Health Atlas Tool Visualizes Place-Based Social Determinants of Health across the United States

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Background

Where we live, including the physical and social environments that surround us, influences health in both positive and negative ways. The Health Atlas (healthatlas.ucsf.edu) is an interactive mapping website that helps users explore place-based characteristics and see how they relate at a population level across the United States.

Methods

Health Atlas was developed at the University of California, San Francisco in partnership with Stamen Design. Health Atlas expanded in May 2024 to include data from all 50 states in the U.S., the District of Columbia, and Puerto Rico.

Health Atlas data includes more than 120 nationally available variables, with data curated from 20+ different sources including:

- American Community Survey (age, sex, race and ethnicity, poverty, unemployment, educational attainment, housing, etc.)
- CDC PLACES (health outcomes, health care use, health behaviors)
- EPA Environmental Justice Screen (environmental exposures)
- Health Equity Action Network (neighborhood deprivation index, segregation)

Key Features:
- Census Tract, ZIP code, congressional districts, county, CBSA, PUMA, and state level maps
- 2010 Census and 2020 Census geographies
- Comparison of two variables
- Visualization of data distributions
- Custom area selection
- Data export
- Detailed data descriptions

Table. Health Atlas data categories

Category	Subcategory
Demographic	Age
	Sex
	Race and Ethnicity
Socioeconomic	Socioeconomic Indices
	Poverty and Income
	Income Inequality
	Employment
	Education
	Digital Access
Neighborhood	Households
	Language and Ethnic Enclaves
	Housing
	Built Environment
	Segregation
	Structural Racism
	Rurality
	Transit
Environment	Air Pollution
	Heat
	Extreme Precipitation
	Environmental Indices
Health and Health Care	Health Outcomes
	Health Care Access
	Health Care Use
	Health Behaviors

