

# Shifting Sands: An Analysis of College Access Deserts from 2001 to 2019

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# College access deserts are commuting zones that:

- do not have one public four-year undergraduate degree-granting institution that accepts at least 75% of applicants
- do not have two public two-year undergraduate degree-granting colleges

Based on Hillman & Weichman, 2016 and Klasik et al., 2018

- IPEDS reclassifies community colleges as four-year colleges when they offer BA degrees
- Carnegie Classifications are an alternative system

Romano & D'Amico, 2021

How do collegiate classification systems change college access desert designations?

What are the demographics of residents in college access deserts in 2019 and areas that were persistent college access deserts from 2010 to 2019?

# Data & Methods:

## Constructing College Access Deserts

- IPEDS data for public colleges 2001 to 2019
- Identify public four-year colleges with acceptance rates greater than 75% and public two-year colleges
  - IPEDS Sectors
  - Carnegie Classifications: Varies by classification period
- Group qualifying colleges by commuting zone
- Identify areas that meet neither condition as college access deserts



# Data & Methods:

## Demographics of College Access Deserts

- Data: American Community Survey Five-Year Estimates: 2015-2019
- Logistic regression
- Variables:
  - Percentages: Race/ethnicity, gender, children in poverty, individuals with BA or higher, residents with broadband, unemployed residents in the labor force
  - Population Density: People per square mile



