



StatVentures

Address Geolocation Challenge

Overview

We are preparing to launch Phase 1 of the Address Geolocation Challenge.
Stay tuned for opportunities to apply in early 2024.

Learn more about StatVentures and
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Overview

The U.S. Census Bureau is seeking to innovate the way it geolocates residential addresses in rural and remote locations.

How can the Census Bureau capture and maintain residential addresses that are not traditional mailing or city-style addresses, more efficiently or effectively than by solely sending a human canvasser out to capture that information?

Background

The Census Bureau conducts dozens of national Censuses and Surveys, including the Decennial Census. This work involves sending survey- or census-takers out to doors across the nation – including in very remote or rural locations without traditional addresses. In order to support these operations, the Census Bureau must capture and maintain a master address file that includes all addresses in the US. Without this



address data, we can't correctly send census-takers, or "enumerators" to doors to include them in critical data collection.

However, the methods currently used to build this database of addresses have some limitations, such as being relatively slow, costly, labor-intensive, and most importantly, sometimes providing incomplete or inaccurate data. We know these

methods and the resulting data could be improved through the use of new or emerging technology or alternative data sources such as drone and satellite imagery, e-commerce data, and others.

Therefore, we've identified the need to explore additional data sources and techniques to evolve our current approaches. In this challenge, we are seeking new approaches, technologies, or data sources that provide a more effective and feasible method to conduct field address canvassing operations – i.e., geolocating addresses in remote or rural locations.

Existing Approaches

In addition to address canvassing, the Census Bureau has been working with remote sensing data collected over the US and territories. The majority of imagery data available to the Census Bureau are from the USDA's National Agriculture Imagery Program (NAIP). The Census Bureau also uses unclassified – but restricted – satellite imagery made available through the Global Enhanced GEOINT Delivery ([GEGD](#)). Along with these sources, it utilizes local imagery sources collected by states and counties to fill in the occasional gap in service and to collect supplemental imagery, such as leaf-off. Last, geographers at the Census Bureau have been exploring machine learning and AI resources to verify, identify, and geocode rural addresses.