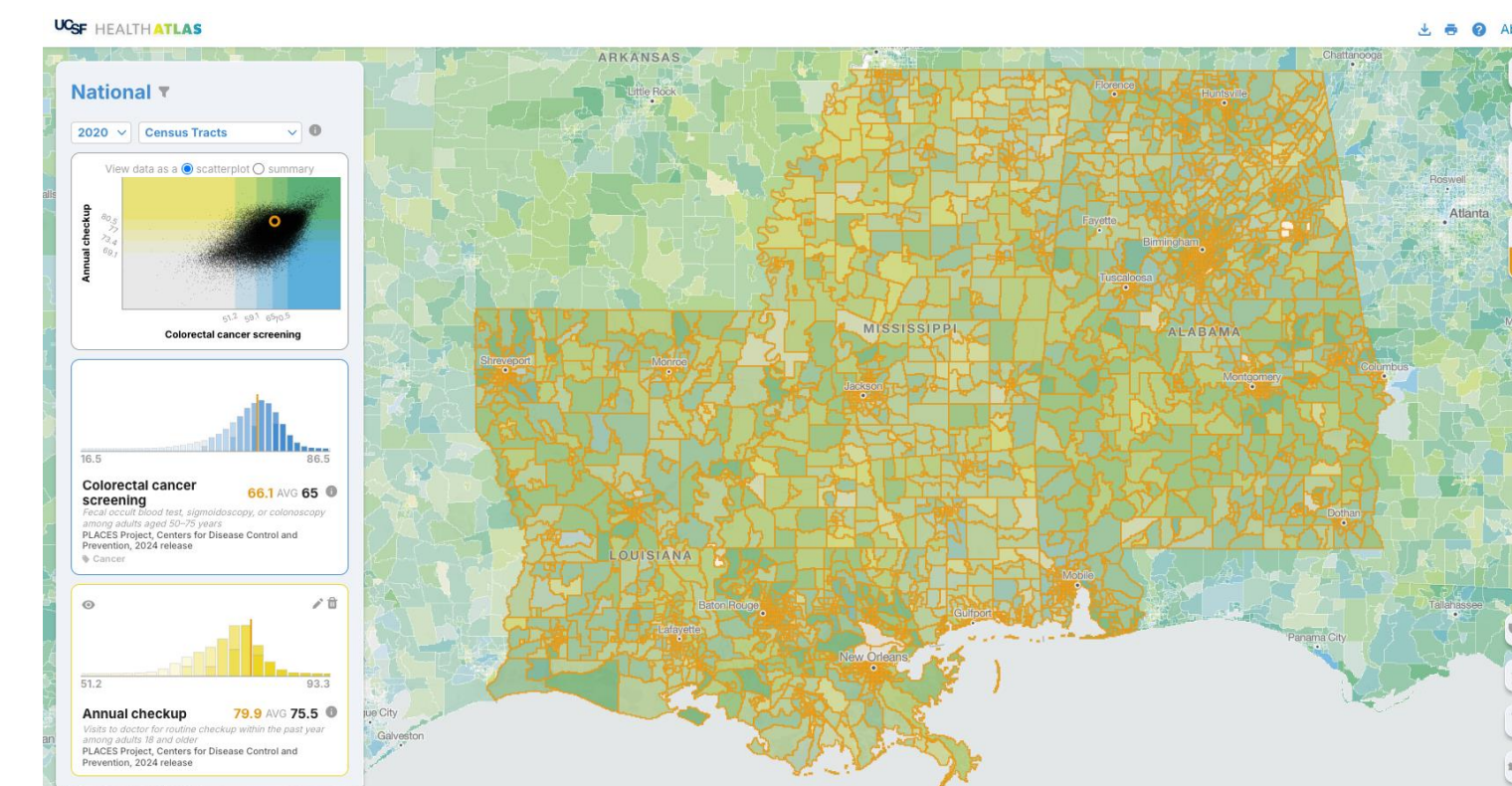**Figure 2. Multi-state custom area selection in Health Atlas**
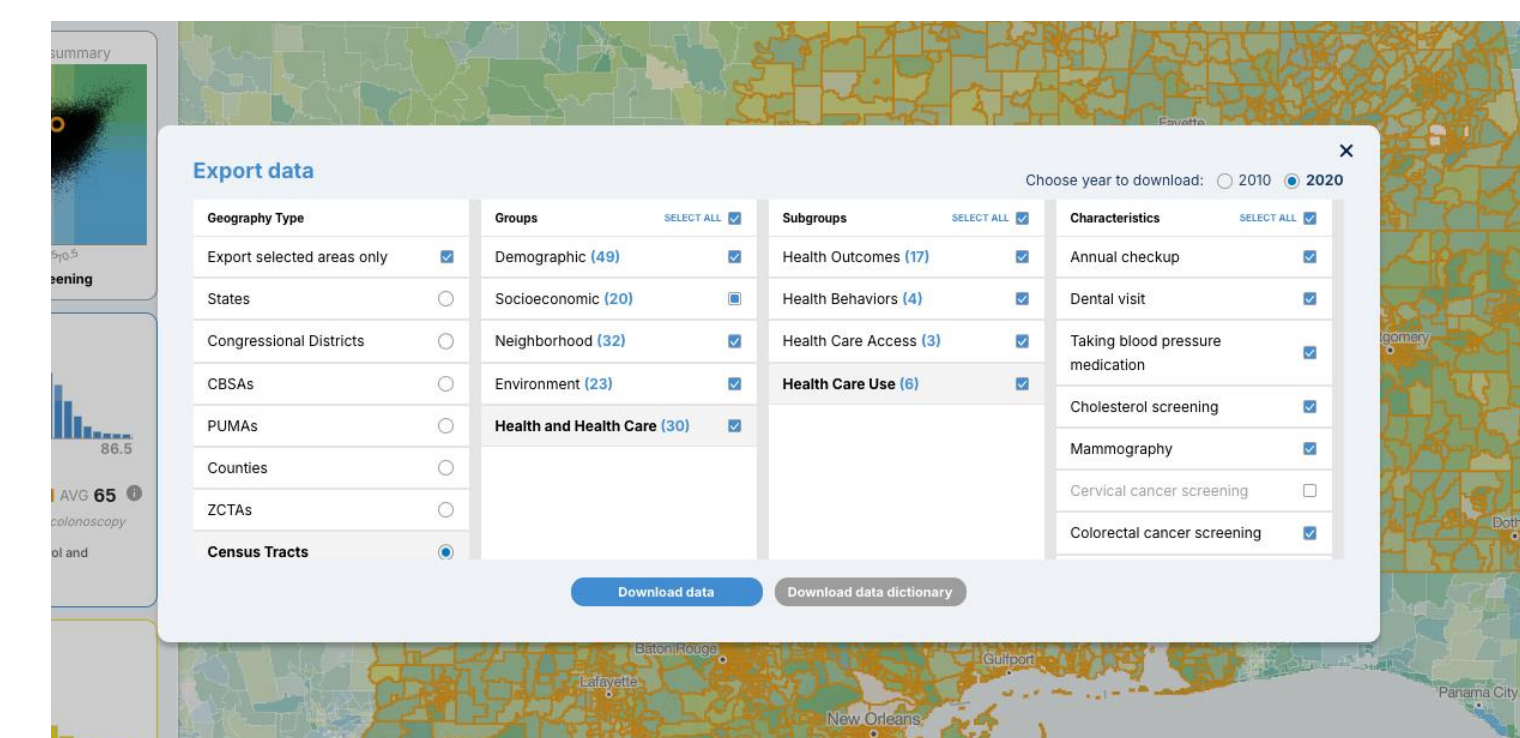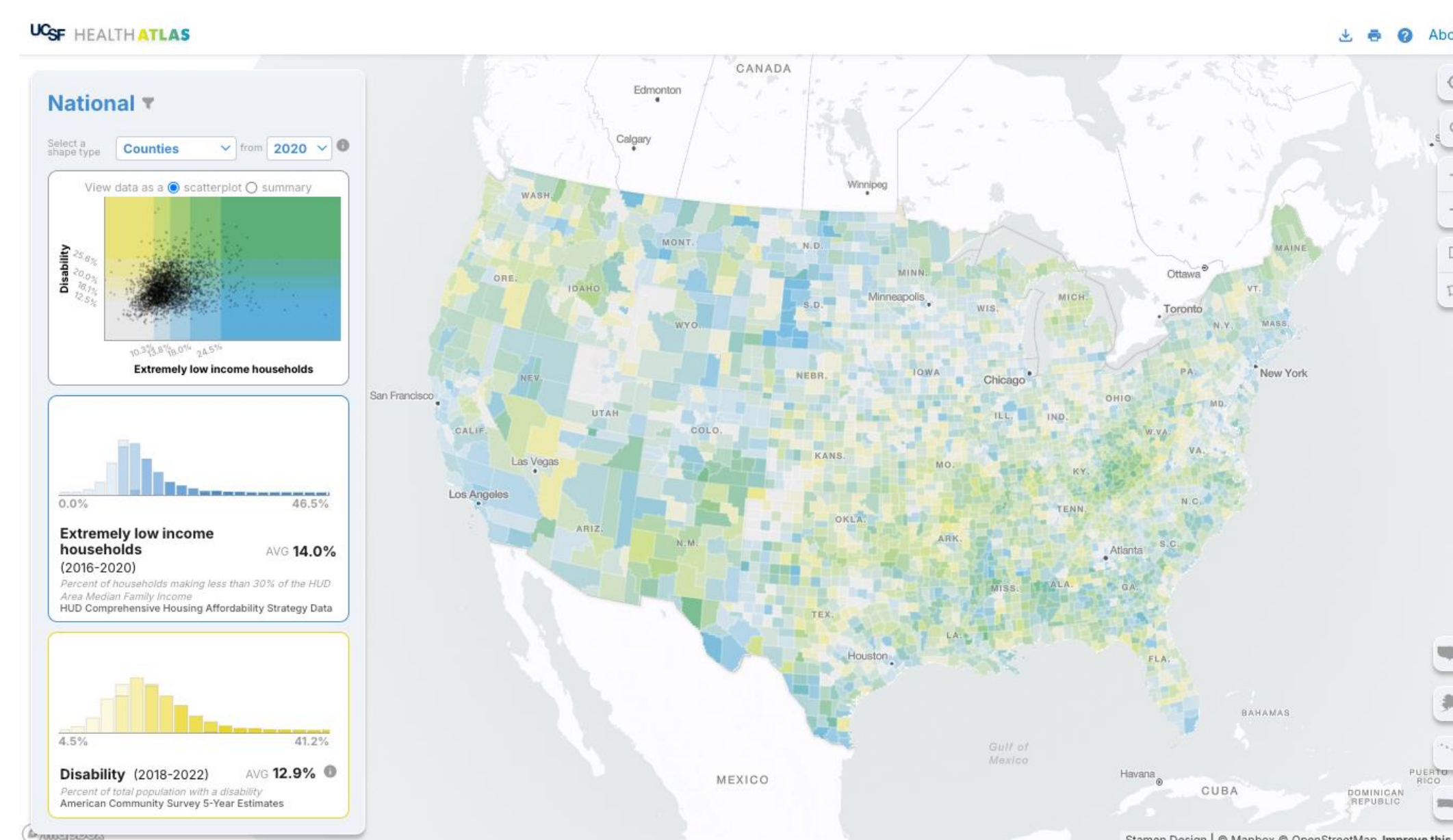

Figure 3. Data export in Health Atlas

Figure 1. Visualizing place-based characteristics in Health Atlas

healthatlas.ucsf.edu

Results

Researchers can download data for analysis and maps for presentations or reports.

Policymakers can gain insights into context of custom regions of interest.

Community members can visualize local health and environmental factors for advocacy.

Teachers & Students can use mapping features to explore a variety of topics.

Conclusion

We envision the national Health Atlas will contribute to community partnerships, impactful health equity research, and effective public health initiatives.

Funding

If you have any questions, please reach out to us at:

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