# Findings

# Findings:

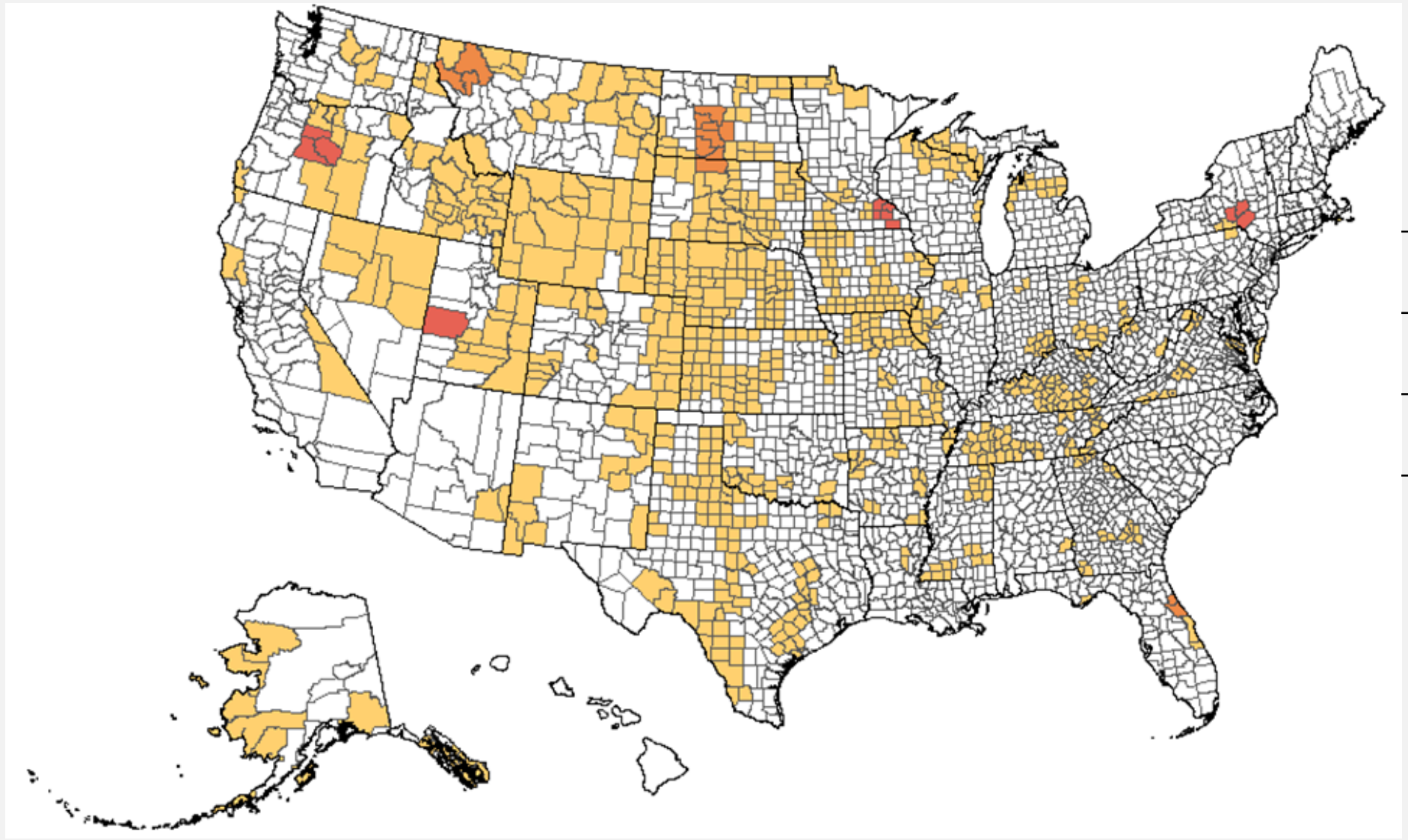
## College Access Deserts

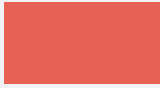




- IPEDS Sector classifications identified more college access deserts in 14 of 19 years
- Greatest number of counties identified as college access deserts in 2009
  - 1,456 via IPEDS and 1,426 via Carnegie Classifications
- Fewer counties are identified as college access deserts
  - 2001: 1,343 via IPEDS and 1,415 via Carnegie Classifications
  - 2019: 1,336 via IPEDS and 1,219 via Carnegie Classifications



# College Access Deserts: 2010 to 2019



College Access Desert: Carnegie Only	
College Access Desert: IPEDS Sector Only	
College Access Desert: Both Systems	

# Findings:

## Characteristics of College Access Deserts in 2019

### IPEDS Sectors

Commuting zones with higher:

- Percentage of Male residents

Commuting zones with lower:

- Percentage of residents with a BA or higher

### Carnegie Classifications

Commuting zones with higher:

- Percentage of Male residents

Commuting zones with lower:

- Percentage of residents with a BA or higher
- Population density
- Percentage of unemployed residents

were more likely to be college access deserts in 2019

# Findings:

## Characteristics of College Access Deserts 2010 to 2019

### IPEDS Sectors

Commuting zones with higher:

- Percentage of American Indian/Alaskan Native residents

Commuting zones with lower:

- Population density
- Percentage of Black residents
- Percentages of children in poverty
- Percentage of residents with a BA or higher
- Percentage of unemployed residents

### Carnegie Classifications

Commuting zones with higher:

Commuting zones with lower:

- Population density
- Percentage of Black residents
- Percentage of residents with a BA or higher
- Percentage of unemployed residents

were more likely to be college access deserts from 2010 to 2019

# Implications



College Access Deserts vary across time and with different classifications



These variations can lead to different conclusions and recommendations



Researcher choices should be transparent and build on open science principles when proposing constructs



