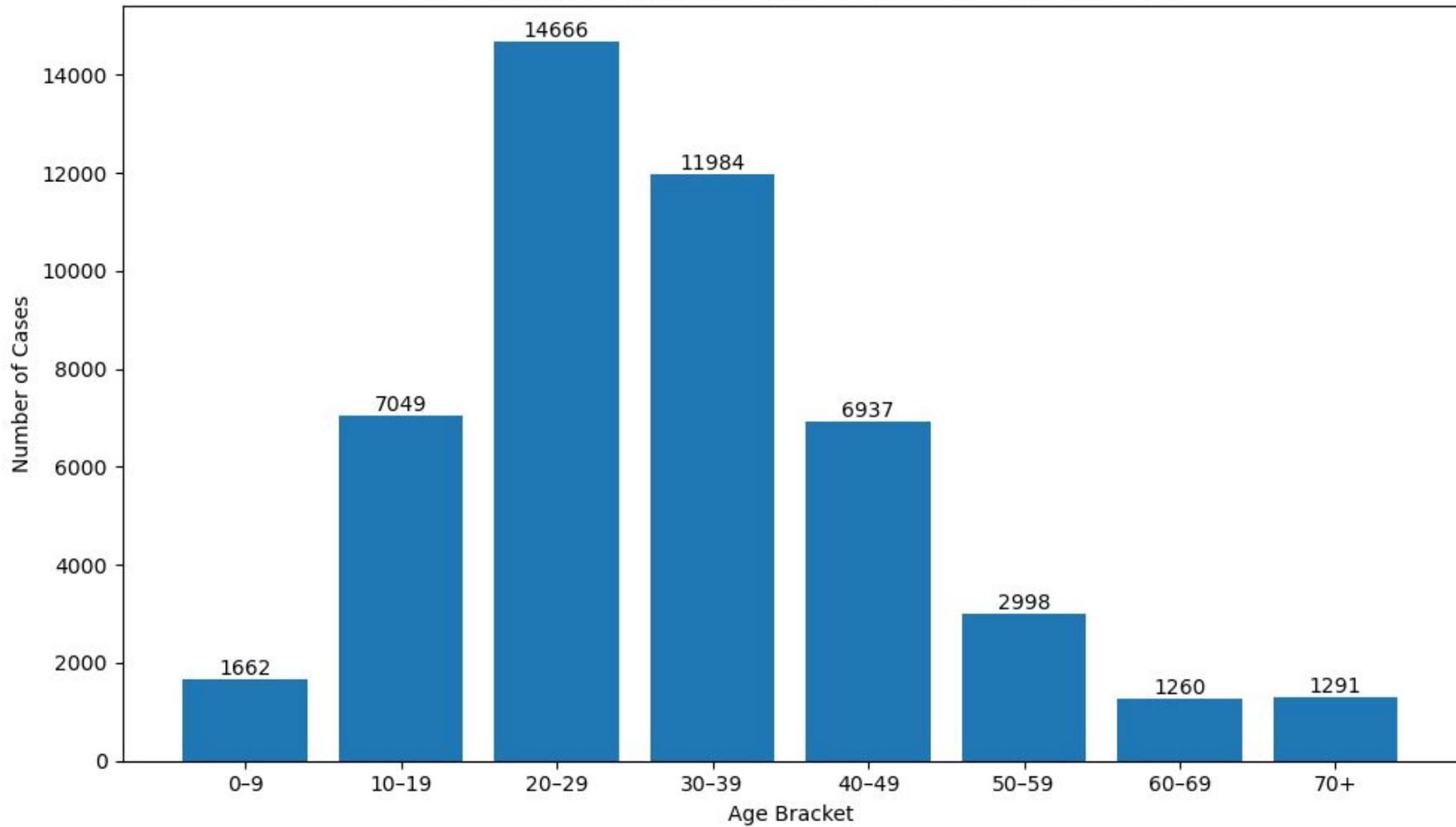


Source: RNPDO (July 2025)

Year of incidence

cupcake icon @lapanquecita

## Distribution of INEGI Missing Persons Cases: Ages at Incidence



### Sex Distribution of INEGI Missing Persons Cases