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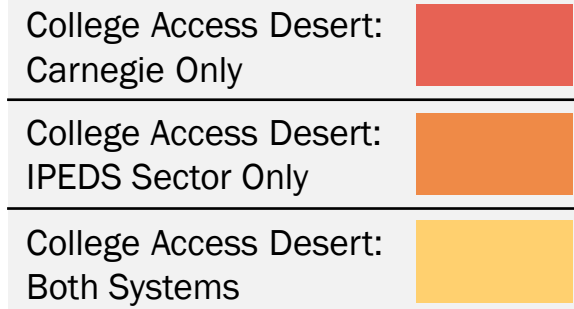
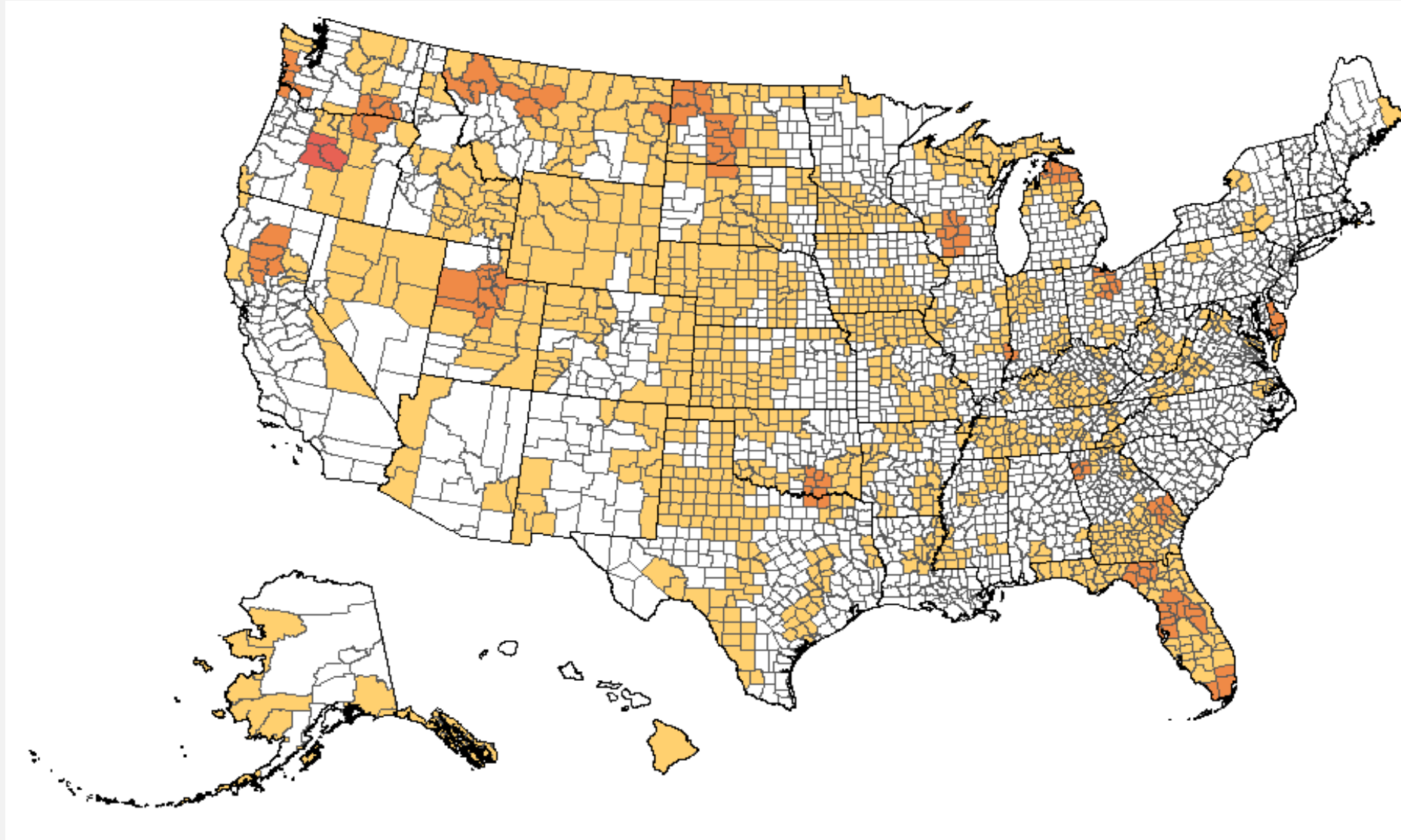
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# College Access Deserts: 2019



# College Access Deserts: 2001

